#### **Program**

## Room S1

Bldg. 10 10-41

#### **CSJ Award Presentation**

#### Saturday, March 26, AM

Chair: KOBAYASHI, Akiko (10:00 $\sim$ 11:00)

**181-01** CSJ Award Presentation Edge State of Nanographene and its Electronic and Magnetic Properties (Tokyo Institute of Technology) ENOKI, Toshiaki (10:00∼11:00)

Chair: TANAKA, Kenichiro (11:10 $\sim$ 12:10)

**1S1-02** CSJ Award Presentation Development of Photocatalysts for Overall Water Splitting (The Univ. of Tokyo) DOMEN, Kazunari (11:10~12:10)

#### **CSJ Public Lectue**

#### Saturday, March 26, PM

Chair: OZAWA, Takeaki (13:20~14:10)

**181-03** CSJ Public Lecture Life Science Experiments in the Space(ISS)-past, present and future- (The Univ. of Tokyo; AIST Research Center for Stem Cell Engineering) ASASHIMA, Makoto (13:20∼14:10)

Chair: INOUE, Masayuki (14:10~15:00)

**181-04** CSJ Public Lecture The Most Acknowledged Medicine in the World (Biopharm Res. Labs., Inc.) ENDO, Akira (14:10∼15:00)

Chair: KANO, Naokazu (15:20~16:10)

**181-05** CSJ Public Lecture An invitation to the face studies - The secret of the face to investigate with a computer - (Emeritus Prof., The Univ. of Tokyo) HARASHIMA, Hiroshi (15:20∼16:10)

Chair: NUMAO, Naoko (16:10∼17:00)

**1S1-06** CSJ Public Lecture Olyset mosquito net as a tool of malaria control (Agricultural Chemicals Laboratory of Sumitomo Chemical) ITOH, Takaaki (16:10∼17:00)

## Room S2

Bldg. 10 10-42

### **CSJ Award Presentation**

#### Saturday, March 26, AM

Chair: KATSUKI, Tsutomu (11:00 $\sim$ 12:00)

**182-01** CSJ Award Presentation Research of the Origins of Chirality and Homochirality of Chiral Organic Compounds (Fac. Sci., Tokyo Univ. of Science) SOAI. Kenso (11:00∼12:00)

#### Saturday, March 26, PM

Chair: SHIMOMURA, Masatsugu (13:00∼14:00)

182-02 CSJ Award Presentation Genome Manipulation and Engineering via Chemical Tools (RCAST, The Univ. of Tokyo) KOMIYAMA, Makoto (13:90~14:00)

Chair: SUZUKI, Keisuke (14:10~15:10)

**182–03** CSJ Award Presentation Studies on Effective Methods for the Synthesis of Bio-related Nucleic Acid Derivatives (Grad. Sch. Biosci. Biotech., Tokyo Tech) SEKINE, Mitsuo (14:10∼15:10)

Chair: SUZUKI, Keisuke (15:20~16:20)

**182-04** CSJ Award Presentation Development of a Method for Protein Synthesis Using Peptide Thioesters as Building Blocks (IPR, Osaka Univ.) AIMOTO, Saburo (15:20~16:20)

### Room S3

Bldg. 16 201

"International Year of Chemistry 2011" JST-PRESTO Joint Symposium on Research and Development Challenging to Save Human beings from Energy Crisis: Utilization of Solar Energy Monday, March 28, AM

(10:00~10:10)

**383-01** Opnening Remarks (JST) KITAZAWA, Koichi (10:00~10:10)

Chair: INOUE, Haruo (10:10 $\sim$ 10:40)

**383-02** Plenary Lecture Chemical sence required for research work: Study on photocatalysis as the example FUJISHIMA, Akira (10:10∼ 10:40)

## Invitation to JST "PRESTO" Projects "Innovative Use of Light and Materials/ Life"

(10:40~11:50)

**383-03** Invitation to JST "PRESTO" Projects (NAIST) MASUHARA, Hiroshi (10:40∼10:50)

**383-04** Probing the Chiral Nature by Single Molecule Fluorescence Detection (RIES, Hokkaido Univ.; PRESTO, JST) FUKAMINATO Tsuyoshi (10:50 ~11:05)

**383-05** Coherent Control of Plasmonic Wave Functions Imura, Kohei (11:05∼11:20)

**383-06** Active Control of Photo-chemical Processes by Manipulation of Intermolecular Distances (Tokyo Metropolitan Univ.: PRESTO, JST) TAKAGI, Shinsuke (11:20∼11:35)

**383-07** Toward the creation of a new nitrogenase from protochlorophyllide reductase (Nagoya Univ.; PRESTO, JST) FUJITA, Yuichi (11:35∼ 11:50)

#### Monday, March 28, PM

Chair: TAKAHASHI, Tamotsu (13:00∼13:10)

**383-08** Special Message (Purdue University, USA) NEGISHI, Eiichi (13:00∼13:10)

Chair: INOUE, Haruo (13:15∼13:55)

**383-09**<sup>#</sup> Special Lecture Conjugated Polyelectrolytes: Structures, Properties and Applications (University of Florida, USA) SCHANZE, Kirk S. (13:15∼13:55)

(13:55~17:45)

**383-10** Invitation to JST "PRESTO" and "CREST" Projects (JST) HARAGUCHI, Ryoji (13:55∼14:25)

#### Invitation to JST "PRESTO" and "CREST" Projects

**383-11** Creation of Basic Technology for Improved Bioenergy Production through Functional Analysis and Regulation of Algae and Other Aquatic Microorganisms (Tokyo University of Agriculture and Technology) MATSUNAGA, Tadashi (14:25∼14:35)

## Invitation to JST "PRESTO" Projects "Photoenergy Conversion Systems and Materials for the Next Generation Solar Cells"

**383-12** Invitation to JST "PRESTO" Projects (Kyushu Institute of Technology) HAYASE, Shuji (14:50∼15:00)

**383-13** Photoconversion Mechanism of Polymer Solar Cells Studied by Transient Absorption Spectroscopy (Kyoto Univ.; JST PRESTO) OHKITA, Hideo (15:00∼15:15)

383-14 Characterization of Multiple Exciton Generation in PbS Quantum Dots Using An Improved Transient Grating Technique (Univ. of Electro-Commun.; PRESTO JST; Chuo Univ.) SHEN, Qing; KATAYAMA, Kenji; SAWADA, Tsuguo; TOYODA, Taro (15:15∼15:30)

**383-15** Solar cells using chalcopyrite-type phosphide - Phase diagram and crystal growth (Grad. Sch. Eng., Kyoto Univ.; JST-PRESTO) NOSE Yoshitaro; UDA Tetsuya (15:30∼15:45)

383-16 Investigation of Melt Growth Mechanisms of Silicon Crystal for improvement of the crystal quality in multicrystalline silicon ingots for solar cells (IMR, Tohoku Univ.; JST PRESTO) FUJIWARA, Kozo (15:45~ 16:00)

3S3-17 High efficient dye-sensitized solar cells (NIMS; PRESTO, JST) YANAGIDA, Masatoshi; HAN, Liyuan (16:00~16:15)

# Invitation to JST "PRESTO" Projects "Chemical Conversion of Light Energy" 383-18 Invitation to JST "PRESTO" Projects (Center for Priority Area, Tokyo Metropolitan Univ.) INOUE, Haruo (16:15~16:25)

3S3-19 Nonsacrificial water splitting through two-step photoexcitation by visible light using dye-sensitized semiconductors as a hydrogen production photocatalyst (Hokkaido Univ.; AIST) ABE, Ryu; MORI, Yuko; HARA, Kohjiro; KOUMURA, Nagatoshi; OHTANI, Bunsho (16:25~16:40)

**3S3-20** Development of Large Photofunctional  $\pi$ -Conjugated Systems (Grad. Sch. Sci., Kyoto Univ.; PRESTO, JST) ARATANI, Naoki (16:40

3S3-21 Studies on biosynthesis of the active-site iron-complex from [Fe]hydrogenase (Max Planck Institute for Terrestrial Microbiology) SHIMA, Seigo (16:55~17:10)

383-22 Molecular Mechanisms of Energy Conversion and Water Oxidation by Photosynthesis (CSTRC, Ehime Univ.) SUGIURA, Miwa (17:10~

3S3-23 Nonlinear Photochemistry Based on Localized Surface Plasmon: Optical Trapping and Photochemical Reactions/Energy Conversions (Grad. Sch. Sci., Hokkaido Univ.; JST-PRESTO) Tsuboi, Yasuyuki (17:25

**3S3-24** Closing Remarks IWASAWA, Yasuhiro (17:40~17:45)

## Room S5

Bldg. 23 23-201

#### Fine Control of Multimolecular Organization and Information Transfer

Saturday, March 26, AM

 $(9:30\sim9:35)$ 

185-01 Special Program Lecture Opening Remarks (Grad. Sch. Sci., Hiroshima Univ.) HAINO, Takeharu (09:30~09:35)

Chair: HAINO, Takeharu  $(9:35\sim10:35)$ 

185-02 Special Program Lecture Modulation of Structures and Functions by Controlling Spatial Arrangement of Functional Units (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) NABESHIMA, Tatsuya (09:35~ 10:05)

1S5-03 Special Program Lecture Preparation of Micro- and Nanocrystails of Luminescent Coordination Compounds with Supramolecular Interactions (Grad. Sch. Mat. Sci., NAIST) KAWAI, Tsuyoshi (10:05~

Chair: AOKI, Shin (10:35~11:35)

185-04 Special Program Lecture Selective Capture and Arraying of a Guest Nanoparticle into a DNA Nanowell (RCAST, The Univ. of Tokyo) KUZUYA, Akinori (10:35~11:05)

185-05 Special Program Lecture Control of Amyloid Fibrillization by Designed Peptides and Proteins (Grad. Sch. Biosci. Biotech., Tokyo Tech) MIHARA, Hisakazu; TAKAHASHI, Tsuyoshi (11:05~11:35)

Chair: NABESHIMA, Tatsuya (11:35~12:35)

1S5-06 Special Program Lecture Creation of a Visible Light-driven Unidirectional Molecular Motor (Grad. Sch. Pharm. Sci., Nagoya City Univ.) HIGUCHI, Tsunehiko; NONOGAKI, Sadanori; UEDA, Shinnosuke; KATO, Nobuki; UMEZAWA, Naoki (11:35~12:05)

185-07 Special Program Lecture Function and Control of Space Made by Topological Linkages -Role of LooselyRestricted System- (Grad. Sch. Sci., Eng., Tokyo Tech) TAKATA, Toshikazu (12:05~12:35)

#### Forefront of Molecular Science in Nano-Molecular Devices

#### Saturday, March 26, PM

Chair: KIGUCHI, Manabu (13:30~15:00)

1S5-08 Special Program Lecture Opening Remarks (ISIR, Osaka TANIGUCHI, Masateru (13:30~13:40)

185-09 Special Program Lecture Molecular Science for Electron Transport: Electron Transport Theory on Real Molecular Junctions (NRI (RICS), AIST) NAKAMURA, Hisao (13:40~14:00)

185-10 Special Program Lecture Theoretical study on molecular conductivity and first-principles quantum chemistry for molecule-metal complex system (Grad. Sch. Eng., Tohoku Univ.) SHIMAZAKI, Tomomi

 $(14:00\sim14:20)$ 

185-11 Special Program Lecture Development of Novel Units for Application to Single-molecular Electronics (ISIR, Osaka Univ.; JST-PREST) IE, Yutaka (14:20~14:40)

185-12 Special Program Lecture Build-up Synthesis of Nanoscale Molecular Device Using Insulated Molecular (Grad. Sch. Eng., Kyoto Univ.) TERAO, Jun (14:40~15:00)

Chair: TANIGUCHI, Masateru (15:00 $\sim$ 16:30)

1S5-13 Special Program Lecture One-dimensional molecular nanostructures inside single-wall carbon nanotubes (NTRC, AIST; JST-PRESTO; Univ. of Tsukuba) OKAZAKI, Toshiya (15:00~15:25)

185-14 Special Program Lecture Single-molecule contact at nano graphenes on metal surface (RIKEN) KIM, Yousoo (15:25~15:45)

185-15 Special Program Lecture Charge transport mechanisms in molecular wires (Sch. Eng. Sci., Osaka Univ.) YAMADA, Ryo (15:45~

185-16 Special Program Lecture Electron transport through single  $\pi$  conjugated molecule (Grad. Sch. Sci., Eng., Tokyo Tech) KIGUCHI, Manabu (16:05~16:25)

185-17 Special Program Lecture Closing Remarks (ISIR, Osaka Univ.; JST-PRESTO) IE, Yutaka (16:25~16:30)

## Room S6

Bldg. 23 23-203

#### Chemical approaches to elucidate biological key phenomena involving transient macromolecular complexes

Saturday, March 26, AM

(9:30~9:35)

186-01 Special Program Lecture Opening Remarks (Grad. Sch. Eng., Kyoto Univ.) HAMACHI, Itaru (09:30~09:35)

Chair: HAMACHI, Itaru (9:35 ~10:25)

1S6-02 Special Program Lecture Structural basis underlying the dual gate properties of KcsA (Grad. Sch. Pharm. Sci., The Univ. of Tokyo) SHIMADA, Ichio (09:35~10:00)

186-03 Special Program Lecture Strategy to obtain structural information from transient macromolecular complexes (MIB, Kyushu Univ.) KOHDA, Daisuke (10:00~10:25)

Chair: TSUKIJI, Shinya (10:25 $\sim$ 11:40)

186-04 Special Program Lecture Selective covalent labeling of proteins using a new tag-probe pair (Kyushu Univ.; Kyoto Univ.) OJIDA, Akio; NONAKA, Hiroshi; HAMACHI, Itaru (10:25~10:50)

186-05 Special Program Lecture Design and synthesis of nucleotide caging agents for manipulating gene functions (Fac. Sci., Toho Univ.) FURUTA, Toshiaki (10:50~11:15)

186-06 Special Program Lecture Real-time monitoring of the single cellular dynamics of inositol polyphosphates (IAE, Kyoto Univ.) MORII, Takashi (11:15~11:40)

Chair: KIYONAKA, Shigeki (11:40~12:30)

1S6-07 Special Program Lecture Dynamics of thrombopoietin receptors on a plasma membrane analyzed by single molecule imaging (Grad. Sch. Pharm. Sci., The Univ. of Tokyo; Fac. of Ed. and Int. Arts. and Sci., Waseda Univ.) SAKAMOTO, Akihiko; KATO, Takashi; FUNATSU, Takashi  $(11:40\sim12:05)$ 

186-08 Special Program Lecture Magnetiv Resonance observations of cells (Grad. Sch. Eng., Kyoto Univ.) SHIRAKAWA, Masahiro (12:05~

#### Frontier of Fundamental and Applied Researches of Organic Semiconductors and Conductors

#### Saturday, March 26, PM

 $(13:30\sim13:35)$ 

186-09 Special Program Lecture Opening Remarks (ICR, Kyoto Univ.) SATO, Naoki (13:30~13:35)

Chair: SATO, Naoki (13:35~15:00)

1S6-10 Special Program Lecture Construction of Strongly Correlated Organic Electron Systems -From Synthetic and StructuralViewpoints-(Grad. Sch. Mat. Sci., Univ. of Hyogo) YAMADA, Junichi (13:35 $\sim$ 

186-11 Special Program Lecture Development of Functional Organic Crystal Responded by External Stimuli (ISSP, The Univ. of Tokyo)

MORI, Hatsumi (14:00~14:30)

186-12 Special Program Lecture Interplay between Magnetism and Conductivity in Organic Molecular Crystal (Grad. Sch. Arts and Sci., The Univ. of Tokyo) SUGAWARA, Tadashi (14:30~15:00)

Chair: YAMASHITA, Yoshiro (15:00~16:30)

- 186-13 Special Program Lecture Design and Synthesis of High-Mobility Organic Semiconductors (Grad. Sch. Eng., Hiroshima Univ.) TAKIMIYA, Kazuo (15:00~15:30)
- 186-14 Special Program Lecture High-order structure control of liquid crystalline semiconducting polymer and its application to thin-film transistor (Grad. Sch. Sci., Eng., Yamagata Univ.) TOKITO, Shizuo; KUMAKI, Daisuke (15:30~16:00)
- 186-15 Special Program Lecture Transformation Organic Semiconductor and its application to Organic Photovoltaic Devices (Mitsubishi Chemical Group Science and Technology Research Center, Inc.) ARAMAKI, Shinji (16:00~16:30)

#### Next generation bio-researches based on creation of nano-science/ technology

#### Sunday, March 27, AM

Chair: TAMIYA, Eiichi (9:30  $\sim$ 12:10)

- 286-01 Special Lecture Opening Remarks (Grad. Sch. Eng., Osaka Univ.) TAMIYA, Eiichi (09:30~09:35)
- 2S6-02 Special Lecture Single-Molecule Identification of Base Molecules .Toward 'Next-next' Generation Sequencing of DNA (ISIR, Osaka Univ.) TANIGUCHI, Masateru; KAWAI, Tomoji (09:35~10:05)
- 2S6-03 Special Lecture Synthesis of Self-Assembled Organic Nanotubes and Their Nano-Bio Application (NTRC, AIST) SHIMIZU, Toshimi  $(10:05\sim10:35)$
- 2S6-04 Special Lecture Development of Highly Functionalized Magnetic Beads for Medicine and Biotechnology (Tokyo Tech. Solutions Research Lab.) HANDA, Hiroshi (10:40~11:10)
- 2S6-05 Special Lecture Detection of Biomolecules Using Bio-transistors with Functional Nano-interface Gates (IBB, Tokyo Medical and Dental Univ.) MIYAHARA, Yuji; MATSUMOTO, Akira; GODA, Tatsuro; MAEDA, Yasuhiro (11:10~11:40)
- 286-06 Special Lecture Bioanalysis using nanoplasmonics (Dept. Appl. Phys., Osaka Univ.) YOSHIKAWA, Hiroyuki (11:40~12:10)

### Organic spintronics

### Tuesday, March 29, AM

Chair: YAMASHITA, Masahiro  $(9:30\sim 11:05)$ 

- 4S6-01 Special Program Lecture Opening Remarks (ISSP, The Univ. of Tokyo) TAJIMA, Hiroyuki (09:30~09:40)
- 4S6-02 Special Program Lecture Study on Spin-dependent Transport via Molecules by Using a Spin Current (Grad. Sch. Eng. Sci., Osaka Univ.; JST-PRESTO) SHIRAISHI, Masashi (09:40~10:15)
- 4S6-03 Special Program Lecture Photoexcited Organic Spin Chemistry and the Related Topics (Grad. Sch. Sci., Osaka City Univ.) TEKI, Yoshio (10:15~10:40)
- 4S6-04 Special Program Lecture Spin Chemistry in Organic Solar Cell (Grad. Sch. Sci. and Technol., Niigata Univ.; CREST, JST) IKOMA, Tadaaki (10:40~11:05)

Chair: SHIRAISHI, Masashi (11:05~12:30)

- 4S6-05 Special Program Lecture Organic Electronics based on Open-Shell Molecules (RCMS, Nagoya Univ.; JST) AWAGA, Kunio (11:05~
- 4S6-06 Special Program Lecture Effect of magnetic field on the photocurrent in the organic thin-film devices (ISSP, The Univ. of Tokyo) TAJIMA, Hiroyuki (11:25~11:45)
- 486-07 Special Program Lecture Charge Transport of Organic Transistors Probed by Electronic Spins (PRI, AIST) HASEGAWA, Tatsuo; MATSUI, Hirovuki (11:45~12:05)
- 4S6-08 Special Program Lecture Perspectives in Molecular Spintronics Based on Single-Molecule Quantum Magnets (Grad. Sch. Sci., Tohoku Univ.) YAMASHITA, Masahiro (12:05~12:30)

#### Development of Low Carbon Energy and Material Production Based on the Photosynthesis Technology

Tuesday, March 29, PM

 $(13 \cdot 30 \sim 13 \cdot 40)$ 

4S6-09 Special Program Lecture Introduction (Fac. Eng., Oita Univ.) AMAO, Yutaka (13:30~13:40)

Chair: NANGO, Mamoru (13:40~15:00)

4S6-10 Special Program Lecture Building Photosynthesis from Arti-

ficial Molecules: Photochemistry of Quinone Pool (IMS) NAGATA, Toshi  $(13:40\sim14:20)$ 

4S6-11 Special Program Lecture X-ray Crystallographic Analysis of Oxygen-Evolving Photosystem II Complex at 1.9 Å Resolution (OCARINA, Osaka City Univ.) KAMIYA, Nobuo; UMENA, Yasufumi; KAWAKAMI, Keisuke: SHEN, Jian-Ren (14:20~15:00)

Chair: AMAO, Yutaka (15:10~16:30)

- 4S6-12 Special Program Lecture Development of Organic Photovoltaics Inspired by Natural Photosynthetic Systems (RCAST, The Univ. of Tokyo) SEGAWA, Hiroshi (15:10~15:50)
- 4S6-13 Special Program Lecture Construction of Artificial Photosynthesis for CO2 Reduction (Grad. Sch. Sci., Eng., Tokyo Tech) ISHITANI, Osamu (15:50~16:30)

## Room S7

Bldg. 23 23-205

#### Development of Basics and Applications of Microwave Chemistry

#### Saturday, March 26, AM

 $(9:30\sim 9:35)$ 

187-01 Special Program Lecture Opening Remarks (AIST) TAKEUCHI, Kazuhiko (09:30~09:35)

### Part 1. Advanced Basics and New Effects of Microwave Chemistry Chair: TAKEUCHI, Kazuhiko (9:35 ∼11:15)

- 187-02 Special Program Lecture Experimental Evidence of Nonequilibrium Local Superheating under MW Irradiation Related to Special Effects (Grad. Sch. Sci., Eng., Tokyo Tech) WADA, Yuji (09:35~09:55)
- 187-03 Special Program Lecture Theoretical Studies of the Mechanism of Microwave Heating of Metal, Dielectric and Magnetic Materials (Chubu Univ.) TANAKA, Motohiko: KONO, Hirohiko, MARUYAMA, Koji; M. Ignatenko; ZEMPO, Yasunari (09:55~10:15)
- 187-04 Special Program Lecture Design of Mesoscopic Materials using Microwave-Induced Non-equilibrium Reaction Field (Grad. Sch. Eng., Tohoku Univ.) TAKIZAWA, Hirotsugu (10:15~10:35)
- 187-05 Special Program Lecture Crystal Growth under Microwave Irradiation and Syntheses of Nanoparticles (IMCE, Kyushu Univ.) TSUJI, Masaharu (10:35~10:55)
- 187-06 Special Program Lecture Application to Chemical Biology with Microwave Effect (KIT) OHUCHI, Shokichi (10:55~11:15)

#### Part 2. Industrial Approach of Microwave Chemistry

Chair: WADA, Yuji (11:25~12:30)

- 187-07 Special Program Lecture Microwave Application in Chemical Industry (Nippon Steel Chemical Co.,Ltd.) KONO, Takumi (11:25~
- 1S7-08 Special Program Lecture Microwave-assisted highly efficient polyester synthesis (ISC, AIST) NAKAMURA, Takashi; NAGAHATA, Ritsuko; TAKEUCHI, Kazuhiko (11:40~11:55)
- 1S7-09 Special Program Lecture Microwave saccharification of cellulosic biomass (Toyota Central R&D Labs., Inc.) FUKUSHIMA, Hideoki  $(11:55\sim12:10)$
- 187-10 Special Program Lecture Efficient production of Biodiesel (MWCC) YOSHINO, Iwao (12:10~12:25)
- 187-11 Special Program Lecture Closing Remarks (Toyota Central R&D Labs., Inc.) FUKUSHIMA, Hideoki (12:25~12:30)

#### Nano-space Chemistry for the Creation of **Functional Materials**

#### Saturday, March 26, PM

Chair: YOKOZAWA, Tsutomu (13:30~14:15)

187-12 Special Program Lecture Creation of Chemospace by Self-Assembly (Sch. Eng., The Univ. of Tokyo) FUJITA, Makoto (13:30~ 14:15)

Chair: HIKICHI, Shiro  $(14:15{\sim}15:00)$ 

187-13 Special Program Lecture Construction of New Biocatalyst Based on Molecular Modification of Proteins (Grad. Sch. Eng., Osaka Univ.) HAYASHI, Takashi (14:15~15:00)

Chair: KUDO, Hiroto (15:00∼15:45)

187-14 Special Program Lecture Free-standing Block Copolymer Membranes with Visualized Transport Channels (Chem. Res. Lab., Tokyo Tech) IYODA, Tomokazu; YAMAMOTO, Takashi; KIMURA, Taro; KOMURA, Motonori; HADANO, Shingo (15:00~15:45)

Chair: KAMEYAMA, Atsushi (15:45~16:30)

- **187-15** Special Program Lecture Development of photoresist for microfabrication based on ladder type cyclic oligomer (JSR Corporation) MARUYAMA, Ken (15:45~16:00)
- **187-16** Special Program Lecture Folded H-Stacking Polymers by Conformational Control with 2-Substituted Trimethylene Tethers (Kanagawa Univ.) OKAMOTO, Sentaro (16:00∼16:15)
- 187-17 Special Program Lecture Preparation of precious metal encapsulated metal oxide nanocomposites and their unique catalytic behavior (Kanagawa Univ.) NAITO, Shuichi (16:15~16:30)

### Room S8

Bldg. 23 23-206

#### A New Trend of Materials Chemistry by Soft-Interface

#### Saturday, March 26, AM

(9:30~9:35)

**188-01** Special Program Lecture Opening Remarks (Grad. Sch. Eng., Kyushu Univ.) MIURA, Yoshiko (09:30∼09:35)

Chair: SATO, Yukari (9:35 ~10:50)

- **1S8-02** Special Program Lecture Design and function of polyion complex nano-/micro-particles through the control of the soft-interface (Grad. Sch. Eng., The Univ. of Tokyo) KISHIMURA, Akihiro (09:35∼ 10:00)
- **188-03** Special Program Lecture Design and Analysis of Interface Nanostructure for Sensor (Nissan Chemical Industries, Ltd.; Oyama National College of Technology; The Univ. of Tokyo) FURUSHO, Hitoshi; IIJIMA, Michihiro; SATO, Riki; YOSHIMOTO, Keitaro (10:00∼10:25)
- **1S8-04** Special Program Lecture Development of Interlocked Crosslinking Method based on Topological Change (Grad. Sch. Sci., Eng., Tokyo Tech) KOYAMA, Yasuhito (10:25∼10:50)

Chair: YOSHIMOTO, Keitaro (10:50 $\sim$ 11:40)

- **1S8-05** Special Program Lecture Conformation of Single Polymer Chains at Surface and Interface Studied by Super-Resolution Optical Microscopy Technique (Adv. Biomed. Res. Unit, Kyoto Univ.) AOKI, Hirovuki (10:50∼11:15)
- **188-06** Special Program Lecture Study on dynamics of water-in-CO<sub>2</sub> microemulsion using supercritical NMR methods (RLNR, Tokyo Tech) TSUKAHARA, Takehiko (11:15∼11:40)

Chair: TAKAI, Madoka (11:40~12:35)

- 188-07 Special Program Lecture Molecular design of magnetic nanoparticle surfaces and their applications to magnetic cell labeling (Tokyo Univ. of Agri. and Technol.) YOSHINO, Tomoko; MATSUNAGA, Tadashi (11:40~12:05)
- **188-08** Special Program Lecture Development of Functional Hybrid Tissues by Controlling Nano-Level Adhesion of Cellular Interface (Grad. Sch. Eng., Osaka Univ.; JST-PRESTO) MATSUZAKI, Michiya; KADOWAKI, Koji; AKASHI, Mitsuru (12:05~12:35)

#### Exotic Self-organized Materials: Development and Analysis of Uncommon Morphologies and Functions Saturday, March 26, PM

(13:30~13:35)

**188-09** Special Program Lecture Opening Remark (Grad. Sch. Eng., Kyushu Univ.) MATSUURA, Kazunori (13:30∼13:35)

Chair: MATSUURA, Kazunori (13:35 $\sim$ 14:15)

- **188-10** Special Program Lecture Emergent Functions of Multishaped Exotic Materials with Fine-tuned Self-organizations (Organic Nanomaterials Center, NIMS; JST-PRESTO) NAKANISHI, Takashi (13:35∼13:55)
- **1S8-11** Special Program Lecture Expectation for Exotic Self-organized Materials from Private Company (Frontier Core-Technology Laboratories, FUJIFILMCorporation) NISHIMI, Taisei (13:55~14:15)

Chair: NAKANISHI, Takashi (14:15 $\sim$ 15:15)

**188-12** Special Program Lecture Exotic functions found in motor protein assembly (Fac. Adv. Life Sci., Hokkaido Univ.; PRESTO, JST) KAKUGO, Akira; GONG, Jian Ping (14:15∼14:35)

- **1S8-13** Special Program Lecture Nanometer-Scale Charge Carrier Transport Property in Self-Organized Materials Studied by Time-Resolved Microwave Conductivity (Grad. Sch. Eng., Osaka Univ.; JST-PRESTO) SAEKI, Akinori (14:35~14:55)
- **188-14** Special Program Lecture Circularly Polarized Luminescent Chiral Supramolecule and its Chiroptical Properties (NAIST; JST-PRESTO; JST-SENTAN) NAITO, Masanobu; SHIBAGUCHI, Hiroshi; TAKIYAMA, Kojiro; TSUMATORI, Hiroyuki; KAWAI, Tsuyoshi; IWAHORI, Kenji; YAMASHITA, Ichiro (14:55~15:15)

Chair: YAGAI, Shiki (15:15~16:35)

- **188-15** Special Program Lecture Construction of Hemoprotein Self-assembled Cluster (Grad. Sch. Eng., Osaka Univ.) HAYASHI, Takashi (15:15~15:45)
- **188-16** Special Program Lecture Nano-palpation technique for soft matter (WPI-AIMR, Tohoku Univ.) NAKAJIMA, Ken (15:45∼16:05)
- **1S8-17** Special Program Lecture Frontier of Liquid Crystals: Supramolecular Association and Functionalization (Grad. Sch. Eng., The Univ. of Tokyo) KATO, Takashi (16:05∼16:35)

## Room S9

Bldg. 23 23-301

Importance and application of chemical compound library: Research for drug discovery with chemical compounds by the collaboration of chemists and biochemists in academia Saturday, March 26, AM

#### Overview

Chair: OKUYAMA, Akira (9:30 ∼9:50)

**189-01** Special Program Lecture A contribution to human society by a synthetic chemist (Hoshi Univ.) IHARA, Masataka (09:30∼09:50)

#### Chemical compound libraries in academia

Chair: SAKAMOTO, Takao (9:50 ∼10:40)

- **189-02** Special Program Lecture Nex-generation natural products (AIST) NATSUME, Toru (09:50∼10:05)
- **189-03** Special Program Lecture Synthesis of target-oriented libraray for investigation of innate immune system (Grad. Sch. Sci., Osaka Univ.) FUKASE, Koichi (10:05∼10:20)
- **189-04** Special Program Lecture Storage Management of Synthetic Compounds in Universities (Professor Emeritus of Kyushu Univ.) MORI, Akira (10:20∼10:30)
- **189-05** Special Program Lecture Intellectual property of materials (Chubu Technology Licensing Office) OMORI, Shigeyoshi (10:30∼ 10:40)

#### Application of chemical compound libraries

Chair: IWABUCHI, Yoshiharu (10:40∼11:25)

- **189-06** Special Program Lecture Chemical Biology Research Initiative (CBRI, The Univ. of Tokyo) OKABE, Takayoshi (10:40∼10:55)
- 189-07 Special Program Lecture Chemical Library in Academia (iCeMS, Kyoto Univ.) UESUGI, Motonari (10:55~11:10)
- 189-08 Special Program Lecture Anticancer drug evaluation in academia (Cancer Chemotherapy Center Japanese Foundation for Cancer Research) YAMORI, Takao (11:10∼11:25)

## Collaboration of chemists, biologists in academia and information technology (Collaboration of academia and industry)

Chair: UENISHI, Junichi (11:25 $\sim$ 12:05)

- **189-09** Special Program Lecture Development of therapeutic drugs for Parkinson's disease through screening in silico (Grad. Sch. Pharm., Hokkaido Univ.) ARIGA, Hiroyoshi (11:25~11:40)
- **189–10** Special Program Lecture Considering the Significance of Synthetic Chemistry in Drug Discovery and Development (Fac. Pharm. Sci., Hoshi Univ.) HONDA, Toshio (11:40∼11:55)
- 189-11 Special Program Lecture Application of *in silico* drug discovery technology to Perkinson's disease (Fujitsu Limited) KAMIYA, Nozomu (11:55∼12:05)

## Setup and development of thedata base of chemical compounds in academia

Chair: HIROTA, Kosaku (12:05~12:30)

**189-12** Special Program Lecture Construction and Application of Data Base of Chemical Compounds Synthesized in Academia (Center for Application of Chemical Compounds) OKUYAMA, Akira (12:05∼12:20)

**189-13** Special Program Lecture Construction and Application of Data Base of Chemical Compounds Synthesized in Academia (Center for Application of Chemical Compounds) SUZUKI, Kunio (12:20∼12:30)

#### Next Generation Life Chemistry: Small molecular drugs revisited

#### Saturday, March 26, PM

 $(13:30\sim13:35)$ 

**189-14** Special Program Lecture Opening Remarks (IMSUT) TSUMOTO, Kohei (13:30~13:35)

Chair: TSUII, Takashi (13:35~14:15)

**189-15** Special Program Lecture Protein network analysis using chemical probes (AIST) NATSUME, Toru (13:35~14:15)

Chair: FUJII, Ikuo (14:15~14:55)

**189-16** Special Program Lecture Antibody functions and low-molecular compunds (KAKETSUKEN) NAKASHIMA, Toshihiro (14:15∼ 14:55)

Chair: MIHARA, Hisakazu (15:05~15:45)

**189-17** Special Program Lecture Discovery of small molecule inhibitors against PPI targets (Drug Design Advisor, Interprotein Corporation) MATSUZAKI, Takao; MORISHIMA, Hajime; KOEZUKA, Yasuhiko; TAKASHIMA, Tohru; ITOH, Manabu; KOMATSU, HIROTSUGU; HOSODA, Masato (15:05∼15:45)

Chair: FUKASE, Koichi (15:45~16:30)

189-18 Special Program Lecture Fragment-based Drug Design in Lead Generation (Astellas Pharma Inc.) NIIMI, Tatsuya (15:45∼16:25)
189-19 Special Program Lecture Closing Remarks (AJINOMOTO PHARMACEUTICALS CO.,LTD.) TSUJI, Takashi (16:25∼16:30)

#### Molecular Bases on Chemical Biology

#### Sunday, March 27, AM

 $(9:00 \sim 9:10)$ 

289-01 Special Lecture Opening Remarks (Osaka City Univ.) OHFUNE, Yasufumi (09:00~09:10)

Chair: ARIMOTO, Hirokazu (9:10  $\sim$ 9:40)

**289-02** Special Lecture Identification of a Target of Thalidomide Teratogenicity Using Handa Beads (Tokyo Tech, Solutions Research Lab) HANDA, Hiroshi (09:10∼09:40)

Chair: FUKASE, Koichi (9:40  $\sim$ 10:10)

289-03 Special Lecture Toward Mechanistic Elucidation of Iron Acquisition in Barley based on Practical Synthesis of Mugineic Acids (Grad. Sch. Sci., Hokkaido Univ.) NANBA, Kosuke (09:40~10:10)

Chair: EGUCHI, Tadashi (10:10 $\sim$ 10:40)

**289-04** Special Lecture Lipid Bilayers as Molecular Basis for Chemical Biology Researches (Grad. Sch. Sci., Osaka Univ.) MATSUMORI, Nobuaki; MURATA, Michio (10:10∼10:40)

Chair: TADANO, Kin-Ichi (10:50~11:20)

**289-05** Special Lecture Development of New Anti-cancer Agents Based on Fusicoccane-type of Diterpene Glycosides (ISIR, Osaka Univ.) KATO, Nobuo (10:50∼11:20)

Chair: TANINO, Keiji (11:20~11:50)

**289-06** Special Lecture chemical biology of natural products controlling biological phenomenon of plant (Grad. Sch. Sci., Tohoku Univ.) UEDA, Minoru (11:20~11:50)

Chair: MURATA, Michio (11:50~12:20)

**289-07** Special Lecture Chemical Biology Research in Japan (Grad. Sch. Sci., Tech., Keio Univ.) UEMURA, Daisuke (11:50∼12:20)

#### Frontier of Bioinorganic Chemistry--- Toward New Challenge of Bio-Related Chemistry

#### Sunday, March 27, PM

Chair: ITOH, Shinobu (13:30∼14:50)

289-08 Special Lecture Development of Artificial Photosynthetic Systems (Grad. Sch. Eng., Osaka Univ.) FUKUZUMI, Shunichi (13:30~14:10)

289-09 Special Lecture Modeling of Dioxygen Activating Dimetalloenzymes: Intermediates and Reactivity (Kanazawa Univ.) SUZUKI, Masatatsu (14:10~14:50) Chair: ISHIMORI, Koichiro (14:50∼16:20)

**289-10**\* Special Lecture Molecular Design of Metalloenzymes: Three Approaches (Grad. Sch. Sci., Nagoya Univ.) WATANABE, Yoshihito (14:50~15:30)

289-11 Special Lecture Novel Advanced Medical Technologies Based on Newly Developed Photo-functional Probes (Grad. Sch. Med., The Univ. of Tokyo) URANO, Yasuteru (15:40∼16:20)

Chair: SHIRO, Yoshitsugu (16:20 $\sim$ 17:40)

**289-12** Special Lecture Toward physical chemistry in cell: examples of rational control of gene expression (FIBER; FIRST, Konan Univ.) SUGIMOTO, Naoki (16:20∼17:00)

289-13 Special Lecture Recent Research Efforts of My Group toward Interdisciplinary Chemical Biology Fields from Bioinorganic Chemistry (Grad. Sch. Eng., Kyoto Univ.; CREST, JST) HAMACHI, Itaru (17:00 ~17:40)

### Room SA

Bldg. 23 23-303

## Tectonics for Materials Chemistry Can Develop New Materials and New Functions

#### Monday, March 28, AM

Chair: TANAKA, Katsuhisa  $(9:00 \sim 9:35)$ 

38A-01 Special Lecture Introduction (Grad. Sch. Eng., Kyoto Univ.) TANAKA, Katsuhisa (09:00∼09:05)

**3SA-02** Special Lecture Manipulation of Biological reaction in the Space of Surface Electric Field on Polarized Bioelectret (Inst. Biomat. & Bioeng., Tokyo Med. & Dent. Univ.) YAMASHITA, Kimihiro (09:05∼09:35)

Chair: NAGAI, Akiko (9:35 $\sim$ 10:35)

38A-03 Special Lecture Photo-Functional Design of Hybrids with Tailored Structure (Toyohashi Univ. of Technol.) MATSUDA, Atsunori (09:35∼10:05)

**3SA-04** Special Lecture Self-assembly nanostructures for electromagnetic and energy-related materials (Interdisciplinary Graduate School of Engineering Sciences, Kyushu Univ.) OHTAKI, Michitaka (10:05∼10:35)

Chair: TANAKA, Yumi  $(10:35{\sim}11:35)$ 

38A-05 Special Lecture Preparation of Ceramic Films by Laser Enhanced Plasma CVD Process (IMR, Tohoku Univ.) GOTO, Takashi (10:35 ∼11:05)

**3SA-06** Special Lecture Geometrical Patterning of Nano/Micro Materials to Exhibit Novel Functions through Structural Joining Processes (JWRI, Osaka Univ.) KIRIHARA, Soshu; OHTA, Noritoshi; TAKINAMI, Youhei; MAEDA, Chiaki: TASAKI, Satoko (11:05∼11:35)

Chair: OHTSUKI, Chikara (11:35 $\sim$ 12:35)

**38A-07** Special Lecture Structural Design of Novel Porous Material by Microstructural Control (Osaka Prefecture Univ) NAKAHIRA, Atsushi (11:35∼12:05)

**3SA-08** Special Lecture Preparation of multi functional and meso/macro strctured organic-inorganic hybrid thin films (Osaka Pref. Univ.) TAKAHASHI, Masahide (12:05∼12:35)

## Chemistry, Chemical Technology and Education for Sustainable Society

#### Tuesday, March 29, AM

Chair: OKUDA, Jun (9:30  $\sim$ 11:00)

**4SA-01** Special Program Lecture Recent Trends of Green & Sustainable Chemistry (GSC) (AIST) SHIMADA, Hiromichi (09:30∼09:45)

#### 10th GSC Awards Winners

**4SA-02** Special Program Lecture Practical application of environmentally-friendly surfactant synthetic process using subcritical water (Kao Corporation) UNO, Mitsuru (09:45∼10:10)

**48A-03** Special Program Lecture Development of Environmentally Benign Organic Reaction Catalyzed by Metal Cluster Complexes (Grad. Sch. Eng. Sci., Osaka Univ.) MASHIMA, Kazushi (10:10∼10:35)

**4SA-04** Special Program Lecture Environmentally Benign Organic Synthesis Based on Characteristic Features of Flow Microreactors (Kyoto Univ.) YOSHIDA, Jun-ichi (10:35∼11:00)

#### 6th GSC Poster Awards Student Winners

Chair: SATO, Kazuhiko (11:10∼11:55)

- **48A-05** Special Program Lecture High Performance of Organosilicon Dyes as Sensitizer in Dye-sensitized Solar Cell (Grad. Sch. Eng., Gunma Univ.) KAKIAGE, Kenji; HANAYA, Minoru (11:10∼11:25)
- **4SA-06** Special Program Lecture Synthesis and acid catalysis of porous carbon-based solid acid (MSL, Tokyo Tech; AIST; KAST) SUGANUMA, Satoshi; NAKAJIMA Kiyotaka; KITANO, Masaaki; HAYASHI, Shigenobu; HARA, Michikazu (11:25∼11:40)
- **48A-07** Special Program Lecture Cathodic Reduction of Polyfluorene Derivative Based on Environmentally Benign Process (Interdisciplinary Grad. Sch. Sci. and Eng., Tokyo Tech) KOSEKI, Kazuya; HAYASHI, Shotaro; INAGI, Shinsuke; FUCHIGAMI, Toshio (11:40∼11:55)

### Room SC

Bldg. 23 23-307

#### Activation of Unreactive Chemical Bonds Directed Toward Straightforward Synthesis

#### Sunday, March 27, PM

 $(14:00\sim14:10)$ 

28C-01 Special Lecture Opening Remarks (Grad. Sch. Eng., Osaka Univ.) CHATANI, Naoto (14:00~14:10)

Chair: IWASAWA, Nobuharu (14:10 $\sim$ 15:10)

28C-02 Special Lecture Catalytic Transformations through the Activation of Aromatic C-O Bonds (Grad. Sch. Eng., Osaka Univ.) TOBISU, Mamoru (14:10~14:40)

**28C-03** Special Lecture Catalytic Coupling Reaction of Carboxylic Acids through C-H and/or C-C Bond Cleavage (Grad. Sch. Eng., Osaka Univ.) SATOH, Tetsuya (14:40~15:10)

Chair: MURAKAMI, Masahiro (15:10 $\sim$ 16:10)

28C-04 Special Lecture Direct C-H Arylation Reactions of Heteroaromatics Towards Straightforward Synthesis of Polyarylated Heteroaromatics (Gifu Univ.) SHIBAHARA, Fumitoshi (15:10~15:40)

**28C-05** Special Lecture Construction of Carbon Skeletons by C-F Bond Activations (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) FUCHIBE, Kohei (15:40∼16:10)

Chair: MASHIMA, Kazushi (16:10 $\sim$ 17:10)

**2SC-06** Special Lecture Development of Novel and Highly Efficient Methods to Construct Carbon-Carbon Bonds Using Group 7 Transiton Metal Catalysts (Okayama Univ.) KUNINOBU, Yoichiro; TAKAI, Kazuhiko (16:10∼16:40)

2SC-07 Special Lecture Studies on Novel Transformations of Unactivated Bonds by Cooperative Metal Catalysis (Grad. Sch. Eng., Kyoto Univ.) NAKAO, Yoshiaki (16:40∼17:10)

## **Room SD**

Bldg. 23 23-309

### Plasmon-Assisted Photochemical Reactions Sunday, March 27, PM

Chair: MURAKOSHI, Kei  $(13:30{\sim}15:35)$ 

2SD-01 Special Lecture Opening Remarks (RIES, Hokkaido Univ.) MISAWA, Hiroaki (13:30~13:35)

2SD-02 Special Lecture Plasmon-assisted photoelectric conversion from visible to near-infrared wavelength using a Au-nanorods/TiO₂ electrode (RIES, Hokkaido Univ.) MISAWA, Hiroaki (13:35∼14:05)

2SD-03 Special Lecture Tuning of Surface Plasmon Resonance Wavelengths by Structural Control of Inorganic Nanoparticles (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) TERANISHI, Toshiharu (14:05∼14:35)

**2SD-04** Special Lecture Microscopic Energy Manipulation by Controlling Light - Molecule Coupling (Grad. Sch. Eng., Osaka Pref. Univ.) ISHIHARA, Hajime (14:35~15:05)

2SD-05 Special Lecture Visualization of Optical Fields in Metal Nanostructures (IMS) OKAMOTO, Hiromi (15:05~15:35)

Chair: TERANISHI, Toshiharu (15:35~17:40)

2SD-06 Special Lecture Fabrication of Nano&Microspaces for Control

of Electric Field of Incident Light Using Ordered Porous Structures (Tokyo Metropolitan Univ.) MASUDA. Hideki (15:35~16:05)

2SD-07 Special Lecture Plasmon Resonance-Induced Charge Separation and Morphology Control of Nanoparticles (IIS, The Univ. of Tokyo) TATSUMA, Tetsu; SAKAI, Nobuyuki; TAKAHASHI, Yukina; MATSUBARA, Kazuki; KAZUMA, Emiko; TANABE, Ichiro (16:05∼16:35)

**2SD-08** Special Lecture Photoelectric Conversion Utilizing Plasmonic Nanostructures with Enhanced Electric Fields (Grad. Sch. Eng., Kyushu Univ.) YAMADA, Sunao (16:35~17:05)

2SD-09 Special Lecture Anisotropic Excitation of Single Molecule in Localized Surface Plasmon (Grad. Sch. Sci., Hokkaido Univ.) TAKASE, Mai; NARA, Masanobu; YASUDA, Satoshi; NABIKA, Hideki; MURAKOSHI, Kei (17:05~17:35)

**2SD-10** Special Lecture Closing Remarks (Tokyo Metropolitan Univ.) MASUDA, Hideki (17:35~17:40)

### Room SE

Bldg. 23 23-310

## Photofunctionalities of Low-Dimensional Inorganic and Organic Hybrid Systems

#### Tuesday, March 29, AM

Chair: TAKAGI, Shinsuke  $(9:30\sim10:45)$ 

**48E-01** Special Program Lecture Opening Remarks (Yamaguchi Univ.) KAWAMATA, Jun (09:30∼09:35)

**48E-02** Special Program Lecture Preparation of One-dimensional Chiral SiO-based Polymers and Induction of Chirality into Photofunctional Molecules (Grad. Sch. Sci., Eng., Kagoshima Univ.) KANEKO, Yoshiro (09:35∼09:55)

**4SE-03** Special Program Lecture Role of Molecular Chirality in Molecular Aggregates: Application of Vibrational Circular Dichrosim Spectroscopy (Toho Univ.) YAMAGISHI, Akihiko (09:55~10:25)

**4SE-04** Special Program Lecture Macroscopic Control of Orientation of Nanospaces and the Consequent Anisotropic Optical Properties (Canon Inc.) MIYATA, Hirokatsu (10:25∼10:45)

Chair: SASAI, Ryo (10:55~12:15)

**48E-05** Special Program Lecture Long-lived Charge Sepation in TiO2 Nanosheets, Mesoporus Silica (KAST; Nagoya Univ.; Tokyo Tech) TAKAGI, Katsuhiko; OKAZAKI, Ken-ichi; TORIMOTO, Tsukasa; YUI, Tatsuto (10:55∼11:25)

**4SE-06** Special Program Lecture Photofunctional Smart Colloids with Inorganic Nanosheets (Tokyo Univ. of Agriculture and Technology) NAKATO, Teruyuki (11:25~11:45)

**4SE-07** Special Program Lecture Reversible morphological change induced by molecular transformation in nano-layered environment (Center for Priority Area, Tokyo Metropolitan Univ.) INOUE, Haruo (11:45~12:15)

## Innovation and development in photofunctional complex systems

#### Tuesday, March 29, PM

Chair: ISHITANI, Osamu (13:30∼14:35)

**4SE-08** Special Program Lecture Opening remarks (Grad. Sch. Sci. Eng., Univ. of Toyama) NOZAKI, Koichi (13:30∼13:35)

**4SE-09** Special Program Lecture Artificial and Photo-functional Proteins Constructed with A New Methodology, *Peptide Origami* (Grad. Sch. Sci., Kitasato Univ.; PRESTO, JST) ISHIDA, Hitoshi (13:35∼14:05)

**48E-10** Special Program Lecture Mechanoluminescence Materials and Their Application (AIST) XU CHAO-NAN (14:05~14:35)

Chair: HAYAMI, Shinya (14:35~15:35)

**4SE-11** Special Program Lecture Basic Concept and Application of Vapochromism (Grad. Sch. Sci., Hokkaido Univ.) KATO, Masako (14:35 ~15:05)

**4SE-12** Special Program Lecture Development of Molecular Photomagnetic Materials (IMCE, Kyushu Univ.) SATO, Osamu (15:05∼15:35)

Chair: TSUBOMURA, Taro (15:35 $\sim$ 16:35)

**48E-13** Special Program Lecture Circular Polarized luminescence of asymmetric lanthanide complexes with chiral ligands (Grad. Sch. Eng., Hokkaido Univ.; Grad. Sch. Mat. Sci., NAIST) HASEGAWA, Yasuchika; HARADA, Takashi; KAWAI, Tsuyoshi (15:35∼16:05)

48E-14 Special Program Lecture Flexible Color Control of Emissive Copper(I) Coordination Polymers (Grad. Sch. Sci. Eng., Univ. of Toyama) TSUGE, Kiyoshi (16:05~16:35)

## Room SF

Bldg. 23 23-311

#### Highly Integrated Smart Catalysts based on Supramolecular Self-Assembly

#### Tuesday, March 29, PM

 $(13:30\sim13:40)$ 

**48F-01** Special Program Lecture Opening Remarks (Inst. Chem. Res., Kyoto Univ.) TAKAYA, Hikaru (13:30∼13:40)

Chair: TAKAYA, Hikaru (13:40~15:00)

48F-02 Special Program Lecture Design of Functional Suprastructures Providing Large Aromatic Rings (Chem. Res. Lab., Tokyo Tech) YOSHIZAWA, Michito (13:40~14:00)

**4SF-03** Special Program Lecture Supramolecular Polymerization Catalyst by Using Modified Cyclodextrins (Grad. Sch. Sci., Osaka Univ.) TAKASHIMA, Yoshinori; YAMAGUCHI, Hiroyasu; HARADA, Akira (14:00∼14:20)

**4SF-04** Special Program Lecture Construction of Functional Nano-Space by Hierarchical Arrangement of Inorganic-Organic Units (Grad. Sch. Arts and Sci., The Univ. of Tokyo) UCHIDA, Sayaka (14:20~14:40)

**4SF-05** Special Program Lecture Controlled Photoreactions in Chiral Liquid Crystalline Reaction Media (RIKEN; PRESTO, JST) ISHIDA, Yasuhiro (14:40~15:00)

Chair: HARA, Kenji (15:00∼16:20)

**4SF-06** Special Program Lecture Self-Organizing Nanopalladium Catalyst-Promoted Organic Syntheses (RIKEN) YAMADA, Yoichi (15:00 ~15:20)

**4SF-07** Special Program Lecture Acid-Base Bifunctional Catalysis of Silica-Alumina-Supported Organic Amines (Interdisciplinary Grad. Sch. Sci. and Eng., Tokyo Tech) MOTOKURA, Ken (15:20∼15:40)

**4SF-08** Special Program Lecture Atomically dispersed Pd catalyst supported on zeolites (Grad. Sch. Eng., Tottori Univ.) OKUMURA, Kazu (15:40∼16:00)

**4SF-09** Special Program Lecture Clarification of Hydrogen Storage Mechanism of Nanoalloys and Application to Catalysis (CRC, Hokkaido Univ.; Faculty of Sci., Kyoto Univ.; PRESTO, JST) YAMAUCHI, Miho; KITAGAWA, Hiroshi; TSUKUDA, Tatsuya (16:00∼16:20)

(16:20~16:30)

**4SF-10** Special Program Lecture Closing Remarks (CRC, Hokkaido Univ.) HARA, Kenji (16:20∼16:30)

## Room G1

Bldg. 23 23-201

## The Latest Development of Display Materials Monday, March 28, AM

#### OLED

(9:00~9:10)

**3G1-01** Opening Remarks (Grad. Sch. Eng., Nagoya Univ.) MORI, Tatsuo (09:00∼09:10)

Chair: MORI, Tatsuo (9:10  $\sim$ 11:40)

3G1-02 ATP Keynote Lecture Recent Progress in Organic Light Emitting Materials and Devices (OPERA, Kyushu Univ.) ADACHI, Chihaya (09:10∼10:00)

**3G1-07** Incubation Time (10:00~10:10)

#### **OLED Display**

**3G1-08** ATP Special Invited Lecture Developmento of Scarable Display with Passive OLEDs (Mitsubishi Electric Corporation) HARA, Zenichiro; TERAZAKI, Nobuo (10:10∼10:50)

**3G1−12** Incubation Time (10:50∼11:00)

3G1-13 ATP Invited Lecture Transparent organic light-emitting diodes and their related technologies (Fac. Eng., Tokyo Polytechnic Univ.) UCHIDA, Takayuki (11:00∼11:30)

**3G1-16** Incubation Time (11:30~11:40)

#### Monday, March 28, PM

Chair: ADACHI, Chihaya (13:00~14:20)

**3G1-25** ATP Invited Lecture A Study on Materials of Semi-Transparent Cathode for OLED Devices with Top Emitting Structures (Sharp Corp.) FUJITA, Yoshimasa; OKAMOTO, Ken; KODEN, Mitsuhiro; KONDOH, Katsumi (13:00∼13:30)

**3G1-28** Incubation Time (13:30~13:40)

3G1-29 ATP Invited Lecture Development and market trend of switch with OLED (Nihon Kaiheiki Ind. Co., Ltd.) OHNUKI, Kazumitsu (13:40 ~14:10)

**3G1-32** Incubation Time (14:10~14:20)

#### **OLED Lighting**

Chair: UCHIDA, Takayuki (14:20∼16:30)

3G1-33 ATP Special Invited Lecture Current Status of OLED Lighting and Future (Panasonic Electric Works Co., Ltd. Advanced Technologies Development Laboratory) KOMODA, Takuya; IDE, Nobuhiro; TSUJI, Hirova (14:20∼15:00)

**3G1-37** Incubation Time (15:00~15:10)

**3G1–38** ATP Invited Lecture OLED Lighting panel with wet processed phosphorescent active layers (Showa Denko K.K. Corporate R&D Center) KONDO, Kunio (15:10~15:40)

**3G1-41** Incubation Time (15:40~15:50)

**3G1-42** ATP Invited Lecture OLED Lighting: Soon To Be Commercialized (NEC Lighting, Ltd.) TOGUCHI, Satoru (15:50∼16:20)

**3G1-45** Incubation Time (16:20~16:30)

#### Tuesday, March 29, AM

#### **OLED-related Materials**

Chair: KAJI, Hironori (9:00  $\sim$ 10:30)

**4G1-01** ATP Special Invited Lecture Polymer LEDs with Polymer Blend Emitting Layer: Achieving Enhanced Device Efficiency and Operational Stability (Sch. Mat. Sci., JAIST) MURATA, Hideyuki; ABE, Junichi (09:00∼09:40)

**4G1−05** Incubation Time (09:40~09:50)

**4G1-06** ATP Invited Lecture Recent progress of polymer OLED material (SUMITOMO Chemical Co., Ltd.) YAMADA, Takeshi (09:50∼ 10:20)

**4G1-09** Incubation Time (10:20~10:30)

Chair: TAKADA, Noriyuki (10:30~11:50)

**4G1-10** ATP Invited Lecture Development of Electron Transporting Materials with High Electron Mobility for Organic EL Devices (Fac. Textile Sci. Technol., Shinshu Univ.; JST PRESTO) ICHIKAWA, Musubu (10:30 ∼11:00)

**4G1-13** Incubation Time (11:00~11:10)

**4G1-14** ATP Invited Lecture Deposition of High quality ITO Thin Films on Plasutic Subustrates (Sanyo Vacuum Industries Co., Ltd.) OGAWA, Soh-ichi (11:10∼11:40)

**4G1-17** Incubation Time (11:40~11:50)

#### Tuesday, March 29, PM

#### Estimation technology for OLED

Chair: MURATA, Hideyuki (13:00 $\sim$ 14:30)

4G1-25 ATP Special Invited Lecture NMR Analysis of molecular orientation and degradation in organic light-emitting diodes (Inst. Chem. Res., Kyoto Univ.; OPERA, Kyushu Univ.; Nissan Chemical Industries, Ltd.) KAJI, Hironori; FUKUSHIMA, Tatsuya; FUKUCHI, Masashi; YAMAMOTO, Junichi; FUJIMURA, Subaru; YAHIRO, Masayuki; HIRATA, Shuzo; HEO, Hyo Jung; HIRATA, Osamu; SHIBANO, Yuki; ADACHI, Chihaya (13:00~13:40)

**4G1-29** Incubation Time (13:40~13:50)

4G1-30 ATP Invited Lecture Visualization of sputtering damage to an organic film (PRI, AIST) TAKADA, Noriyuki; SUEMORI, Kouji; HOSHINO, Satoshi; KAMATA, Toshihide; IBARAKI, Nobuki (13:50∼ 14:20)

**4G1-33** Incubation Time (14:20~14:30)

Chair: ICHIKAWA, Musubu (14:30 $\sim$ 15:10)

4G1-34 ATP Invited Lecture Direct measurement of back energy transfer in blue phosphorescent system by time-resolved optical waveguide spectroscopy (Analysis Technology Center, Fujifilm Corp.; IMRAM, Tohoku Univ.) HIRAYAMA, Heijiro; SUGAWARA, Yoshihiro; FUJIMURA, Hidetoshi; MIYASHITA, Yosuke; MITSUISHI, Masaya; MIYASHITA, Tokuji (14:30∼15:00)

**4G1-37** Incubation Time (15:00∼15:10)

## Room G2

Bldg. 23 23-203

## The Latest Development of Display Materials Monday, March 28, AM

#### Electronic Paper

 $(9:00 \sim 9:10)$ 

**3G2-01** Opening Remarks (Sch. Eng., Tokai Univ.) MAEDA, Shuichi (09:00∼09:10)

#### Plain Paper Electronic Paper

Chair: OZAWA, Shinji  $(9:10\sim10:50)$ 

**3G2-02** ATP Special Invited Lecture Potentials of Paper Media as viewed from Body Sensations and Cognitive Characteristics (Emeritus Prof., The Univ. of Tokyo) ONABE, Fumihiko (09:10∼09:50)

**3G2-06** Incubation Time (09:50~10:00)

**3G2-07** ATP Special Invited Lecture Trend of Electronic Paper (Sch. Eng., Tokai Univ.) OMODANI, Makoto (10:00∼10:40)

**3G2-11** Incubation Time (10:40~10:50)

#### Electronic Paper and its Materials(1)

Chair: KOBAYASHI, Norihisa (10:50 $\sim$ 12:10)

**3G2-12** ATP Invited Lecture High speed passive matrix display using leuco dye (FUNAI ELECTRIC CO., LTD.) SUZUKI, Masao; HIGUCHI, Tetsuya; WU, Weng; SHIMOMURA, Takeshi; FUKUOKA, Toshimi; ONO, Masatoshi; OMODANI, Makoto (10:50∼11:20)

**3G2-15** Incubation Time (11:20~11:30)

**3G2-16** ATP Invited Lecture New Display Devices with Organic-Metallic Hybrid Polymers (NIMS; JST-CREST) HIGUCHI, Masayoshi (11:30 ~12:00)

**3G2-19** Incubation Time (12:00~12:10)

#### Monday, March 28, PM

#### Electronic Paper and its Materials(2)

Chair: MAEDA, Shuichi (13:30∼15:20)

**3G2–28** ATP Invited Lecture E-paper Technology with Both Emissive and Reflective Displaying Properties (Grad. Sch. Adv. Integration Sci., Chiba Univ.) KOBAYASHI, Norihisa (13:30∼14:00)

**3G2-31** Incubation Time (14:00~14:10)

**3G2−32** ATP Invited Lecture Twisting ball type electronic papers (Soken Chemical Co.Ltd) TAKIZAWA, Yoichi (14:10~14:40)

**3G2-35** Incubation Time (14:40~14:50)

**3G2-36** Oral C Direct coloration and de-coloration technique triggered by the electrochemical deposition and desorption of a Zn layer onto a thin nanoporous alumina layer. (Kyushu Univ., Center for Organic Photonics and Electronics Research(OPERA)) TSUJI, Toshiro; HIRATA, Shuzo; ADACHI, Chihaya (14:50~15:10)

**3G2-38** Incubation Time  $(15:10 \sim 15:20)$ 

#### **Electronic Paper and its Applications**

Chair: OMODANI, Makoto (15:20~17:20)

**3G2–39**<sup>#</sup> ATP Invited Lecture On Site Visualization as a new concept for safety monitoring, disaster prevention and remediation (Grad. Sch. Eng., Kobe Univ.) AKUTAGAWA, Shinichi (15:20∼15:50)

**3G2-42** Incubation Time (15:50~16:00)

**3G2-43** ATP Invited Lecture Use of electronic paper at disaster prevention (CTI Engineering Co., Ltd.; Kobe Univ.) NOMURA, Mitsugu; AKUTAGAWA, Shinichi (16:00∼16:30)

**3G2-46** Incubation Time (16:30~16:40)

**3G2-47** ATP Invited Lecture Digital Signage Using Electrophoretic Electronic Paper Displays (TOPPAN PRINTING CO., LTD) DANJO, Hidetoshi (16:40∼17:10)

**3G2-50** Incubation Time (17:10~17:20)

## Room G3

Bldg. 23 23-205

## Innovative Technologies for Environment and Natural Resources

Sunday, March 27, AM

## Innovative Processes for Energy and Resource Conservation

(9:30~9:40)

**2G3-04** Opening Remarks (Chem. Res. Lab., Tokyo Tech) TATSUMI, Takashi (09:30~09:40)

Chair: TATSUMI, Takashi  $(9:40\sim10:20)$ 

2G3-05 ATP Special Invited Lecture Energy and Environmental Measures of Automobile Tire - New Manufacturing Method of A Silane Coupling Agent (Dept. of Org. and Polym. Mater., Tokyo Tech) TAKATA, Toshikazu (09:40∼10:20)

Chair: TAKATA, Toshikazu (10:20~11:00)

2G3-09 ATP Special Invited Lecture Current status and the future of carbon fiber composites (Composite Materials Research Laboratories, TORAY INDUSTRIES, INC.) KITANO, Akihiko (10:20~11:00)

Chair: KITANO, Akihiko (11:00~11:40)

**2G3-13** ATP Special Invited Lecture The high-clear and high-heat shield window film using the interference multilayer film (Sumitomo 3M Limited) IGARASHI, Maya (11:00∼11:40)

Chair: SEKO, Shinzo (11:40~12:10)

**2G3-17** Incubation Time (11:40~12:10)

#### Sunday, March 27, PM

Chair: SATO, Kazuhiko (13:10 $\sim$ 14:00)

**2G3-26** ATP Keynote Lecture New Catalysts That Save Material Resources, Energy and the Environment (Mitsui Chemicals, Inc.) FUJITA, Terunori (13:10~14:00)

Chair: FUJITA, Terunori (14:00 $\sim$ 14:40)

**2G3-31** ATP Special Invited Lecture Green Oxidation with Aqueous Hydrogen Peroxide (ISC, AIST) SATO, Kazuhiko (14:00∼14:40)

Chair: MASUDA, Takao (14:40∼15:10)

**2G3-35** ATP Invited Lecture Innovation of separation technology with microporous thin membrane (School of Adv. Sci. and Eng., Waseda Univ.) MATSUKATA, Masahiko (14:40∼15:10)

Chair: MATSUKATA, Masahiko (15:10∼15:40)

**2G3-38** ATP Invited Lecture Production of Useful Chemicals from Inedible Biomass Using Iron Oxide Catalysts (Fac. Eng., Hokkaido Univ.) MASUDA, Takao; TAGO, Teruoki (15:10∼15:40)

Chair: TATSUMI, Takashi (15:40 $\sim$ 16:10)

**2G3-41** Incubation Time  $(15:40\sim16:10)$ 

Chair: INOUE, Kenji (16:10 $\sim$ 16:40)

**2G3-44** Oral D Microwave low temperature continuous preparation of bio diesel fuel (Sojo Univ.) IKENAGA, Kazutoshi; OGATA, Yasuto; UEDA, Yuji; SAKITA, Nariyuki (16:10∼16:40)

#### Monday, March 28, AM

#### Coping with Diversification of Carbon Resources

 $(9 \cdot 10 \sim 9 \cdot 20)$ 

3G3-02 Opening Remarks (MSL, Tokyo Tech) HARA, Michikazu (09:10 ~09:20)

Chair: HARA, Michikazu (9:20  $\sim$ 10:20)

**3G3-03** ATP Keynote Lecture The Future of the Biorefinery Industry (RITE) YUKAWA, Hideaki (09:20∼10:10)

**3G3-08** Incubation Time  $(10:10\sim10:20)$ 

Chair: YUKAWA, Hideaki  $(10:20{\sim}11:40)$ 

**3G3-09** ATP Special Invited Lecture Algae Biomass: A Future Alternative Resource of Fossil Oil (Grad. Sch. Life and Environmental Sci., Univ. of Tsukuba) WATANABE, Makoto (10:20∼11:00)

3G3-13 ATP Invited Lecture Its posible and the past, nowdays and future; Sucrose as raw materials of chemical industry (Japan Sugar Refiners'

Association) SAITO, Shoji (11:00~11:30) **3G3-16** Incubation Time (11:30~11:40)

Chair: KOBORI, Yoshihiro (11:40~12:10)

**3G3-17** Oral D Utilization of whole lignocellulosics with both fractionation and functionality control under room temperature (Funaoka LAB. Graduate School of Bioresources Mie Univ.) FUNAOKA, Masamitsu; AOYAGI, Mitsuru; MIKAME, Keigo; NONAKA, Hiroshi (11:40∼12:10)

#### Monday, March 28, PM

Chair: KOBORI, Yoshihiro (13:10~14:30)

**3G3-26** ATP Special Invited Lecture Present and Future Prospects of the Third Generation Liquid Bioenergies (Grad. Sch. Energy Sci., Kyoto Univ.) SAKA, Shiro (13:10∼13:50)

**3G3-30** ATP Invited Lecture Development of an integrated system for a cellulosic bioethanol production from energy crops cultivation to ethanol conversion process (Research association of innovative bioethanol technology) KAWABATA, Hideo (13:50~14:20)

**3G3-33** Incubation Time (14:20~14:30)

Chair: SAKA, Shiro (14:30∼15:50)

**3G3-34** ATP Special Invited Lecture Recent Research Activities Related to Carbon Resources in Kyushu University: Basic/Applied Research Projects Promoted by Research and Education Center of Carbon Resources and Other Institutes (Research and Education Center of Carbon Resources, Kyushu Univ.) HAYASHI, Jun-ichiro; HIRAJIMA, Tsuyoshi; MATSUSHITA, Yohsuke; TERAOKA, Yasutake (14:30~15:10)

3G3-38 ATP Invited Lecture Oil Sand Projects in Canada (JX Nippon Oil & Gas Exploration Corporation) ISOE, Yoshiro (15:10~15:40)
 3G3-41 Incubation Time (15:40~15:50)

Chair: HAYASHI, Jun-ichiro (15:50~17:10)

**3G3-42** ATP Special Invited Lecture Photocatalysts for solar hydrogen production and CO₂ fixation using water as a reducing reagent (Tokyo Univ. of Sci.) KUDO, Akihiko (15:50∼16:30)

**3G3-46** ATP Invited Lecture Recent Researches and Developments on Carbon Dioxide Derived Aliphatic Polycarbonate and Problems of Its Practical Application (Fac. Eng., Tokyo Univ. of Sci.) SUGIMOTO, Hiroshi (16:30 ∼17:00)

**3G3-49** Incubation Time (17:00~17:10)

## Room G4

Bldg. 23 23-206

## Innovative Technologies for Environment and Natural Resources

Sunday, March 27, AM

Strategy of Materials Developments under a Limitation of Mineral Resources

Chair: HORI, Hisao (9:00 ~9:50)

**2G4-01** Oral C Thermo Plasticization of Cellulose and Application for Preparation of the Fiber by Melt Spinning Process (Toray Industries, Inc.) KANO, Hidekazu; YAMADA, Hiroyuki; ARANISHI, Yoshitaka; MAEDA, Yuhei (09:00∼09:20)

2G4-03 Oral D Vitamin B<sub>12</sub> catalysed Arsenic Detoxification Reaction (Nippon Sheet Glass Co.Ltd) NAKAMURA, Koichiro (09:20∼09:50)

#### Sunday, March 27, PM

(13:00~13:10)

**2G4−25** Opening Remarks (IIS, The Univ. of Tokyo) OKABE, Toru (13:00 ~13:10)

Chair: OKABE, Toru (13:10 $\sim$ 14:00)

**2G4-26** ATP Keynote Lecture Most modern way of production for NdFeB magnets and the prospect (Intermetallics Co.,Ltd.) SAGAWA, Masato (13:10∼14:00)

Chair: TADA, Keishi (14:00~15:30)

**2G4-31** ATP Special Invited Lecture Recycling of Rare Metals (AIST) TANAKA, Mikiya  $(14:00 \sim 14:40)$ 

**2G4-35** Incubation Time (14:40~14:50)

**2G4-36** ATP Special Invited Lecture The energy and the material strategy considered from Nd magnet (Shin-Etsu Chemical Co., Ltd. Magnetic Materials Reseach Center) MINOWA, Takehisa (14:50~15:30)

Chair: HORI, Hisao (15:30~16:50)

2G4-40 ATP Special Invited Lecture Materials processing on rare

earth halides (Grad. Sch. Eng., Kyoto Univ.) UDA, Tetsuya (15:30~16:10)

**2G4-44** ATP Special Invited Lecture Pyrometallurgical Recycling for Rare Earth Magnet Alloy by Using Molten Fluoride (Tohoku Univ.) TAKEDA, Osamu; NAKANO, Kiyotaka; SATO, Yuzuru (16:10∼16:50)

 $(16:50\sim17:50)$ 

**2G4-48** Panel Discussion Strategy of Materials Developments under a Limitation of Mineral Resources: Panelist: SAGAWA, Masato; TANAKA, Mikiya; MINOWA,Takehisa; UDA, Tetsuya; TAKEDA, Osamu, Cordinator: OKABE, Toru (16:50∼17:50)

### A leap ahead with Challenging Biochemicals

#### Monday, March 28, AM

Chair: FUKASE, Koichi (11:40~12:20)

**3G4-17** Oral C New aspect for green-bio chemo-enzymatic synthesis: toward the development for sophisticated fluorescent agent for analysis (Faculty of Pharmacy, Keio Univ.) HIGASHI, Toshinori; SHOJI, Mitsuru; SUGAI, Takeshi (11:40~12:00)

**3G4-19** Oral C Development of a yeast glycolipid biosurfactant, mannosylerythritol lipids (Nat. Inst. Advanced Ind. Sci. & Tech. (AIST)) FUKUOKA, Tokuma; MORITA, Tomotake; IMURA, Tomohiro; KITAMOTO, Dai (12:00∼12:20)

#### Monday, March 28, PM

Chair: SUGAI, Takeshi (13:30~14:30)

**3G4-28** Oral C Organic nanotubes with distinctive inner / outer surfaces: nanotube capsules for biomaterials and drugs (NTRC-AIST) MASUDA, Mitsutoshi; DING, Wuxiao; KAMETA, Naohiro; MINAMIKAWA, Hiroyuki; SHIMIZU, Toshimi (13:30~13:50)

3G4-30 Oral C Innate immune modulators in fermented foods (Grad. Sch. of Sci., Osaka Univ.; Grad. Sch. of Eng., Kagoshima Univ.; Hukuyama Bussann Co.,Ltd.; Taste & Aroma Strategic Research Institute Co.,Ltd.) FUJIMOTO, Yukari; HASHIMOTO, Masahito; PRADIPTA, Ambara Rachmat; KAN, Shintaro; SHIGEHISA, Hiroshi; FUKASE, Koichi (13:50 ~14:10)

**3G4-32** Oral C Development of an unnatural base pair system that functions in PCR amplification with high fidelity and efficiency (SSBC, RIKEN; TagCyx Biotechnologies; Grad. Sch. of Sci., Univ. of Tokyo) KIMOTO, Michiko; YAMASHIGE, Rie; SATO, Akira; MITSUI, Tsuneo; YOKOYAMA, Shigeyuki; HIRAO, Ichiro (14:10∼14:30)

Chair: KONOIKE, Toshiro (14:30~15:30)

**3G4-34** ATP Keynote Lecture Integrated Drug Discovery on the Basis of Peptide Chemistry (Kyoto Pharm. Univ.) KISO, Yoshiaki (14:30∼ 15:20)

**3G4-39** Incubation Time (15:20~15:30)

Chair: OOHASHI, Takehisa (15:30~16:10)

**3G4-40** ATP Invited Lecture Bio-chemicals Development by DAISO (Research Center, DAISO CO., LTD.) SAIKA, Tetsuyuki (15:30~16:00)

**3G4-43** Incubation Time  $(16:00\sim16:10)$ 

Chair: SUGAI, Takeshi (16:10~16:50)

**3G4-44** ATP Invited Lecture chemical glycobiology toward mmune control (Grad. Sch. Sci., Osaka Univ.) FUKASE, Koichi (16:10∼16:40) **3G4-47** Incubation Time (16:40∼16:50)

(16:50~17:50)

**3G4-48** Panel Discussion A Leap ahead with Challenging Biochemicals: Panelist: KISO, Yoshiaki; TAGUCHI, Takahisa; SAIKA, Tetsuyuki, Cordinator: SUGAI, Takeshi; UEJIMA, Yasuhide (16:50∼17:50)

#### Tuesday, March 29, AM

Chair: SUGAI, Takeshi (9:30  $\sim$ 10:10)

**4G4-04** ATP Invited Lecture "Technology and track records of NML" -Facing the new industry with the evolution technology (Neo-Morgan Lab. Incorporated.) FUJITA, Tomohiro (09:30∼10:00)

**4G4-07** Incubation Time  $(10:00\sim10:10)$ 

Chair: AKIYOSHI, Kazunari (10:10∼11:10)

**4G4-08** ATP Keynote Lecture The Future Medicine Pioneered by Biological Detection (Advanced Materials Laboratories, Sony Corp.) YASUDA, Akio (10:10∼11:00)

**4G4−13** Incubation Time (11:00~11:10)

Chair: TOMIGAHARA, Yoshitaka (11:10~12:00)

**4G4-14** ATP Special Invited Lecture Production of useful material from microalgae Euglena (Euglena Co., Ltd.) SUZUKI, Kengo (11:10∼ 11:50)

**4G4-18** Incubation Time (11:50~12:00)

#### Tuesday, March 29, PM

Chair: WATANABE, Eiichi (13:00~13:50)

4G4-25 ATP Special Invited Lecture Biofuel production using sakebrewing technology (Gekkeikan Sake Company, Ltd.) HATA, Yoji (13:00 ~13:40)

**4G4-29** Incubation Time (13:40~13:50)

Chair: TOMIGAHARA, Yoshitaka (13:50 $\sim$ 14:40)

**4G4-30** ATP Special Invited Lecture Whole Genome Analysis of a Cellulosome-Producing Anaerobic Bacterium, *Clostridiumcellulovorans* and its Application to Complete Biomass Utilization (Grad. Sch. Bioresources., Mie Univ.) TAMARU, Yutaka (13:50~14:30)

**4G4-34** Incubation Time (14:30~14:40)

Chair: 00HASHI, Takehisa (14:40~15:40)

**4G4-35** ATP Keynote Lecture New materials inspired by bio-systems (AIST Kansai) TAGUCHI, Takahisa (14:40∼15:30)

**4G4-40** Incubation Time (15:30~15:40)

Chair: WATANABE, Eiichi (15:40∼16:30)

**4G4-41** ATP Special Invited Lecture Fungal biosurfactant proteins functional in degradation of biopolymers (Grad. Sch. Agric. Sci., Tohoku Univ.; NICHe Tohoku Univ.; Natl Inst. Brewing) ABE, Keietsu; TAKAHASHI Toru (15:40~16:20)

**4G4-45** Incubation Time (16:20~16:30)

Chair: KONOIKE, Toshiro (16:30~17:10)

**4G4-46** ATP Invited Lecture Development of Saccharification Process from Cellulosic Biomass (Mitsubishi Heavy Industries, Ltd.) NISHIYAMA, Michio; KONDO, Gaku; UEHARA, Ryosuke; SUZUKI, Hideo; TERAKURA, Seiichi (16:30∼17:00)

**4G4-49** Incubation Time (17:00~17:10)

## Room H1

Bldg. 23 23-301

#### New Energy Technologies towards the Realization of a Low-carbon Society

Monday, March 28, AM

#### Next Generation Photovoltaic Technologies

 $(9:30\sim 9:40)$ 

**3H1-04** Opening Remarks (RCAST, The Univ. of Tokyo) SEGAWA, Hiroshi (09:30~09:40)

Chair: NAKAZAKI, Jotaro (9:40 ~10:50)

3H1-05 ATP Invited Lecture Design of Dye Materials for High Efficient Light Energy Conversion (Shinshu Univ.) KIMURA, Mutsumi (09:40 ∼10:10)

**3H1-08** Oral C Study of hybrid dye sensitized solar cells based on phthalocyanine and naphthalocyanine dyes (Kyushu Inst. Tech.) PARK, Byung-wook; INOUE, Takafumi; OGOMI, Yuhei; PANDEY, Shyam S.; MIYAMOTO, Akari; FUJITA, Shinsuke; HAYASE, Shuzi (10:10∼10:30)

3H1-10<sup>#</sup> Oral C Investigation of dye adsorption and diffusion in the light of structure property correlation for dye sensitized solar cells (Kyushu Inst. Technol.) PANDEY, Shyam S.; HAYAT, Azwar; LEE, Kyung-young; SATO, Hiromi; OGOMI, Yuhei; HAYASE, Shuzi (10:30∼10:50)

Chair: KIMURA, Mutsumi (10:50 $\sim$ 12:10)

3H1-12 ATP Invited Lecture Development of Near-IR Sensitive Dye toward Highly Efficient Dye-sensitized Solar Cells (RCAST, The Univ. of Tokyo) SEGAWA, Hiroshi (10:50∼11:20)

**3H1−15** ATP Invited Lecture Mechanism of dye-sensitized solar cells studied by time-resolved laser spectroscopy (AIST) KATOH, Ryuzi (11:20 ~11:50)

3H1-18 Oral C Problems concerning with impedance spectroscopy for dyesensitized solar cells (Faculty of Science and Engineering, Doshisha Univ.)
ADACHI, Motonari; TANINO, Ryou; MORI, Yasushige; UCHIDSA, Fumio (11:50∼12:10)

#### Monday, March 28, PM

Chair: UCHIDA, Satoshi (13:30~14:20)

**3H1-28** ATP Invited Lecture Electrolytic Solution Using Novel Linear Sulfone for Dye-Sensitized Solar Cells (Japan Carlit) YANADA, Kazuto; CHIBA, Kazumi; YAMAGUCHI, Yoji (13:30∼14:00)

3H1-31 Oral C Photovoltaic performance of dye-sensitized solar cells using

sulfide/disulfide redox couples (DAI-ICHI KOGYO SEIYAKU CO.,LTD) SAITO. Yasuteru: KATO. Kazuvuki (14:00~14:20)

Chair: MIYASAKA, Tsutomu (14:20~15:50)

3H1-33 ATP Invited Lecture Cyanoborate Ionic Liquid-based electrolyte for dye-sensitised solar cells (Merck Ltd.) KAWATA, Kentaro; YOSHIZAKI, Hiroki; GOTO, Tomohisa; SAWADA, Atsushi; SHINOHARA, Hiromi (14:20~14:50)

**3H1-36** ATP Invited Lecture Frontiers of Organic Photovoltaic Cells Using Redox Polymers (Waseda Univ.) NISHIDE, Hiroyuki (14:50∼ 15:20)

3H1-39 ATP Invited Lecture High Performance Nano-Clay Electrolyte for Dye-Sensitized Solar Cells (Univ. of Tokyo) UCHIDA, Satoshi; KUBO, Takaya; SEGAWA, Hiroshi (15:20~15:50)

Chair: ADACHI, Motonari (16:00∼17:00)

3H1-43 Oral D Spray pyrolysis deposition method and its application to the dye solar cell fabrication process (SPD Laboratory, Inc.) KANEKO, Shoji; KUMARA, G. R. A.; VIRAJ, J. P.; KAWASAKI, Shunji (16:00∼16:30)

**3H1-46** ATP Invited Lecture Study of Optical Wireless Power Supply System for Mobile Phone with DSC and OLED (Rohm; OKI Semiconductor; NTT Docomo) WATANABE, Minoru; KIMURA, Toshihiro; TAKENO, Kazuhiko (16:30∼17:00)

#### Tuesday, March 29, AM

#### Next Generation Photovoltaic Technologies

Chair: TAJIMA, Keisuke  $(9:00\sim10:00)$ 

4H1-01 ATP Invited Lecture Electron Transfer/Transport in Dye-Sensitized Solar Cells (Shinshu Univ.) MORI, Shogo (09:00∼09:30)

**4H1-04** ATP Invited Lecture Photoexcited Carrier Dynamics and Photovoltaic Properties of Semiconductor Quantum Dot-Sensitized Solar Cells (Univ. of Electro-Communication; PRESTO, JST) TOYODA, Taro; SHEN, Qing (09:30~10:00)

Chair: MORI, Shogo (10:00 $\sim$ 11:00)

**4H1-07** ATP Invited Lecture Organic Photovoltaics using Surface Complexes of Titanium Dioxide and Dicyanomethylene Compounds (Univ. of Tokyo) FUJISAWA, Jun-ichi; NAGATA, Morio; NAKAZAKI, Jotaro; UCHIDA, Satoshi; KUBO, Takaya; SEGAWA, Hiroshi (10:00∼10:30)

**4H1-10** ATP Invited Lecture Tailoring Organic Heterojunction Interfaces in Polymer Photovoltaic Devices (Univ. of Tokyo; JST-ERATO) TAJIMA, Keisuke; TADA, Akira; GENG, Yanfang; WEI, Qingshuo; HASHIMOTO, Kazuhito (10:30∼11:00)

Chair: OYAIZU, Kenichi (11:00 $\sim$ 11:40)

4H1-13 ATP Special Invited Lecture Development of Printable, Small-molecule Organic Photovoltaics (Grad. Sch. Sci., The Univ. of Tokyo) NAKAMURA, Eiichi (11:00~11:40)

#### Tuesday, March 29, PM

Chair: SEGAWA, Hiroshi (12:30 $\sim$ 13:50)

4H1-22 ATP Keynote Lecture Solar Photovoltaic Technology in the 21st Century - Our Hope and Responsibility (SSR, Tokyo Tech) KUROKAWA, Kosuke (12:30∼13:20)

4H1-27 ATP Invited Lecture Photovoltaic Power Generation Technology Development in JX Nippon Oil & Energy Corporation (JX Nippon Oil & Energy Corporation) ASANO, Tsuyoshi; Eu, Seunghun; IKEDA, Satoru; NAKAYAMA, Keisuke; GOTO Masanao; NAKAMURA Tsutomu (13:20~13:50)

Chair: HAYASE, Shuji (13:50 $\sim$ 14:40)

4H1-30 ATP Keynote Lecture Present Status and Future Prospects of Solar Cells and Photovoltaics (Toyota Tech. Inst.) YAMAGUCHI, Masafumi (13:50~14:40)

Chair: KUBO, Takaya (14:40∼15:50)

**4H1-35** ATP Invited Lecture Perspectives of printable solar cells using organic and inorganic sensitizers (Toin Univ. of Yokohama) MIYASAKA, Tsutomu (14:40∼15:10)

4H1-38 ATP Special Invited Lecture Strategy for dye-sensitized solar cells with high efficiency (Kyutech) HAYASE, Shuji (15:10∼15:50)

(16:10~17:10)

4H1-44 Panel Discussion Present Status and Next Challenge of Organic Photovoltaics: Panelist: KUROKAWA, Kosuke; YAMAGUCHI, Masafumi; HAYASE, Shuji; MIYASAKA, Tsutomu, Cordinator: SEGAWA, Hiroshi (16:10~17:10)

## Room H2

Bldg. 23 23-304

## Frontier Materials Monday, March 28, AM

#### Recent Progress on Biomimetic Materials

Chair: SHIMOMURA, Masatsugu (9:00  $\sim$ 10:30)

**3H2-01** ATP Keynote Lecture Biomimetics: Integration of Biology and Nanotechnology (WPI-AIMR, Tohoku Univ.; IMRAM, Tohoku Univ.) SHIMOMURA, Masatsugu (09:00∼09:50)

3H2-06 ATP Special Invited Lecture Optical Materials based on the Biological Principles (Hamamatsu Univ. Sch. Med.) HARIYAMA, Takahiko (09:50∼10:30)

Chair: HARIYAMA, Takahiko (10:30~12:00)

**3H2-10** ATP Invited Lecture Formation of moth-eye surfaces supported by self-organization (MITSUBISHI RAYON CO.,LTD.) UOZU, Yoshihiro (10:30∼11:00)

**3H2−13** ATP Invited Lecture Designing of antifouling materials learnt from ocean organisms (Grad. Sch. Adv. Life Sci., Hokkaido Univ.) MUROSAKI, Takayuki; GONG, Jian Ping (11:00∼11:30)

3H2-16 ATP Invited Lecture Biomimetic Adhesion (NIMS) HOSODA, Naoe (11:30∼12:00)

#### Monday, March 28, PM

Chair: HOSODA, Naoe (13:00~14:40)

3H2-25 ATP Invited Lecture Mechanotaxis: Mechanobiomimetic design for cell manipulation materials (IMCE, Kyushu Univ.) KIDOAKI, Satoru; KAWANO, Takahito; SAKASHITA, Hiroyuki (13:00∼13:30)

3H2-28 ATP Special Invited Lecture Biosensing system: Insect chemosensory systems (Grad. Sch. Sci., Kobe Univ.) OZAKI, Mamiko (13:30 ~14:10)

**3H2-32** ATP Invited Lecture Lesson from nature: mechanism how to survive extreme environments in the Sleeping Chironomid, *Polypedilum vanderplanki* (NIAS) OKUDA, Takashi (14:10~14:40)

Chair: KIDOAKI, Satoru (14:40 $\sim$ 16:10)

**3H2-35** ATP Invited Lecture Bio-inspired Flight Systems (Grad. Sch. Eng., Chiba Univ.) Hao LIU (14:40∼15:10)

3H2-38 ATP Invited Lecture Biomimetic engineering tribology and automotive parts (Toyota Motor Corporation; Tohoku Univ.) SUZUKI, Atsushi; KAIDO, Masataka; SHIMOMURA, Masatsugu; YABU, Hiroshi; HIRAI, Yuji (15:10∼15:40)

3H2-41 ATP Invited Lecture Nanoimprint Application for Biomimetics devices (MRL, Hitachi Ltd.) MIYAUCHI, Akihiro (15:40~16:10)

Chair: GONG, Jianping (16:10~17:40)

3H2-44 ATP Invited Lecture Development of Biologically-Inspired Water-Repellent Surfaces (MRISD, AIST) HOZUMI, Atsushi (16:10  $\sim$  16:40)

3H2-47 ATP Invited Lecture Biologically Inspired Hydrophilic Material (General Research Institute of Technology, INAX Corporation) ISU, Norifumi (16:40∼17:10)

3H2-50 ATP Invited Lecture Creation of tunable structural color materials with opal photonic crystal (NIMS) FUDOZI, Hiroshi (17:10∼17:40)

Chair: HOSODA, Naoe (17:40 $\sim$ 18:20)

**3H2-53** Oral C A Novel Dye-Oriented Material:Inclusion Complex of Single Dye Crystal (ISIT) TSUCHIYA, Youichi; YAMANO, Akihito; SHIRAKI, Tomohiro; SADA, Kazuki; SHINKAI, Seiji (17:40∼18:00)

3H2-55 Oral C A One-Step Convenient Procedure for Fabricating Micro and Nanotextured Poymer Coatings: Creation of Superhydrophobicity (Kawamura Institute of Chemical Research) KATO, Shinji; SATO, Aya (18:00~18:20)

#### Tuesday, March 29, AM

#### Recent Progress on Biomimetic Materials

Chair: HOZUMI, Atsushi (9:00  $\sim$ 10:40)

4H2-01 ATP Special Invited Lecture Biomimetics for Plant Protection (Kyoto Univ.; FFPRI; RCAST, The Univ. of Tokyo) MORI, Naoki; OKUMOTO, Yutaka; MISE, Kazuyuki; TAKANASHI, Takuma; MITSUNO, Hidefumi; KANZAKI, Ryouhei (09:00~09:40)

4H2-05 ATP Invited Lecture Insect Inventory as a Biomimetic Database (National Museum of Nature and Science) NOMURA, Shuhei (09:40  $\sim 10:10$ 

4H2-08 ATP Invited Lecture Fish Inventory as a Biomimetic Database (National Museum of Nature and Science) SHINOHARA, Gento (10:10∼ 10:40)

Chair: MORI, Naoki (10:40~12:00)

4H2-11 ATP Invited Lecture Biomimetics Database and Ontology (ISIR, Osaka Univ.) KOZAKI, Koji (10:40~11:10)

**4H2-14** ATP Keynote Lecture Channeling the Forces of Nature, Nature Technology (Grad. Sch. Environmental Studies, Tohoku Univ.) ISHIDA, Hideki (11:10∼12:00)

#### Tuesday, March 29, PM

Chair: OHZONO, Takuya (13:00~14:40)

4H2-25 ATP Special Invited Lecture Innovations Inspired by Nature and upcoming Company Action (Sekisui Integrated Research Inc.) SANO, Kenzo (13:00∼13:40)

**4H2-29** ATP Invited Lecture Comprehensive Technology Governance in Biomimetic Field (NRI, AIST) ATA, Masafumi; SEKIYA, Mizuki (13:40~14:10)

**4H2-32** ATP Invited Lecture Bio-TRIZ and new design for sustainable engineering (Fac. Eng., Niigata Univ.) YAMAUCHI, Takeshi (14:10~14:40)

Chair: KOBAYASHI, Motoyasu (14:40~16:10)

**4H2-35** ATP Invited Lecture Developmental genetics of self-organization process in insect cuticle formation (Hokkaido Univ. of Educ.) KIMURA, Ken-ichi (14:40~15:10)

**4H2-38** ATP Invited Lecture Mathematical Physics and Biomimetics (Grad. Sch. Info. Sci., Tohoku Univ.) KUBO, Hideo (15:10∼15:40)

4H2-41 ATP Invited Lecture Self-Organized Shape-Tunable Microwrinkles and Applications (NRI, AIST) OHZONO, Takuya (15:40~16:10)

Chair: SHIMOMURA, Masatsugu (16:10~17:00)

**4H2−44** ATP Invited Lecture Tribological Behavior of Polymer Brushes Designed for Biomimetic Water Lubrication (JST, ERATO; IMCE, Kyushu Univ.) KOBAYASHI, Motoyasu; TAKAHARA, Atsushi (16:10∼16:40)

**4H2-47** Oral C Flexible, Transparent Laponite-PEG Composite Film with Ordered Structure (Tokyo Univ. of Agri. and Tech; RIKEN) AIZAWA, Kazuto; SHIKINKA, Kazuhiro; FUJII, Nozomu; OSADA, Yoshihito; SHIGEHARA, Kiyotaka (16:40~17:00)

## Room H3

Bldg. 23 23-305

### Frontier Materials Monday, March 28, AM

### Photonics Materials for Next Generation

(10:30~10:40)

**3H3−10** Opening Remarks (Asahi Kasei Corporation) AOKI, Kensuke (10:30~10:40)

Chair: TANAKA, Chikafumi (10:40∼11:30)

3H3-11 ATP Keynote Lecture Photonics Polymer for Face-to-Face Communication (Fac. Sci. Tech., Keio Univ.) KOIKE, Yasuhiro (10:40∼ 11:30)

Chair: KOIKE, Yasuhiro (11:30∼12:10)

3H3-16 ATP Special Invited Lecture Photonics Polymers for Next Generation Optical Interconnect Devices (IMRAM, Tohoku Univ.) SUGIHARA, Okihiro; KAINO, Toshikuni (11:30∼12:10)

#### Monday, March 28, PM

Chair: KOIKE, Yasuhiro (13:30 $\sim$ 14:50)

**3H3-28** ATP Invited Lecture Perfluorinated GI Plastic Optical Fiber For High Speed Applications (ASAHI GLASS CO., LTD.) TANAKA, Chikafumi (13:30∼14:00)

3H3-31 ATP Invited Lecture Development of Graded Index Type Plastic Optical Fiber with Partially Chlorinated Polymer (Urban Infrastructure & Environmental Products Company, SEKISUI CHEMICAL CO., LTD) NAKAO, Ryosuke (14:00~14:30)

3H3-34 Oral C Development of polyester-based optically-driven actuator (FUJIFILM Corporation) YASUDA, Takayasu; NISHIKAWA, Naoyuki; OKAZAKI, Masaki (14:30~14:50) Chair: SUGIHARA, Okihiro (15:10~16:30)

3H3-38 ATP Special Invited Lecture Liquid Crystalline Optical Film (JX Nippon Oil & Energy Corporation) TOYOOKA, Takehiro (15:10~ 15:50)

3H3-42 ATP Special Invited Lecture Optical Compensation Films for LCDs: Material Design and Latest trends (KANEKA TECHNO RESEARCH CO.,LTD.) FUJII, Sadao; KAWABATA, Hirosuke (15:50~16:30)

Chair: TAGAYA, Akihiro (16:30~17:40)

**3H3-46** ATP Special Invited Lecture Development of ArF lithography material by using living ROMP catalyst (Mitsui Chemicals, Inc. New Materials Development Center) SUNAGA, Tadahiro (16:30∼17:10)

3H3-50 ATP Invited Lecture Energy Efficient Liquid Crystal Display (e²-LCDs) using Photonic Crystal Structure based on Cholesteric Liquid Crystals (Merck & Co., Inc.) SUZUKI,Masayoshi; FUJIWARA, Naoya (17:10∼17:40)

## Room H4

Bldg. 23 23-306

### Frontier Materials Monday, March 28, AM

#### Supramolecular Programming for Devices

(9:20~9:30)

3H4-03 Opening Remarks (Chem. Res. Lab., Tokyo Tech) YAMAMOTO, Kimihisa (09:20∼09:30)

Chair: YAMAMOTO, Kimihisa  $(9:30 \sim 10:20)$ 

**3H4-04** ATP Keynote Lecture Approach to Chemical Devices Using Coordination Programming (Grad. Sch. Sci., The Univ. of Tokyo) NISHIHARA, Hiroshi (09:30∼10:20)

Chair: ARIGA, Katsuhiko (10:20~11:30)

3H4-09 ATP Special Invited Lecture Design and Synthesis of Supramolecular Hydrogels toward Biomaterials Devices (Grad. Sch. Eng., Kyoto Univ.; CREST, JST) HAMACHI, Itaru (10:20∼11:00)

3H4-13 ATP Invited Lecture Programmed Hierarchical Assemblies of Hemoproteins: Challenges toward Innovative Biodevices (Grad. Sch. Eng., Osaka Univ.) ONODA, Akira; HAYASHI, Takashi (11:00∼11:30)

Chair: ONODA, Akira (11:30∼12:10)

**3H4-16** ATP Special Invited Lecture from Molecule to Macro & from Macro to Molecule: Supramolecular Hierarchic Stuructures & Hand-Operationg Nanotechnology (WPI-MANA, NIMS) ARIGA, Katsuhiko (11:30∼12:10)

#### Monday, March 28, PM

Chair: HIGUCHI, Masayoshi (14:00 $\sim$ 15:10)

**3H4-31** ATP Special Invited Lecture Block Copolymer Template Engineering: Programming of Nanostructures and Nanofunctions (Chem. Res. Lab., Tokyo Tech) IYODA, Tomokazu (14:00∼14:40)

3H4-35 ATP Invited Lecture Development of Supramolecular Assemblies Possessing Electronic, Optoelectronic, and Magnetic Functions (JST-ERATO-SORST) YAMAMOTO, Youhei (14:40~15:10)

Chair: YAMAMOTO, Youhei (15:10~16:20)

3H4-38 ATP Special Invited Lecture Coordination Programming on Organic-Metallic Hybrid Polymers for Device Applications (NIMS; JST-CREST) HIGUCHI, Masayoshi (15:10∼15:50)

3H4-42 ATP Invited Lecture Molecular Device Programming from Electrodes and Molecules (ISIR, Osaka Univ.; JST-PRESTO) TANIGUCHI, Masateru (15:50∼16:20)

Chair: TANIGUCHI, Masateru (16:20 $\sim$ 17:30)

3H4-45 ATP Special Invited Lecture An Approach to Single Electronics from Nanoparticle Science (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba; CREST-JST) TERANISHI, Toshiharu (16:20~17:00)

3H4-49 ATP Invited Lecture Electric Properties of Self-Assembling Conducting Polymer Nanowire and Nanofiber (BASE, Tokyo Univ. of Agri. and Technol.) SHIMOMURA, Takeshi (17:00~17:30)

## Room H5

Bldg. 23 23-307

## Diversity of Fine Patterning Technology -Rivalry and co-prosperity-

Monday, March 28, AM

#### Nano- and Micropatterning via Self-assembly

 $(9:50 \sim 10:00)$ 

3H5-06 Opening Remarks (Grad. Sch. Eng., Nagoya Univ.) SEKI, Takahiro (09:50∼10:00)

Chair: SEKI, Takahiro (10:00 $\sim$ 12:00)

3H5-07 ATP Keynote Lecture Patterning by using a dewetting phemomenon and its application to photonics (Chitose Inst. Sci. Tech.) KARTHAUS, Olaf; KIYONO, Yuji (10:00∼10:50)

3H5-12 ATP Special Invited Lecture Development and application of Super-fine ink jet, SIJ (NRI, AIST) MURATA, Kazuhiro (10:50~11:30)

3H5-16 ATP Invited Lecture Formation of Surface Pattern and Tuning of Crystal Orientation for Inorganic Thin Films (The Univ. of Tokyo) NISHIMURA, Tatsuya; SAKAMOTO, Takeshi; KATO, Takashi (11:30∼12:00)

#### Monday, March 28, PM

Chair: HAYAKAWA, Teruaki (13:00∼14:40)

3H5-25 ATP Special Invited Lecture Preparation and pattern formation of metal nano- and fine-particles (Faculty Eng., Hokkaido Univ.) YONEZAWA, Tetsu (13:00∼13:40)

**3H5-29** ATP Invited Lecture Current Development of Relief Formation due to Mass Transfer by Spatially Patterned Light (Yokohama Natl. Univ.) UBUKATA, Takashi (13:40~14:10)

3H5-32 ATP Invited Lecture Fabrication of Polymer Particles with Hierarchic Structures and Application for Metamaterials (IMRAM, Tohoku Univ.; PRESTO, JST) YABU, Hiroshi (14:10∼14:40)

Chair: YONEZAWA, Tetsu (14:50~16:00)

**3H5-36** ATP Special Invited Lecture Development and Precision Patterning of Silsesquioxane-Containing Block Copolymers (Grad. Sch. Sci., Eng., Tokyo Tech) HAYAKAWA, Teruaki (14:50∼15:30)

3H5-40 ATP Invited Lecture Orientation Controls and Relirf Formation in Organic-Inorganic Hybrid Materials (Grad. Sch. Eng., Nagoya Univ.) SEKI, Takahiro (15:30~16:00)

#### Tuesday, March 29, AM

#### The Next Generation Lithography

(9:00 ~9:10)

4H5-01 Opening Remarks (ISIR, Osaka Univ.) KOZAWA, Takahiro (09:00∼09:10)

Chair: KOZAWA, Takahiro (9:10 $\sim$ 10:40)

**4H5-02** ATP Keynote Lecture From Polymer Resists to Molecular Resists: -Recent Advancement of EUV Resist Materials Including "Noria" Derivatives (Fac. Eng., Kanagawa Univ.) NISHIKUBO, Tadatomi (09:10 ∼10:00)

4H5-07 ATP Special Invited Lecture EUV lithography into production (Update of ASML's EUV exposure tool development) (ASML Japan Co., Ltd.) MIYAZAKI, Junji (10:00∼10:40)

Chair: KUDO, Hiroto (10:40 $\sim$ 12:10)

**4H5-11** ATP Invited Lecture Trend of cost effective efficient lithography based on the discussion at "MNC2010 GreenLithography Symposium" (Renesas Electronics Corporation) NAGAHARA, Seiji (10:40∼ 11:10)

4H5-14 ATP Invited Lecture Development status of next generation lithography materials (Tokyo Ohka Kogyo Co., Ltd) SATO, Kazufumi (11:10~11:40)

**4H5-17** ATP Invited Lecture Development of Under Layer material for EUV Lithography (Electronic Materials Research Laboratories, Nissan Chemical Industries. Ltd.) SAKAMOTO, Rikimaru; HO, Bang-Ching; FUJITANI, Noriaki; ENDO, Takafumi; Oonish,i Ryuji (11:40∼12:10)

#### Tuesday, March 29, PM

Chair: NAGAHARA, Seiji (14:40~15:50)

4H5-35 ATP Special Invited Lecture EUV Resist Materials and Pro-

cessing (Selete) ITANI, Toshiro (14:40~15:20)

**4H5-39** ATP Invited Lecture EUV lithography material Development in JSR (Fine Electronic Materials Research Laboratories, JSR Corporation) SHIMIZU, Makoto (15:20~15:50)

Chair: OHTA, Masaru (15:50~17:00)

**4H5-42** ATP Special Invited Lecture Research and Development of EUVL at Center for Extreme Ultraviolet Lithography (Univ. of Hyogo) WATANABE, Takeo; HARADA, Tetsuo; KINOSHITA Hiroo (15:50∼ 16:30)

**4H5-46** ATP Invited Lecture Development of polymer-bounded PAG type EUV resist materials (FUJIFILM Corp.) TARUTANI, Shinji (16:30 ∼17:00)

## Room H6

Bldg. 23 23-309

## Diversity of Fine Patterning Technology -Rivalry and co-prosperity-

Monday, March 28, AM

#### Nanoimprint

 $(9:50 \sim 10:00)$ 

3H6-06 Opening Remarks (Univ. of Hyogo) MATSUI, Shinji (09:50~10:00)

Chair: HIROSHIMA, Hiroshi  $(10:00{\sim}12:00)$ 

**3H6-07** ATP Keynote Lecture Latest trend of Nanoimprint Technology (Univ. of Hyogo; JST-CREST) MATSUI, Shinji (10:00∼10:50)

3H6-12 ATP Special Invited Lecture Nanoimprint Process for High-Brightness LED application using film type mold (TOSHIBA MACHINE CO.,LTD) GOTO, Hiroshi (10:50~11:30)

3H6-16 ATP Invited Lecture Roll nanoimprint of moth-eye anti-reflection films (MITSUBISHI RAYON CO.,LTD.) UOZU, Yoshihiro (11:30∼ 12:00)

#### Monday, March 28, PM

Chair: NAKAGAWA, Masaru (13:00∼15:00)

**3H6-25** ATP Special Invited Lecture Fabrication of Nanoimprint Mold (HOYA CORPORATION) NAGAREKAWA, Osamu (13:00~13:40)

3H6-29 ATP Special Invited Lecture UV Nanoimprint (UMEMSME, AIST; JST-CREST) HIROSHIMA, Hiroshi (13:40~14:20)

**3H6-33** ATP Special Invited Lecture Process physics and chemistry in Nanoimprint lithography (Grad. Sch. Eng., Osaka Pref. Univ.) HIRAI, Yoshihiko (14:20∼15:00)

Chair: HIRAI, Yoshihiko (15:10 $\sim$ 16:20)

3H6-38 ATP Special Invited Lecture Molecular Control of Interface Function in UV nanoimprint (IMRAM, Tohoku Univ.) NAKAGAWA, Masaru (15:10∼15:50)

3H6-42 ATP Invited Lecture Nanoimprint materials (DAICEL CHEMICAL INDUSTRIES, LTD.) YUKAWA, Takao; TAKEUCHI, Hidekazu; IYOSHI, Shuso; MIYAKE, Hiroto (15:50~16:20)

#### Tuesday, March 29, PM

 $(13:00{\sim}14:30)$ 

**4H6-25** Panel Discussion Diversity of Fine Patterning Technology -Rivalry and co-prosperity: Panelist: NAGAHARA, Seiji; KOZAWA, Takahiro; MATSUI, Shinji; HIRAI, Yoshihiko; Olaf KARTHAUS; SEKI, Takahiro, Cordinator: OHNISHI, Yasunobu (13:00∼14:30)

### Room H8

Bldg. 23 23-311

## New Energy Technologies towards the Realization of a Low-carbon Society

Sunday, March 27, PM

#### **Future Energy Storage Devices**

(13:00~13:10)

**2H8−25** Opening Remarks (Grad. Sch. Eng., Kyoto Univ.) ABE, Takeshi (13:00∼13:10)

Chair: ABE, Takeshi (13:10~14:40)

**2H8-26** ATP Keynote Lecture Current status of LIB industry and activity of LIBTEC (Consortium for Lithium Ion Battery Technology & Evaluation Center) YOSHINO, Akira (13:10~14:00)

**2H8-31** ATP Special Invited Lecture Development of New Nissan Electric Vehicle "LEAF" (NISSAN MOTOR CO.,LTD. ) MIYAMOTO, Takeshi (14:00~14:40)

Chair: FUJINAMI, Tatsuo  $(14:40\sim15:40)$ 

2H8-35 ATP Invited Lecture Electrode Reaction in Lithium Battery - Mechanistic Study using Model System - (Tokyo Tech; JAEA) KANNO, Ryoji; HIRAYAMA, Masaaki; TAMURA, Kazuhisa (14:40~15:10)

2H8-38 ATP Invited Lecture Electrochemical Properties of Micronsized Single-Particle of Graphite (Fac Eng., Yokohama Natl. Univ.)
DOKKO, Kaoru (15:10~15:40)

Chair: KANNO, Ryoji (15:40~16:30)

2H8-41<sup>†</sup> Oral C Microwave syntheses and lithium battery performances of oxide nanoparticles (AIST) YOSHINAGA, Masashi; KIJIMA, Norihito; WAKAHARA, Sonoko; AKIMOTO, Junji (15:40∼16:00)

2H8−43 Oral D Fabrication of 3dimensionallyall-solid-statelithium battery (toklyo metropolidan Univ.) KANAMURA, Kiyoshi; KOTOBUKI, Masashi; OSONE, Ryo; MUNAKATA, Hirokazu (16:00∼16:30)

Chair: DOKKO, Kaoru (16:30∼17:30)

2H8-46 ATP Invited Lecture Boron Compound-based Liquid Electrolytes for High Voltage Batteries (Fac. Eng., Shizuoka Univ.) FUJINAMI, Tatsuo (16:30∼17:00)

**2H8-49** ATP Invited Lecture Long-term performance of the lithium primary and secondary cells -The operation of the interplanetary spacecraft 'HAYABUSA'- (JAXA) SONE, Yoshitsugu (17:00~17:30)

#### Monday, March 28, AM

#### Fuel Cells Hydrogen Energy Technology

(9:30~9:40)

**3H8-04** Opening Remarks (Fac. Sci. Eng., Doshisha Univ.) INABA, Minoru (09:30∼09:40)

Chair: INABA, Minoru (9:40  $\sim$ 10:40)

**3H8-05** ATP Keynote Lecture New materials for advanced fuel cell-Development of non precious metal cathode- (Grad. Sch. Eng., Yokohama Natl. Univ.) OTA, Ken-Ichiro (09:40~10:30)

**3H8-10** Incubation Time (10:30~10:40)

Chair: IMAI, Hideto (10:40~12:00)

3H8-11 ATP Invited Lecture Research and Development of electrocatalyst for fuel cell (TOYOTA MOTOR CORPORATION) KAWAMURA, Tetsuo; KODAMA, Tomoki; MIZUTANI, Nobuaki (10:40∼11:10)

**3H8-14** Incubation Time  $(11:10\sim11:20)$ 

**3H8-15** ATP Invited Lecture Development of Durable PEFC Catalyst by Using Chemically-Modified Carbon Support (Fac. Eng., Oita Univ.) KINUMOTO, Taro (11:20~11:50)

**3H8-18** Incubation Time (11:50~12:00)

#### Monday, March 28, PM

Chair: AKIBA, Etsuo (13:00 $\sim$ 15:10)

3H8-25 ATP Keynote Lecture Carbon leading to technological renovation in materials & energy - carbon alloy catalyst - (JAIST; Tokyo Tech; JAEA; The Univ. of Tokyo) TERAKURA, Kiyoyuki; HUANG, Shen-Feng; HOU, Zhufeng; WANG, Xianlong; NABAE, Yuta; KUROKI, Shigeki; KAKIMOTO, Masa-aki; MIYATA Seizo; IKEDA, Takashi; HARADA, Yoshihisa; OSHIMA, Masaharu; SAIKI, Koichiro (13:00∼13:50)

**3H8-30** Incubation Time (13:50~14:00)

3H8-31 ATP Special Invited Lecture In situ and real-time structural

characterization of fuel-cell electrocatalysts by using synchrotron radiation x-rays (Green Innovation Research Labs., NEC) IMAI, Hideto  $(14:00 \sim 14\cdot40)$ 

**3H8-35** Incubation Time (14:40~14:50)

3H8-36 Oral C Construction of biofuel cell by using carbon fibers as anode and cathode materials. (Grad. Sch. Eng., Soka Univ.) MAEDA, Hidekatsu; IWAMURA, Ken-ichi; NAGAMOTO, Hidetoshi (14:50~15:10)

Chair: KINUMOTO, Taro (15:20~17:10)

**3H8-39** ATP Invited Lecture Evaluation and Analysis of Electrocatalysts for Automotive Fuel Cells (Advanced Materials Laboratory, Nissan Research Center, Nissan Motor Co., Ltd.) SUGAWARA, Seiho (15:20∼ 15:50)

**3H8-42** Incubation Time (15:50~16:00)

3H8-43 ATP Special Invited Lecture Hydrogen Storage, Transportation and Delivery (Grad. Sch. Eng., Kyushu Univ.) AKIBA, Etsuo (16:00∼ 16:40)

**3H8-47** Incubation Time (16:40~16:50)

3H8-48 Oral C Structure Analysis of hydrogen-storage vessel made by CFRP Using X-ray Computed Tomography (JX Nippon Oil & Energy Corporation Testing & Analysis CenterCentral Technical Research Laboratory Research & Development Division) SATO, Lusaka; ISHII, Mitsuo; KONISHI, Tomohiro; MIYAGI, Shin (16:50~17:10)

### Room P

#### Bldg. 13 Gymnasium

#### Sunday, March 27, AM

(12:30~14:00)

## Diversity of Fine Patterning Technology -Rivalry and co-prosperity-

2PB-001 Development of low-k materials by using multifunctional cross-linked polymer (Sumitomo Bakelite Co., Ltd. Fundamental Research Laboratory) KOMATSU, Satoko; NAKATANI, Koji; HIRAI, Mihoko; TADA, Masahiro

#### Frontier Materials

**2PB-002** Novel gel-forming materilals based on organic electrolyte (AIST) YOSHIDA, Masaru; NAGASAWA, Jun'ichi

2PB-003 Modification of poly(lactic acid) nano-fiber with amphiphilic oligo (lactic acid)-nerve regenerative peptide conjugates and its application for nerve conduit (Nat. Cer. Cardiovasc. Cent. Res. Inst.) KAKINOKI, Sachiro; YAMAOKA, Tetsuji

2PB-004 Mass Production of Organic Nanotubes and Their Functionalization (NTRC-AIST) KOGISO, Masaki; AOYAGI, Masaru; ASAKAWA, Masumi; SHIMIZU, Toshimi

## Innovative Technologies for Environment and Natural Resources

2PB-005 Mesoporous-silica containing reactor for enzymatic reactions (National Institute of Advanced Industrial Science and Technology (AIST)) KATAOKA, Sho; TAKEUCHI, Yasutaka; ENDO, Akira

2PB-006 MolWorks: the Integrated Software Tool for Molecular Design for reducing costs and saving time of searching a new material (Beyond Computing Co.,Ltd.) TAJIMA, Sumie; NAGASHIMA, Umpei; SENDA, Norio; AKIYAMA, Yutaka; NISHI, Katsuya

2PB-007 Ultra-cheap Visual Type NO2 Air Pollutant Sampler employing Fluidized Particulate Chemical Reagents and other Various Simple and Easy Methods of Measuring Air Pollution. (Home) AMAYA, Kazuo

2PB-008 Magnetic Nanoparticle-Supported Osmium Catalysts for Dihydroxylation of Olefins (AIST; School of Science and Technology, Meiji Univ.) FUJITA, Ken-ichi; INOUE, Kensuke; TSUCHIMOTO, Teruhisa; YASUDA, Hirovuki

2PB-009 Microwave low temperature continuous preparation of bio diesel fuel (Sojo Univ.) IKENAGA, Kazutoshi; OGATA, Yasuto; UEDA, Yuji; SAKITA. Nariyuki

2PB-010 Development of the New Water Treatment Technology I - Preparation and Applications of High-Performance and High-Stabilization of the Aqueous of Hypochlorous Acid - (Tokyo Metro. Coll. of Ind. Tech.) TAMURA, Kenii

**2PB-011** Development of the New Water Treatment Technology II - Preparation and Applications of Nano-Bubble Water - (Tokyo Metro. Coll. of Ind. Tech.) SHIMIZU, Kazuyuki; ASAKAWA, Toshiaki; HAGIWARA, Tadahiko; SUZUKI, Yoshinori; TAMURA, Kenji

**2PB-012** Development and Applications of the Environmental Conformity Type Products Based on the Ionic Semiconductor and the Relation

Technologies (Ion-Kagaku; Ltd.; Tokyo Metr. Coll. of Ind. Tech.) KARINO, Hitoshi: TAMURA, Kenii

2PB-013 Vitamin B<sub>12</sub> catalysed Arsenic Detoxification Reaction (Nippon Sheet Glass Co.Ltd) NAKAMURA, Koichiro

**2PB-014** Application for the Roof Replanting with Regeneration Charcoal Derived from the Environmental Conformity Type Automatic Carbonization Equipment (Tokyo Metr. Coll. of Ind. Tech.) TAMURA, Kenji

2PB-015 Utilization of whole lignocellulosics with both fractionation and functionality control under room temperature. (Graduate School of Bioresources Mie Univ.) FUNAOKA, Masamitsu; AOYAGI, Mitsuru; MIKAME, Keigo; NONAKA, Hiroshi

#### New Energy Technologies towards the Realization of a Low-carbon Society

2PB-016<sup>†</sup> Microwave syntheses and lithium battery performances of oxide nanoparticles (AIST) YOSHINAGA, Masashi; KIJIMA, Norihito; WAKAHARA, Sonoko; AKIMOTO, Junji

2PB-017<sup>†</sup> Syntheses and battery performances of lithium battery electrode materials with tunnel structures (AIST) SAKAO, Mitsumasa; KIJIMA, Norihito; OKUTANI, Takeshi; AKIMOTO, Junji

2PB-018 Preparation of anion-exchange membranes by radiation grafting (Japan Atomic Energy Agency) ASANO, Masaharu; KOSHIKAWA, Hiroshi; YAMAKI, Tetsuya; MAEKAWA, Yasunari; YAMAGUCHI, Susumu; YAMAMOTO, Kazuya; ASAZAWA, Koichiro; YAMADA, Koji; TANAKA, Hirohisa

#### A leap ahead with Challenging Biochemicals

2PB-019 Low-cost Fluorometry of Reactive Oxygen Species (Shizuoka Univ.) HIRAKAWA, Kazutaka

2PB-020 Engineering of bioplastic-producing Ralstonia eutropha for efficient production of polyhydroxyalkanoate copolymers from vegetable oils (Grad. Sch. Biosci. & Bioeng., Tokyo Tech.) FUKUI, Toshiaki; MIFUNE, Jun; ORITA, Izumi; NAKAMURA, Satoshi

2PB-021 Innovative technology for advanced utilization of chitin (Ichinoseki National College of Technology) OSADA, Mitsumasa; MIURA, Chika; NAKAGAWA, Yuko; KAIHARA, Mikio; NIKAIDO, Mitsuru; TOTANI, Kazuhide

2PB-022 Development of a yeast glycolipid biosurfactant, mannosylerythritol lipids (Nat. Inst. Advanced Ind. Sci. & Tech. (AIST)) FUKUOKA, Tokuma; MORITA, Tomotake; IMURA, Tomohiro; KITAMOTO, Dai

2PB-023 High speed and high accuracy detection of biomolecules using highly functionalized fluorescent magnetic beads (Grad. School of Biosci. and Biotechnol., Tokyo Tech.; Solutions Res. Lab.; Tokyo Tech.) SAKAMOTO, Satoshi; KAWATA, Shintaro; NAITO, Yasuyuki; MOCHIZUKI, Yuusuke; KISHI, Hiroshi; HATAKEYAMA, Mamoru; HANDA, Hiroshi

2PB-024 Theoretical insight into the pharmacological effects of royal jelly by the ONIOM method. (Kanagawa Univ.) KOTAKE, Mitsuru; MATSUBARA, Toshiaki

2PB-025 Data Mining of Structural Homology between Major Histocompatibility Complex (MHC) Class I and II Molecules and Light Chains of Immunogloblins Using Conformational Code (AIST) IZUMI, Hiroshi

2PB-026 Efficient Bioconjugation between Amino Groups Using Double Azaelectrocyclization (Osaka Univ., Department of Chemistry; Kishida Chemical Co. Ltd; HiPep Laboratories) TANAKA, Katsunori; NAKAYAMA, Kaori; SIWU, Eric R. O.; KOYAMA, Koichi; HIRATA, Akiyoshi; OHYAMA, Takashi; NOKIHARA, Kiyoshi; FUKASE, Koichi

#### Monday, March 28, AM

(12:30~14:00)

## Diversity of Fine Patterning Technology -Rivalry and co-prosperity-

3PB-001 Development of low-k materials by using multifunctional cross-linked polymer (Sumitomo Bakelite Co., Ltd. Fundamental Research Laboratory) KOMATSU, Satoko; NAKATANI, Koji; HIRAI, Mihoko; TADA, Masahiro

#### Frontier Materials

**3PB-002** Novel gel-forming materilals based on organic electrolyte (AIST) YOSHIDA, Masaru; NAGASAWA, Jun'ichi

3PB-003 Modification of poly(lactic acid) nano-fiber with amphiphilic oligo (lactic acid)-nerve regenerative peptide conjugates and its application for nerve conduit (Nat. Cer. Cardiovasc. Cent. Res. Inst.) KAKINOKI, Sachiro; YAMAOKA. Tetsuii

3PB-004 Mass Production of Organic Nanotubes and Their Functionalization (NTRC-AIST) KOGISO, Masaki; AOYAGI, Masaru; ASAKAWA, Masumi; SHIMIZU, Toshimi

## Innovative Technologies for Environment and Natural Resources

- 3PB-005 Mesoporous-silica containing reactor for enzymatic reactions (National Institute of Advanced Industrial Science and Technology (AIST)) KATAOKA, Sho; TAKEUCHI, Yasutaka; ENDO, Akira
- **3PB-006** MolWorks: the Integrated Software Tool for Molecular Design for reducing costs and saving time of searching a new material (Beyond Computing Co.,Ltd.) TAJIMA, Sumie; NAGASHIMA, Umpei; SENDA, Norio; AKIYAMA, Yutaka; NISHI, Katsuya
- 3PB-007 Ultra-cheap Visual Type NO2 Air Pollutant Sampler employing Fluidized Particulate Chemical Reagents and other Various Simple and Easy Methods of Measuring Air Pollution. (Home) AMAYA, Kazuo
- **3PB-008** Magnetic Nanoparticle-Supported Osmium Catalysts for Dihydroxylation of Olefins (AIST; School of Science and Technology, Meiji Univ.) FUJITA, Ken-ichi; INOUE, Kensuke; TSUCHIMOTO, Teruhisa; YASUDA, Hiroyuki
- 3PB-009 Microwave low temperature continuous preparation of bio diesel fuel (Sojo Univ.) IKENAGA, Kazutoshi; OGATA, Yasuto; UEDA, Yuji; SAKITA, Nariyuki
- 3PB-010 Development of the New Water Treatment Technology I Preparation and Applications of High-Performance and High-Stabilization of the Aqueous of Hypochlorous Acid (Tokyo Metro. Coll. of Ind. Tech.) TAMURA, Kenji
- 3PB-011 Development of the New Water Treatment Technology II Preparation and Applications of Nano-Bubble Water (Tokyo Metro. Coll. of Ind. Tech.) SHIMIZU, Kazuyuki; ASAKAWA, Toshiaki; HAGIWARA, Tadahiko; SUZUKI, Yoshinori; TAMURA, Kenji
- **3PB-012** Development and Applications of the Environmental Conformity Type Products Based on the Ionic Semiconductor and the Relation Technologies (Ion-Kagaku; Ltd.; Tokyo Metr. Coll. of Ind. Tech.) KARINO, Hitoshi; TAMURA, Kenji
- 3PB-013 Vitamin B<sub>12</sub> catalysed Arsenic Detoxification Reaction (Nippon Sheet Glass Co.Ltd) NAKAMURA, Koichiro
- **3PB-014** Application for the Roof Replanting with Regeneration Charcoal Derived from the Environmental Conformity Type Automatic Carbonization Equipment (Tokyo Metr. Coll. of Ind. Tech.) TAMURA, Kenji
- 3PB-015 Utilization of whole lignocellulosics with both fractionation and functionality control under room temperature. (Graduate School of Bioresources Mie Univ.) FUNAOKA, Masamitsu; AOYAGI, Mitsuru; MIKAME, Keigo; NONAKA, Hiroshi

## New Energy Technologies towards the Realization of a Low-carbon Society

- 3PB-016<sup>†</sup> Microwave syntheses and lithium battery performances of oxide nanoparticles (AIST) YOSHINAGA, Masashi; KIJIMA, Norihito; WAKAHARA, Sonoko; AKIMOTO, Junji
- 3PB-017<sup>†</sup> Syntheses and battery performances of lithium battery electrode materials with tunnel structures (AIST) SAKAO, Mitsumasa; KIJIMA, Norihito; OKUTANI, Takeshi; AKIMOTO, Junji
- 3PB-018 Preparation of anion-exchange membranes by radiation grafting (Japan Atomic Energy Agency) ASANO, Masaharu; KOSHIKAWA, Hiroshi; YAMAKI, Tetsuya; MAEKAWA, Yasunari; YAMAGUCHI, Susumu; YAMAMOTO, Kazuya; ASAZAWA, Koichiro; YAMADA, Koji; TANAKA, Hirohisa

#### A leap ahead with Challenging Biochemicals

- 3PB-019 Low-cost Fluorometry of Reactive Oxygen Species (Shizuoka Univ.) HIRAKAWA, Kazutaka
- 3PB-020 Engineering of bioplastic-producing Ralstonia eutropha for efficient production of polyhydroxyalkanoate copolymers from vegetable oils (Grad. Sch. Biosci. & Bioeng., Tokyo Tech.) FUKUI, Toshiaki; MIFUNE, Jun; ORITA, Izumi; NAKAMURA, Satoshi
- **3PB-021** Innovative technology for advanced utilization of chitin (Ichinoseki National College of Technology) OSADA, Mitsumasa; MIURA, Chika; NAKAGAWA, Yuko; KAIHARA, Mikio; NIKAIDO, Mitsuru; TOTANI, Kazuhide
- 3PB-022 Development of a yeast glycolipid biosurfactant, mannosylerythritol lipids (Nat. Inst. Advanced Ind. Sci. & Tech. (AIST)) FUKUOKA, Tokuma; MORITA, Tomotake; IMURA, Tomohiro; KITAMOTO, Dai
- **3PB-023** High speed and high accuracy detection of biomolecules using highly functionalized fluorescent magnetic beads (Grad. School of Biosci. and Biotechnol., Tokyo Tech.; Solutions Res. Lab.; Tokyo Tech.) SAKAMOTO, Satoshi; KAWATA, Shintaro; NAITO, Yasuyuki; MOCHIZUKI, Yuusuke; KISHI, Hiroshi; HATAKEYAMA, Mamoru; HANDA, Hiroshi
- 3PB-024 Theoretical insight into the pharmacological effects of royal jelly by the ONIOM method. (Kanagawa Univ.) KOTAKE, Mitsuru; MATSUBARA, Toshiaki
- 3PB-025 Data Mining of Structural Homology between Major Histocompatibility Complex (MHC) Class I and II Molecules and Light Chains of Immunogloblins Using Conformational Code (AIST) IZUMI, Hiroshi
- 3PB-026 Efficient Bioconjugation between Amino Groups Using Double

Azaelectrocyclization (Osaka Univ., Department of Chemistry; Kishida Chemical Co. Ltd; HiPep Laboratories) TANAKA, Katsunori; NAKAYAMA, Kaori; SIWU, Eric R. O.; KOYAMA, Koichi; HIRATA, Akiyoshi; OHYAMA, Takashi; NOKIHARA, Kiyoshi; FUKASE, Koichi

## Room A1

Bldg. 7 7-13

### Natural Products Chemistry Saturday, March 26, AM

Chair: HAYAKAWA, Ichiro (9:00~10:00)

- \* 8:50-9:00: interval for laptop PC connection.(1A1-01, 1A1-02, 1A1-03, 1A1-04, 1A1-05, 1A1-06)
- 1A1-01 High-Yielding Synthesis of Anti-Influenza Drug Oseltamivir via Two "One-Pot" and Column Free Sequence (Faculty of Engineering, Tokyo Univ. of Science; AIST) ISHIKAWA, Hayato; SUZUKI, Takaki; ORITA, Hideo; UCHIMARU, Tadafumi; HAYASHI, Yujiro
- **1A1-02** Curtius Rearrangement with Trimethylsilyl Azide by Microflow Systems (Faculty of Engineering, Tokyo Univ. of Science) BONDZIC, Bojan; ISHIKAWA, Hayato; HAYASHI, Yujiro
- **1A1-03** Total Synthesis of (-)-Oseltamivir by Microflow System of Curtius Rearrangement (Faculty of Engineering, Tokyo Univ. of Science) ISHIKAWA, Hayato; BONDZIC, Bojan; HAYASHI, Yujiro
- 1A1-04 Synthetic Study of Phoslactomycin B Based on Asymmetric C-C Bond Forming Reactions Catalyzed by BINOL-Ti and BINAP-Pd Complexes (Graduate School of Science and Engineering, Tokyo Institute of Technology) NUMATA, Yukinobu; AIKAWA, Kohsuke; MIKAMI, Koichi
- 1A1-05 Synthetic Study of Kedarcidin Chromophore (Graduate School of Science, Tohoku Univ.) HIRAI, Keiichiro; OGAWA, Kouki; SATO, Itaru; HIRAMA, Masahiro
- 1A1-06<sup>†</sup> Synthetic Study of C-1027 Chromophore (Graduate School of Science, Tohoku Univ.) TAMURA, Yukio; HIRAI, Keiichiro; HIRAKAWA, Fumiya; SATO, Itaru; HIRAMA, Masahiro

Chair: SHIINA, Isamu (10:10~11:00)

- \* 10:00-10:10: interval for laptop PC connection.(1A1-08, 1A1-09, 1A1-10, 1A1-11, 1A1-12)
- 1A1-08 One-pot synthesis of ABT-341, a DPP4 inhibitor (Faculty of Engineering, Tokyo Univ. of Science) ISHIKAWA, Hayato; HONMA, Masakazu; HAYASHI, Yujiro
- 1A1-09 Studies toward the Total Synthesis of a Marine Toxin Polycavernoside A (Graduate School of Life Sciences, Tohoku Univ.) KASAI, Yusuke; ITO, Takanori: SASAKI, Makoto
- 1A1-10 Synthetic Study of Coronatine (Department of Biomolecular Engineering; Tokyo Institute of Technology) KOSAKI, Yusuke; OGAWA, Narihito; KOBAYASHI, Yuichi
- 1A1-11 Synthetic Study of Arabidopside F (Tokyo Institute of Technology; Department of Biomolecular Engineering) TOJO, Toshifumi; OGAWA, Narihito; KOBAYASHI, Yuichi
- 1A1-12 Synthetic study of molecular probes of auripyrones as a ligand (Univ. of Tsukuba) TAKEMURA, Takuma; TANABE, Satoshi; HAYAKAWA, Ichiro: KIGOSHI, Hideo

Chair: ISHIKAWA, Hayato  $(11:10{\sim}12:00)$ 

- \* 11:00-11:10: interval for laptop PC connection.(1A1-14, 1A1-15, 1A1-16, 1A1-17, 1A1-18)
- 1A1-14 synthetic study of tedanolide having potent antitumor activity (Organic Synthesis Chemistry Laboratory, Kogakuin Univ.) YAMAZAKI, Junichi; ISHIWATARI, Tatsuya; YASUI, Eiko; NAGUMO, Shinii: MIYASHITA, Masaaki
- 1A1-15 Asymmetric Total Synthesis of (-)-2-Hydroxytetracosanolide via Kinetic Resolution of Racemic 2-Hydroxyester (Tokyo Univ. of Science) SEKIGUCHI, Akihiro; SHIINA, Isamu
- 1A1-16 Asymmetric Total Synthesis of (-)-Tetrahydrolipstatin via Kinetic Resolution of Racemic Propargylalcohol (Tokyo Univ. of Science) UMEZAKI, Yuma; NAGAI, Syunsuke; SHIINA, Isamu
- 1A1-17 Asymmetric Total Synthesis of Nonactin via Kinetic Resolution of Racemic Propargylalcohol (Tokyo Univ. of Science) UMEZAKI, Yuma; KURODA, Nobutaka; OUCHI, Mizue; SHIINA, Isamu
- 1A1-18 Synthetic studies on the total synthesis of seragakinone A (Graduate School of Science and Technology, Tokyo Institute of Technology) HASHIMOTO, Yoshimitsu; TAKADA, Akiomi; HIKITA, Katsuyoshi; TAKIKAWA, Hiroshi; SUZUKI, Keisuke

#### Saturday, March 26, PM

Chair: FUJIWARA, Kenshu (13:10∼13:50)

- \* 13:00-13:10: interval for laptop PC connection.(1A1-26, 1A1-27, 1A1-28)
- 1A1-26 Asymmetric Total Synthesis of 4-Epi-5-epi-9-epimerrillianin (Tokyo

- Univ. of Science) IIZUMI, Takashi; YAMADA, Tetsuro; SHINOHARA, Shoujirou; KAGEYAMA, Yousuke; SHIINA, Isamu
- 1A1-27 Synthetic studies of amphidinolide B, G and H (Keio Univ.) MORIMOTO, Ryo; HARA, Akihiro; IWASAKI, Yuki; ISHIKAWA, Yuichi; NISHIYAMA, Shigeru
- 1A1-28\*† Synthetic studies of amphidinolide B, G and H (Keio Univ.) HARA, Akihiro; MORIMOTO, Ryo; IWASAKI, Yuki; ISHIKAWA, Yuichi; NISHIYAMA, Shigeru

Chair: ISHIKAWA, Yuichi (14:00 $\sim$ 14:40)

- \* 13:50-14:00: interval for laptop PC connection.(1A1-31, 1A1-32, 1A1-33, 1A1-34)
- 1A1-31 Synthetic Studies on Nigricanoside A Dimethyl Ester (Hokkaido Univ.; JST PRESTO) KINASHI, Naoto; FUJIWARA, Kenshu; KAWAI, Hidetoshi; SUZUKI, Takanori
- 1A1-32 Synthetic Studies on the Macrolactone Moiety of Mycalolide B (Univ. of Tsukuba) OKA, Hirotaka; USUI, Akihiro; ISHITSUKA, Tomoya; KITA, Masaki; KIGOSHI, Hideo
- 1A1-33 Synthetic Studies on Mycalolide B, a Marine Macrolide with an Actin-depolymerizing Activity (Univ. of Tsukuba) USUI, Akihiro; OKA, Hirotaka; ISHITSUKA, Tomoya; KITA, Masaki; KIGOSHI, Hideo
- 1A1-34 Synthetic study of Aspercyclide B (Graduate School of Science, Tohoku Univ.) YOSHINO, Tatsuya; SATO, Itaru; HIRAMA, Masahiro

Chair: EBINE, Makoto (16:50~17:40)

- \* 16:40-16:50: interval for laptop PC connection.(1A1-48, 1A1-49, 1A1-50, 1A1-51, 1A1-52)
- 1A1-48 Synthetic Study of Cyanosporaside (Graduate School of Science, Tohoku Univ.) YAMAGUCHI, Takaya; SATO, Itaru; HIRAMA, Masahiro
- **1A1-49** Synthetic study of biselides-part 1. (Univ. of Tsukuba) YAMADA, Takuya; SATO, Yosuke; KAWAMURA, Dai; HAYAKAWA, Ichiro; KIGOSHI, Hideo
- 1A1-50 Synthetic study of biselides part 2. (Univ. of Tsukuba) SATOH, Yosuke; YAMADA, Takuya; KAWAMURA, Dai; HAYAKAWA, Ichiro; KIGOSHI, Hideo
- 1A1-51 Synthestic Studies on Avermectin Bla (Faculty of Science, Tohoku Univ.) NAKANO, Aoi: YAMASHITA, Shuii: HIRAMA, Masahiro
- 1A1-52 Synthetic Study of UstiloxinD (Graduate School of Science, Tohoku Univ.) HARADA, Syuji; SATO, Itaru; HIRAMA, Masahiro

Chair: SUENAGA, Kiyotake (17:50~18:30)

- \* 17:40-17:50: interval for laptop PC connection.(1A1-54, 1A1-55, 1A1-56, 1A1-57)
- 1A1-54 Total Synthesis of Gravicycle (Graduate school of Science. Tohoku Univ..) UEDA, Katsuaki; SATOU, Itaru; HIRAMA, Masahiro
- 1A1-55 RCM Approach for the Total Synthesis of Incednam, the Aglycon of Incednine. (Faculty of Science and Technology; Keio Univ.) TSUKAMOTO, Shinya; OHTANI, Takashi; TAKAHASHI, Daisuke; TOSHIMA, Kazunobu
- 1A1-56 Study on the Target Proteins of an Anticancer Macrolide Aplyronine A with a Fluorescent Probe (Univ. of Tsukuba) YONEDA, Kozo; HIRAYAMA, Yuichiro; SUGIYAMA, Miyuki; SAITOU, Yuki; KITA, Masaki; KIGOSHI, Hideo
- 1A1-57 Study on the Target Proteins of an Anticancer Macrolide Aplyronine A with a Photoaffinity Probe (Univ. of Tsukuba) HIRAYAMA, Yuichiro; YONEDA, Kozo; FUJISAWA, Ryosuke; SUGIYAMA, Miyuki; KITA, Masaki; KIGOSHI, Hideo

#### Sunday, March 27, PM

Chair: TAKAMURA, Hiroyoshi (13:00 $\sim$ 14:00)

- \* 12:50-13:00: interval for laptop PC connection.(2A1-25, 2A1-26, 2A1-27, 2A1-28, 2A1-30)
- 2A1-25 Asymmetric total synthesis of (+)-carneic acid A and structure revision of its natural form (Dept. of Chem. and BioChem., Adv. Sch. of Sci. and Engin., Waseda Univ.) YAMAKOSHI, Shuhei; HAYASHI, Nobuyuki; NAKADA. Masahisa
- 2A1-26<sup>†</sup> Enantioselective divergent approaches to both (-)-platensimycin and (-)-platencin (Waseda Univ. Graduate School of Sci. and Engin.) HIRAI, Sho: NAKADA, Masahisa
- 2A1-27 Synthetic studies of amphidinolide Q (Keio Univ.) KAWA, Kohei; HARA, Akihiro; ISHIKAWA, Yuichi; NISHIYAMA, Shigeru
- 2A1-28\* Synthesis and Biological Evaluation of a Hybrid Compound of Aplyronine A and Mycalolide B (Univ. of Tsukuba) KOBAYASHI, Kenichi; FUJII, Yusuke; KOBAYASHI, Shinichi; HAYAKAWA, Ichiro; KIGOSHI, Hideo
- 2A1-30 Synthetic study of aplyronine A. (Univ. of Tsukuba) KOBAYASHI, Shinichi; KOBAYASHI, Kenichi; FUJII, Yusuke; HAYAKAWA, Ichiro; KIGOSHI. Hideo

Chair: KITA, Masaki (14:10∼15:10)

- \* 14:00-14:10: interval for laptop PC connection.(2A1-32, 2A1-33, 2A1-34, 2A1-35, 2A1-36, 2A1-37)
- **2A1-32** Synthetic Studies of Iriomoteolides (Keio univ.) UMISHIO, Hiroshi; ISHIKAWA, Yuichi; NISHIYAMA, Shigeru

- **2A1-33** Alkylation of cyclopentadiene and its synthetic application: Convenient Synthesis of (+)-Methyl cis-jasmonate (Fac. Eng., Okayama Univ. of Sci.) OMATSU, Rikiya; NOKAMI, Junzo; KUNITADA, Takahiro
- 2A1-34 Synthetic study of marine natural product Koshikalide (Keio Univ., faculty of science and technology) NAGAMOTO, Masashi; SUENAGA, Kiyotake: OHNO. Osamu
- 2A1-35 Synthetic studies on Reidispongiolide A, an actin-depolymerizing Macrolide (Faculty of Science and Tecnology, keio) SUZUKI, Kazushi; TORIIHARA, Eisuke; AKIYAMA, Satoshi; TERUYA, Toshiaki; OHNO, Osamu; SUENAGA, Kiyotake
- 2A1-36 Synthetic study on Biselyngbyaside, a Macrolide Glycoside (Faculty of Science and Technology, Keio Univ.) OHKUBO, Akifumi; NAKAJIMA, Naova; TERUYA, Toshiaki; OHNO, Osamu; SUENAGA, Kiyotake
- 2A1-37 Synthetic Study of Gummiferol toward the Structural Elucidation (Okayama Univ.) WADA, Hiroko; LU, Nan; TAKAMURA, Hiroyoshi; KADOTA, Isao

Chair: KADOTA, Isao (15:20~16:20)

- \* 15:10-15:20: interval for laptop PC connection.(2A1-39, 2A1-41, 2A1-42, 2A1-43, 2A1-44)
- 2A1-39\*† Convergent Total Synthesis of (+)-TMC-151C (Tokyo Univ. of Science; Faculty of Pharmaceutical Sciences) MATSUI, Ryosuke; SETO, Kentaro; SATO, Yuna; FUJITA, Kazuhiro; SUZUKI, Takahiro; NAKAZAKI, Atsuo; KOBAYASHI, Susumu
- 2A1-41 Orientation analysis of the olefine plane of sphingomyelin in lipid raft using solid state NMR (Osaka Univ.) MAETA, Yoshiko; SUZUKI, Takashi; YAMAGUCHI, Toshiyuki; MATSUMORI, Nobuaki; OISHI, Tohru; MURATA, Michio
- 2A1-42 <sup>2</sup>H Solid State NMR studies on the mobility of sphingomyelin acyl chain (Osaka Univ.) YASUDA, Tomokazu; YAMAGUCHI, Toshiyuki; OKAZAKI, Hiroki; MORI, Shoko; DOI, Mototsugu; MATSUMORI, Nobuaki; OISHI, Tohru; MURATA, Michio
- 2A1-43<sup>†</sup> NMR-based analysis of orientation of sphingomyelin head group in lipid rafts (Osaka Univ.) YAMAGUCHI, Toshiyuki; MAETA, Yoshiko; MATSUMORI, Nobuaki; OISHI, Tohru; MURATA, Michio
- **2A1-44** Synthesis of Partial Structures and Structure Confirmation of Amphidinol 3 (Osaka Univ.; Kyushu Univ.) KANEMOTO, Mitsunori; SWASONO, Respati; MATSUMORI, Nobuaki; MURATA, Michio; TORIKAI, Kouhei; OISHI, Tohru

Chair: MATSUMORI, Nobuaki (16:30~17:30)

- \* 16:20-16:30: interval for laptop PC connection.(2A1-46, 2A1-47, 2A1-48, 2A1-49, 2A1-51)
- **2A1-46** Isolation and Structure Determination of a Novel Thiazole Compound from an Okinawan Marine Cyanobacterium (Keio Univ.) SAME, Kyouhei; OHNO, Osamu; TERUYA, Toshiaki; SUENAGA, Kiyotake
- 2A1-47 Structure and Bioactivity of Novel Macrolide Glycosides from Marine Cyanobacteria (Faculty of Science and Technology, Keio Univ.) MORITA, Maho; TERUYA, Toshiaki; OONO, Osamu; SUENAGA, Kiyotake
- 2A1-48 Study on the structural elucidation of the huge compounds produced by the dinoflagellate Amphidmium sp. (Life Science Research Center, Gifu Univ.; Faculty of Engineering, Gifu Univ.; Faculty of Science and Technology, Keio Univ.) INUZUKA, Toshiyasu; YAMAMOTO, Yutaka; UEMURA, Daisuke
- 2A1-49\*† Biosynthesis of Yessotoxin, a Ladder-Frame Polyether by <sup>13</sup>C- or <sup>18</sup>O-Labeling (Sch. of Sci., The Univ. of Tokyo) YAMAZAKI, Masatoshi; IZUMIKAWA, Miho; SATAKE, Masayuki; TACHIBANA, Kazuo
- 2A1-51 Structural Study on New Red Tide Poly Ether Toxin in New Zealand (Univ. of Tokyo; Cawthron Institute) HAMAMOTO, Yuka; SATAKE, Masayuki; TACHIBANA, Kazuo; HOLLAND, Patrick; BEUZENBERG, Vernonica

#### Monday, March 28, AM

Chair: FUWA, Haruhiko (9:00  $\sim$ 9:50)

- \* 8:50-9:00: interval for laptop PC connection.(3A1-01, 3A1-02, 3A1-03, 3A1-04, 3A1-05)
- **3A1-01** Stereoconfigurational NMR Analysis of Prorocentrol from an Epiphytic Dinoflagellate (School of Science, The Univ. of Tokyo) SUGAHARA, Kohtaro; KITAMURA, Yoshiaki; SATAKE, Masayuki; TACHIBANA, Kazuo
- 3A1-02 Solid state NMR analyses on the interaction between amphotericin B and ergosterol in lipid bilayers (Osaka Univ.) NAKAGAWA, Yasuo; UMEGAWA, Yuichi; MATSUSHITA, Naohiro; TAHARA, Kazuaki; MATSUMORI, Nobuaki; OISHI, Tohru; MURATA, Michio
- 3A1-03 Amphotericin B induced motility change of phosphatidylcholine in membrane (Osaka Univ.) TAKANO, Tetsuro; UMEGAWA, Yuichi; DOI, Mototsugu; MATSUMORI, Nobuaki; MURATA, Michio
- 3A1-04 Orientation of amphotericin B methyl ester in lipid bilayer examined by deuterium solid-state NMR (Osaka Univ.) MATUDA, Yasuhiko; DOI, Mototsugu; UMEGAWA, Yuichi; MATSUMORI, Nobuaki; MURATA, Michio
- 3A1-05 Synthetic Studies on Caribbean Ciguatoxin Left Fragment Utilizing 6-Exo Radical Cyclization (Graduate School of Science, Tohoku Univ.) UEMATSU, Ryohei; YAMASHITA, Shuji; HIRAMA, Masahiro

- Chair: MIYAZAWA, Masahiro (10:00∼11:00)
- \* 9:50-10:00: interval for laptop PC connection.(3A1-07, 3A1-08, 3A1-09, 3A1-10, 3A1-12)
- **3A1-07** Improved Synthesis of the ABCDE Ring Segment of Ciguatoxin CTX3C (Okayama Univ.) SHIROMA, Kengo; FUJIWARA, Rie; TAKAMURA, Hiroyoshi; KADOTA, Isao
- 3A1-08 Synthetic Study of the HIJKLM Ring Segment of Ciguatoxin CTX3C (Okayama Univ.) NISHIUMA, Naoki; ABE, Takashi; TAKAMURA, Hiroyoshi; KADOTA, Isao
- **3A1-09**<sup>†</sup> Synthesis of Hapten-Protein Conjugate for Preparing Monoclonal Antibodies to CTX1B Left Wing. (Graduate School of Science, Tohoku Univ..; Graduate School of Science, Osaka Prefecture Univ..) TAKEUCHI, Katsutoshi; ISHIHARA, Yuuki; YAMASHITA, Shuji; TSUMURAYA, Takeshi; FUJII, Ikuo; HIRAMA, Masahiro
- 3A1-10\* Generation of monoclonal antibody for sandwich ELISA detection of CTX1B (Osaka Prefecture Univ.; Tohoku Univ.) TSUMURAYA, Takeshi; TAKEUCHI, Katsutoshi; YAMASHITA, Shuji; HIRAMA, Masahiro; FUJII, Ikuo
- 3A1-12 Convergent Synthesis of the GHIJ-ring Fragment Having A Side Chain of Gambieric Acids (Graduate School of Life Sciences, Tohoku Univ.) TSUBONE, Koichi; HASHIZUME, Keisuke; FUWA, Haruhiko; SASAKI, Makoto
  - Chair: YAMASHITA, Shuji (11:10 $\sim$ 12:00)
- \* 11:00-11:10: interval for laptop PC connection.(3A1-14, 3A1-15, 3A1-16, 3A1-17, 3A1-18)
- 3A1-14 Chemoselective deprotection of silylethers by DIBALH (School of Science, The Univ. of Tokyo) ISHIHARA, Shuji; KURANAGA, Takefumi; OHTANI, Naohito; SATAKE, Masayuki; TACHIBANA, Kazuo
- 3A1-15 Synthetic studies on brevisin artificial analogue for SAR study (School of Science, The Univ. of Tokyo) ISHIHARA, Shuji; KURANAGA, Takefumi; SATAKE, Masayuki; TACHIBANA, Kazuo
- 3A1-16 Development of the Pd(II)-catalyzed cyclization and its application to the synthetic studies of ABCD ring of Yessotoxin(2) (Toyama Univ.) YOKOYAMA, Hajime; KUSUMOTO, Yasuhiro; MIYAZAWA, Masahiro; HIRAI, Yoshiro
- 3A1-17 Synthetic studies of Spirofungin A Using Pd-catalyst (Univ. of Toyama) MIYAZAWA, Masahiro; SANGA, Takao; MURAYAMA, Taku; YOKOYAMA, Hajime; HIRAI, Yoshiro
- 3A1-18 Synthetic Studies of 2-deoxy-L-ribose using Palladium (II)-catalyst (Univ. of Toyama) MIYAZAWA, Masahiro; AKITA, Erika; YOKOYAMA, Hajime; HIRAI, Yoshiro

#### Monday, March 28, PM

Chair: OHISHI, Tohru  $(13:10{\sim}14:10)$ 

- \* 13:00-13:10: interval for laptop PC connection.(3A1-26, 3A1-27, 3A1-28, 3A1-29, 3A1-30, 3A1-31)
- 3A1-26 Bronsted acid-catalyzed intramolecular oxa-conjugate cyclization for stereoselective synthesis of 2,6-cis-substituted tetrahydropyrans (1) (Graduate School of Life Sciences, Tohoku Univ.) NOTO, Kenkichi; FUWA, Haruhiko; SASAKI, Makoto
- 3A1-27 Bronsted acid-catalyzed intramolecular oxa-conjugate cyclization for stereoselective synthesis of 2,6-cis-substituted tetrahydropyrans (2) (Graduate School of Life Sciences, Tohoku Univ.) ICHINOKAWA, Naoki; FUWA, Haruhiko; SASAKI, Makoto
- 3A1-28 Synthetic Study of Tamulamide B (1) (Okayama Univ.) KISHI, Takayuki; YAMAGAMI, Yuji; FUJISAWA, Yuka; TAKAMURA, Hiroyoshi; KADOTA, Isao
- **3A1-29** Synthetic Study of Tamulamide B(2) (Okayama Univ.) YAMAGAMI, Yuji; KISHI, Takayuki; FUJISAWA, Yuka; TAKAMURA, Hiroyoshi; KADOTA, Isao
- 3A1-30 Studies toward the total synthesis of goniodomin A: Stereoselective synthesis of the C1-C16 segment (Graduate School of Life Sciences, Tohoku Univ.) NAKAJIMA, Motohiro; SHI, Jinglu; TAKEDA, Yoshiyuki; SAITO, Tomovuki; FUWA, Haruhiko; SASAKI, Makoto
- 3A1-31 Studies toward the total synthesis of goniodomin A: An improved synthesis of the C26-C36 segment. (Graduate School of Life Sciences, Tohoku Univ.) MATSUKIDA, Seiji; FUWA, Haruhiko; SASAKI, Makoto
  - Chair: TORIKAI, Kohei (14:20 $\sim$ 15:20)
- \* 14:10-14:20: interval for laptop PC connection.(3A1-33, 3A1-34, 3A1-35, 3A1-36, 3A1-37, 3A1-38)
- 3A1-33 Synthesis of the Left half of Pectenotoxin 2 (Hokkaido Univ.; JST PRESTO) FUJIWARA, Kenshu; KIKUCHI, Yuta; AKI, Yu-ichi; YAMAMOTO, Fuyuki; KOBAYASHI, Masanori; MURAI, Akio; KAWAI, Hidetoshi; SUZUKI, Takanori
- 3A1-34 Synthesis of the Right half of Pectenotoxin 2 (Hokkaido Univ.; JST PRESTO) FUJIWARA, Kenshu; KOSEKI, Nao; SUZUKI, Yuki; KIKUCHI, Yuta; MURATA, Shun-ichi; AKI, Yu-ichi; OKANO, Azusa; YAMAMOTO, Fuyuki; KAWAMURA, Mariko; KOBAYASHI, Masanori; MURAI, Akio; KAWAI, Hidetoshi; SUZUKI, Takanori
- 3A1-35 Total Synthesis of Pectenotoxin 2 (Hokkaido Univ.; JST PRESTO)
  FUJIWARA, Kenshu; SUZUKI, Yuki; KOSEKI, Nao; AKI, Yu-ichi;
  MURAI, Akio; KAWAI, Hidetoshi; SUZUKI, Takanori

- 3A1-36 Synthesis of tetrahydro-4H-pyran-4-one derivatives via a palladium-catalyzed reaction of thiol esters (Graduate School of Life Sciences, Tohoku Univ.) MIZUNUMA, Kana; MATSUKIDA, Seiji; FUWA, Haruhiko; SASAKI, Makoto
- **3A1-37** Synthetic Study on Brevisamide Analogues for Structure-Activity Relationship Study (Univ. of Tokyo) ARAI, Hiroki; TSUTSUMI, Ryosuke; KURANAGA, Takefumi; SATAKE, Masayuki; TACHIBANA, Kazuo
- 3A1-38 Synthesis of proposed partial structure of BSX-1, a new marine polycyclic ether from a dinoflagellate Karenia brevisulcata (School of Science, Univ. of Tokyo) TSUTSUMI, Ryosuke; SATAKE, Masayuki; TACHIBANA, Kazuo

Chair: SATO, Itaru (15:30~16:40)

- \* 15:20-15:30: interval for laptop PC connection.(3A1-40, 3A1-41, 3A1-42, 3A1-43, 3A1-44, 3A1-46)
- 3A1-40 Synthetic studies on (-)-Prorocentin (Grad. School of Science, Hokkaido Univ.; PRESTO) KATAGIRI, Yasushi; FUJIWARA, Kenshu; KAWAI, Hidetoshi; SUZUKI, .takanori
- 3A1-41 Preparation of Optically Active 3-Alkoxyallyl alcohols Possessing a 4-Methoxyphenyl Protecting Group and its Application to Stereoselective Ether Synthesis (Hokkaido Univ.; JST PRESTO) NOGOSHI, Keisuke; FUJIWARA, Kenshu; KAWAMURA, Natsumi; KAWAI, Hidetoshi; SUZUKI, Takanori
- 3A1-42 Design and synthesis of polycyclic ether library via Suzuki coupling/ ring expansion strategy. (Univ. of Tokyo) MATSUMOTO, Kenichi; KURANAGA, Takefumi; TACHIBANA, Kazuo
- 3A1-43<sup>†</sup> Mixed Thioacetal Formation Using In(OTf)<sub>3</sub>/MS4A:Improved Synthesis of the WXYZ-Ring System of Maitotoxin (Osaka Univ.; Kyushu Univ.) NAKASHIMA, Takeharu; OSHIMA, Takahiro; HASEGAWA, Futoshi; MURATA, Michio; TORIKAI, Kohei; OISHI, Tohru
- **3A1-44\*** Total synthesis of brevenal: A practical approach toward polycyclic ether skeletons (Graduate School of Life Sciences, Tohoku Univ.) EBINE, Makoto; FUWA, Haruhiko; SASAKI, Makoto
- 3A1-46 Synthetic Studies on the A-Ring of Armatol F (Faculty of Sci., Hokkaido Univ.; JST PRESTO) HIROSE, Yuta; FUJIWARA, Kenshu; SATO, Daisuke; KAWAI, Hidetoshi; SUZUKI, Takanori

Chair: SAIKAWA, Yoko (16:50~17:40)

- \* 16:40-16:50: interval for laptop PC connection.(3A1-48, 3A1-49, 3A1-50, 3A1-51, 3A1-52)
- **3A1-48** Development of efficient bis-*C*-glycosylation toward the synthesis of the pluramycins (Tokyo Institute of Technology) KITAMURA, Kei; SHIGETA, Masayuki; ANDO, Yoshio; MATSUMOTO, Takashi; SUZUKI, Keisuke
- 3A1-49 Diels-Alder Reaction of Naphthoquinone Monoacetal (Department of Chemistry, Tokyo Institute of Technology) ANDO, Yoshio; SHIGETA, Masayuki; KITAMURA, Kei; MATSUMOTO, Takashi; SUZUKI, Keisuke
- **3A1-50** First Total Synthesis of 6'-Methoxyretrojusticidin B Using Regiocontrolled Benzannulation: Structural Inconsistency with Procumphthalide A and ItsRevision to 5'-Methoxyretrochinensin (Faculty of Textile Science and Technology, Shinshu Univ.) YOSHIDA, Eri; SAKAI, Ryo; NISHII, Yoshinori
- 3A1-51 A Novel Total Synthesis of Cyclogalgravin Utilizing Highly Regiose-lective Ring-expansion as a key step (Faculty of Textile Science & Technology, Shinshu Univ.) TAGUCHI, Ryouta; NISHII, Yoshinori
- 3A1-52 Synthetic study of kosinostatin (Department of Applied Chemistry, Kyushu Institute of Technology) MATSUZAKI, Hiroki; YOSHINAGA, Shogo; EZAKI, Kantaro; ARAKI, Keiichiro; OKAUCHI, Tatsuo; KITAMURA, Mitsuru
  - Chair: KITAMURA, Mitsuru (17:50 $\sim$ 18:30)
- \* 17:40-17:50: interval for laptop PC connection.(3A1-54, 3A1-56, 3A1-57)
- **3A1-54\***<sup>†</sup> Syntheses of All-methylated Isorugosin B and Rugosin B (Graduate School of Science and Engineering, Univ. of Toyama) SHIOE, Kazuma; SAHARA, Yusuke; TAKEUCHI, Yasuo; HARAYAMA, Takashi; ABE, Hitoshi
- 3A1-56 Synthetic study of the dermocanarin 2 (Department of Chemistry, Tokyo Institute of Technology; School Pharmacy, Tokyo Univ. of Pharmacy and Life Sciences; SORST-JST) TAKAHASHI, Nobuyuki; YAMAGUCHI, Satoru; YUYAMA, Daisuke; SUZUKI, Keisuke; MATSUMOTO, Takashi
- 3A1-57 Synthetic Study on BE-43472B (Graduate School of Science and Technology, Tokyo Institute of Technology) YAMASHITA, Yu; TAKIKAWA, Hiroshi: SUZUKI, Keisuke

#### Tuesday, March 29, AM

Chair: NAKAMURA, Kazuhiko (9:00  $\sim$ 10:00)

- \* 8:50-9:00: interval for laptop PC connection.(4A1-01, 4A1-02, 4A1-03, 4A1-04, 4A1-05, 4A1-06)
- 4A1-01 Synthesis of flavonoids having isoprenyl groups, spinoflavanone-B (Graduate School of Science and Technology, Tokyo Institute of Technology) NAKAMURA, Kayo; SEO, Hana; OHMORI, Ken; SUZUKI, Keisuke
- 4A1-02 Synthesis of C(4)-C(6) linked catechin oligomer (Tokyo Institute of Technology) TAKAHASHI, Takehiro; OHMORI, Ken; SUZUKI, Keisuke

- 4A1-03 Efficient synthetic method of five-membered lactams utilizing Bischler-Napieralski reaction. (Faculty of Science and Technology, Keio Univ.) ONOZUKA, Masao; ADACHI, Satoshi; MIYAOKA, Yoshihito; KAMEDA, Syunsuke; YOSHIDA, Yuko; IDE, Mitsuaki; SAIKAWA, Yoko; NAKATA, Masaya
- 4A1-04 Synthetic Studies on Lactonamycin (Faculty of Science and Technology, Keio Univ.) ADACHI, Satoshi; MIYAOKA, Yoshihito; SAIKAWA, Yoko; NAKATA, Masaya
- 4A1-05 Search for Congeners of The Toxic Pigment Stentorin in Ciliate Stentor coeruleus (Department of Material Science, Graduate School of Science, Osaka City Univ.) MIYABE, Hiroki; USUKI, Yoshinosuke; IIO, Hideo
- 4A1-06 Asymmetric total synthesis of Danicalipin A (Hokkaido Univ.) SHIBATA, Masayuki; UMEZAWA, Taiki; KANEKO, Kensuke; OKINO, Tatsuhumi; MATSUDA, Fuyuhiko

Chair: TANAKA, Hiroshi  $(10:10{\sim}10:50)$ 

- \* 10:00-10:10: interval for laptop PC connection.(4A1-08, 4A1-09, 4A1-10, 4A1-11)
- 4A1-08 Synthetic study of bacterial fatty acid containing cyclopropane ring. (Grad. Sch. Sci., Osaka Univ.) ASADA, Saori; FUJIMOTO, Yukari; FUKASE, Koichi
- 4A1-09 Melanin Biosynthesis Inhibitors from Tarragon (Keio Univ.; FANCL Co.Ltd) NAKAMURA, Kazuhiko; WATABE, Taeko; KAWAGOSHI, Masaru; UOTSU, Nobuo; CHIBA, Tomohiro; YAMADA, Masayoshi; YAMAGUCHI, Kohji; OHNO, Osamu; UEMURA, Daisuke
- 4A1-10 Total synthesis of a D-gluconic acid-containing ellagitannin, lager-stannin C (School of Science and Technology, Kwansei Gakuin Univ.) KANEKO, Yuki; TANDA, Kentaro; MICHIHATA, Naoki; YAMADA, Hidetoshi
- 4A1-11 Synthesis of sphingomyelin analogues toward elucidation of the microdomain properties (School of Science and Technology, Kwansei Gakuin Univ.) YAMAGUCHI, Sho; KURITA, Mayuko; YAMAMOTO, Tetsuya; SLOTTE, J.P.; KATSUMURA, Shigeo

#### Combichem

Chair: TAKAHASHI, Daisuke (11:00∼11:50)

- \* 10:50-11:00: interval for laptop PC connection.(4A1-13, 4A1-15, 4A1-17)
- **4A1-13\***<sup>†</sup> Synthesis of Forssman Antigen and its Derivatives for Charactalization of Coral Lectin (Tokyo Institute of Technology) TAKEUCHI, Ryota; TANAKA, Hiroshi; JINBO, Mitsuru; TAKAHASHI, Takashi
- 4A1-15\* Combinatorial Synthesis of Deoxyhexasaccharide Related to the Landomycin A Sugar Moiety, Based on An Orthogonal Deprotection Strategy (Tokyo Institute of Technology) YAMAGUCHI, Sho; TANAKA, Hiroshi; TAKAHASHI, Takashi
- 4A1-17 Synthetic study of the Versipelostatin-F deoxytrisaccharide and glycoside delivatives (Tokyo Institute of Technology; AIST; JBIC) TANAKA, Hiroshi; AKAZA, Hiroto; YOSHIZAWA, Atsushi; TAKAGI, Motoki; SHINYA, Kazuo; TAKAHASHI, Takashi

## Room A2

Bldg. 7 7-14

### Natural Products Chemistry Saturday, March 26, AM

#### Sugar

Chair: TANAKA, Katsunori (9:00  $\sim$ 9:50)

- \* 8:50-9:00: interval for laptop PC connection.(1A2-01, 1A2-02, 1A2-03, 1A2-04)
- 1A2-01 Synthesis of Gb4 Glycoconjugate Immobilized on Gold Nanoparticles (Department of Chemistry, Okayama Univ. of Sci.) YAMADA, Haruo; FURUSHOU, Yamato
- **1A2-02** Synthesis of Gb3 and Gg3 Derivatives Immobilized on Gold Nanoparticles (Department of Chemistry, Okayama Univ. of Sci.) YAMADA, Haruo: FURUSHOU, Yamato
- **1A2-03** Probing the Carbohydrate-Carbohydrate Interaction between GM3 and Gg3 Glycoconjugates on Gold Nanoparticles. (Department of Chemistry, Okayama Univ. of Sci.) YAMADA, Haruo; HORIE, Akifumi
- 1A2-04\*† Development of novel glucuronate and Iduronate glycosyl donors by using conformational conversion as a key strategy. (Graduate school of life science, Hokkaido Univ.) FURUKAWA, Takayuki; HINOU, Hiroshi; NISHIMURA, Shin-ichiro

Chair: FUSE, Shinichiro (10:00 $\sim$ 10:50)

- \* 9:50-10:00: interval for laptop PC connection.(1A2-07, 1A2-08, 1A2-10)
- **1A2–07** Highly  $\alpha$ -selective glucosylation using 3,6-O-(o-xylylene)-bridged sugar (Graduate School of Science and Technology, Kwansei Gakuin

- Univ.) MOTOYAMA, Atsushi; ASHIKAGA, Yoshiki; YAMADA, Hidetoshi
- 1A2-08\*† Practical \( \alpha \)-Sialylation Using The N5-Ac Sialic Acid Donor (Osaka Univ.) UCHINASHI, Yosuke; NAGASAKI, Masahiro; ZHOU, Jiazhou; TANAKA, Katsunori; FUKASE, Koichi
- 1A2-10\* The endocleavage reaction library preparation (RIKEN, Advanced Science Institute) MANABE, Shino; ITO, Yukishige

Chair: HIRAI, Go (11:00∼11:50)

- \* 10:50-11:00: interval for laptop PC connection.(1A2-13, 1A2-14, 1A2-15, 1A2-16, 1A2-17)
- **1A2-13** Synthesis of Functionalized Glycopolymers by .pai..2d.Allyl Nickel Catalyzed Living Coordination Polymerization (Tokyo Institute of Technology) TANAKA, Hiroshi; OHIRA, Shuichi; TOMITA, Ikuyoshi; TAKAHASHI, Takashi
- 1A2-14<sup>†</sup> Synthesis of the small particles immobilized with β Glucan Oligosaccharide and their Innate Immunity-modulating activity. (Department of Applied Chemistry, Graduate School of Science and Engineering, Tokyo Institute of Technology) KAWAI, Tetsuya; TANAKA, Hiroshi; ADACHI, Yoshiyuki; OHNO, Naohito; TAKAHASHI, Takashi
- 1A2-15 Solid-phase synthesis of the β-glucan analogues by Huisgen reaction (Department of Applied Chemistry, Graduate School of Science and Engineering, Tokyo Institute of Technology) TANAKA, Hiroshi; TAGO, Hiroaki; ADACHI, Yoshiyuki; ONO, Naohito; TAKAHASHI, Takashi
- 1A2-16 Synthesis of Parasitic Bacterial Lipopolysaccharide Partial Structures for Elucidation and Regulation of Innate Immune System (Grad. Sch. of Sci., Osaka Univ.) SHIMOYAMA, Atsushi; SAEKI, Akinori; KITAYAMA, Naohiro; FUJIMOTO, Yukari; FUKASE, Koichi
- **1A2-17** Synthesis and immunomodulatory activities of *Porphyromonas gingivalis* lipid A (Grad. Sch. of Sci., Osaka Univ.) SAEKI, Akinori; SHIMOYAMA, Atsushi; KASAMATSU, Chika; KITAYAMA, Naohiro; FUJIMOTO, Yukari; FUKASE, Kouichi

#### Saturday, March 26, PM

Chair: HINOU, Hiroshi (13:00∼13:30)

- \* 12:50-13:00: interval for laptop PC connection.(1A2-25, 1A2-26, 1A2-27)
- 1A2-25 Library Creation of Disaccharide Glycoconjugates on Gold Nanoparticle and Observation of Carbohydrates Interaction by Particle Measurement (Department of Chemistry, Okayama Univ. of Sci.) YAMADA, Haruo: SHIKANO. Jun
- 1A2-26 Stereoselective phosphorylation reaction of myo-inositol for the synthesis of immunomodulatory phosphoinositol lipids (Grad. Sch. Sci., Osaka Univ.) SATO, Masaki; UMEGAKI, Daichi; FUJIMOTO, Yukari; FUKASE, Kouichi
- **1A2-27** Synthetic study of *Entamoeba histolytica* inositol phospholipids which activate NKT cell (Graduate school of Science, Osaka Univ.) UMEGAKI, Daichi; SATO, Masaki; IWASAKI, Takanori; KAMBE, Nobuaki; FUJIMOTO, Yukari; FUKASE, Koichi

Chair: TADANO, Kin-Ichi (13:40∼14:40)

- \* 13:30-13:40: interval for laptop PC connection.(1A2-29)
- **1A2-29** CSJ Award for Creative Works Functional Analysis of Bioactive Glycoconjugates Based on Organic Synthesis and Bioimaging (Grad. Sch. Sci., Osaka Univ.) FUKASE, Koichi

Chair: MIZUNO, Mamoru (16:50~17:40)

- \* 16:40-16:50: interval for laptop PC connection.(1A2-48, 1A2-49, 1A2-50, 1A2-51, 1A2-52)
- 1A2-48 Glycosylations via Glycosyl Sulfonium Ions (Kyoto Univ.; RIKEN) NOZAKI, Yuki; SAIGUSA, Yoshihiro; NOKAMI, Toshiki; MANABE, Shino; ITO, Yukishige; YOSHIDA, Jun-ichi
- **1A2–49** Synthetic study of *N*-linked oligosaccharides using stereoinversion of the C-2 hydroxyl group of a glucose residue (Department of Materials and Life Science, Seikei Univ.) IWATA, Kodai; IWAMOTO, Shogo; SABUROUMARU, Miyuki; MATSUZAKI, Yuji; TOTANI, Kiichiro
- 1A2-50 Synthetic study of the ER type oligosaccharide-probesusing universal monosaccharide unit. (Department of Materials and Life Science, Seikei Univ.) SHINODA, Yuki; IWAMOTO, Shogo; MATSUSHIMA, Hikaru; SABUROMARU, Miyuki; OTA, Takashi; MATSUZAKI, Yuji; TOTANI, Kiichiro
- 1A2-51 A Novel Chemoselective Glycosylation Method of 2,3-Dideoxy-glycosyl Donors Utilizing an Armed-disarmed Effect of Remote Protecting Groups. (Faculty of Science and Technology; Keio Univ.) TOMONO, Satoshi: KUSUMI, Svunichi: TAKAHASHI, Daisuke: TOSHIMA, Kazunobu
- 1A2-52 A Novel Glycosylation of Inactive Glycosyl Donors Using an Ionic Liquid Containing a Protic Acid Under Reduced Pressure Conditions. (Faculty of Science and Technology, Keio Univ.) TAKAHASHI, Daisuke; KUROIWA, Yasutaka; SEKINE, Maiko; TOMONO, Satoshi; TOSHIMA, Kazunobu

Chair: TOTANI, Kiichiro (17:50 $\sim$ 18:10)

- \* 17:40-17:50: interval for laptop PC connection.(1A2-54, 1A2-55)
- **1A2-54** Synthesis of Glycosyl Bromide by Phase-Vanishing Method (The Noguchi Institute) TOJINO, Mami; MIZUNO, Mamoru

1A2-55 Synthesis of core fucose-containing complex-type N-linked oligosaccharide (Osaka Univ.) MIYAGAWA, Takuya; TANAKA, Katsunori; FUKASE. Koichi

#### Sunday, March 27, PM

Chair: FUJIMOTO, Yukari (13:00~13:50)

- \* 12:50-13:00: interval for laptop PC connection.(2A2-25, 2A2-26, 2A2-27, 2A2-28, 2A2-29)
- 2A2-25 Photo-degradation of Target Oligosaccharides by Anthraquinone-lectin Hybrids (Faculty of Science and Technology, Keio Univ) IMAI, Yukari; HIRONO, Shingo; MATSUBA, Haruka; KOBAYASHI, Yuka; KAWAGISHI, Hirokazu; TAKAHASHI, Daisuke; TOSHIMA, Kazunobu
- 2A2-26 Photo-degradation of Target Oligosaccharides by Fullerene-boronic Acid Hybrids. (Keio Univ.; Faculty of Science and Technology) HIRONO, Shingo; TAKAHASHI, Daisuke; TOSHIMA, Kazunobu
- 2A2-27 Synthetic study of FRET-sensitive macromolecules(III): amylase assay on the basis of FRET (Grad. Sch. Sci. eng., Saitama univ.) ARAI, Hirokatsu; KOYAMA, Tetsuo; HATANO, Ken; MATSUOKA, Koji
- 2A2-28 Synthetic study efficient synthetic construction of Lewis Y structure (Grad. sch. sci. eng., Saitama univ.) SHIMADA, Masahiro; KOYAMA, Tetsuo; HATANO, Ken; MATSUOKA, Koji
- 2A2-29 Synthesis and antimicrobial screening of orsellide A-E. (Univ. of Kanagawa) AOSHIMA, Keita; AKAI, Shoji; SATO, Ken-ichi

Chair: AKAI, Shoji (14:00∼15:00)

- \* 13:50-14:00: interval for laptop PC connection.(2A2-31, 2A2-32, 2A2-33, 2A2-34, 2A2-35, 2A2-36)
- 2A2-31 Influence of hyaluronic acid environments on stereoserectivity of Aldol reaction (Department of Materials and Life Science, Seikei Univ.) ISHIKAWA, Takashi; USHIDA, Kiminori; TOTANI, Kiichiro
- 2A2-32 Glycohydrolysis mediated by mucins from jellyfish (Department of Materials and Life Science, Seikei Univ.) ORIHARA, Daisuke; NAKAMURA. Ryuunosuke: TOTANI. Kiichiro: USHIDA. Kiminori
- **2A2-33** Convenient preparation of the polymerizable GlcNAc derivative and evaluation of the glycopolymers(II):Application of the glycopolymers for affinity chromatography. (Grad. sch. sci. eng., Saitama univ.) YAMASHITA, Shohei; KOYAMA, Tetsuo; HATANO, Ken; MATSUOKA, Koii
- **2A2–34** Syntheses of sialyl  $\alpha$  (2-6)galactose-supported copolymers and construction of the library (Grad. sch. sci. eng., Saitama univ.) YOSHIDA, Tetsuya; KOYAMA, Tetsuo; HATANO, Ken; MATSUOKA, Koji
- 2A2-35 Glycan of blepharmone, a conjugation-inducing pheromone of Blepharisma japonium (Department of Material Science, Graduate School of Science, Osaka City Univ.) YAMAGISHI, Yoshikazu; YOSHIOKA, Koichi; WATANABE, Takashi; USUKI, Yoshinosuke; IIO, Hideo
- 2A2-36<sup>#</sup> Synthesis of peptidoglycan fragment library for exploring recognition proteins (Osaka Univ.) WANG, Ning; HUANG, Cheng-yuan; FUJIMOTO, Yukari; FUKASE, Koichi.

Chair: NOGUCHI, Masato (15:10 $\sim$ 16:10)

- \* 15:00-15:10: interval for laptop PC connection.(2A2-38, 2A2-39, 2A2-40, 2A2-41, 2A2-42, 2A2-43)
- 2A2-38 New Synthetic Method of Sialylglycopeptide-thioesterHaving a Human Complex-Type Sialyloligosaccharide by Using Boc SPPS (School of Science, Osaka Univ.) MURAKAMI, Masumi; OKAMOTO, Ryo; KAJIHARA, Yasuhiro
- 2A2-39<sup>†</sup> Synthesis of C-glycosides and behavior of these molecular (Tokai Univ.) MATSUDA, Sho; INAZU, Toshiyuki
- 2A2-40<sup>†</sup> A novel method for the preparation of pseudo glycoamino acid and its application to glycopeptide synthesis (Tokai Univ.) TOMABECHI, Yusuke; INAZU, Toshiyuki
- 2A2-41 An Efficient preparation method of Fmoc-Asn(Sugar)-OH (Tokai Univ.) HATA, Tomoya; TOMABECHI, Yusuke; HANEDA, Katsuji; INAZU, Toshiyuki
- 2A2-42 A novel strategy of glycosylation using glycosyl boranophosphate deribatives (The univ. of Tokyo) TATSUMI, Shiro; MATSUMURA, Fumiko; OKA, Natsuhisa; WADA, Takeshi
- **2A2–43** Synthesis of TMG-chitotriomycin, a potent inhibitor of β-N-acetylglucosaminidase, and its related sugar chains (RIKEN; Saitama Univ.) KITAMURA, Yujiro; MATSUOKA, Koji; KOSHINO, Hiroyuki; TAKAHASHI. Shunya

Chair: MATSUOKA, Koji (16:20∼17:30)

- \* 16:10-16:20: interval for laptop PC connection.(2A2-45, 2A2-46, 2A2-47, 2A2-48, 2A2-49, 2A2-50, 2A2-51)
- 2A2-45<sup>†</sup> Synthesis of Oligo(alpha-D-Glycosyl Boranophosphates) and Conversion to Natural Phosphoglycans Containing Phosphate Units (Univ. of Tokyo) FUJITA, Shoichi; OKA, Natsuhisa; MATSUMURA, Fumiko; WADA, Takeshi
- **2A2–46** Stereoselective Synthesis of *P*-modified α-Glycosyl Phosphates by the Oxazaphospholidine Approach (The univ. of Tokyo) NORO, Mihoko; FUJITA, Syoichi; WADA, Takeshi
- 2A2-47 A Facile Glycosylating Process Involving Direct Anomeric Thiopyridylation of Unprotected Sugars (Graduate School of Engineering, Tohoku

- Univ.) ISHIHARA, Masaki; AIDA, Naoya; NOGUCHI, Masato; SHODA, Shin-ichiro
- 2A2-48 Direct Glycosylation Reaction of Unprotected Sugars under Hydorogenolytic Conditions (Graduate School of Engineering, Tohoku Univ.) TAKAGI, Yuka; ISHIHARA, Masaki; NOGUCHI, Masato; SHODA, Shinichiro
- 2A2-49 Stereoselective synthesis of ketoses and urosonic acids through aqueous aldol reaction (Dept. of Chem., College of Sci.& Tech., Meisei Univ.) MIURA, Daisuke; TSUTUI, Ayumi; FUJIMOTO, Takashi; USUI, Yosuke; MACHINAMI, Tomoya
- 2A2-50 Application of intramolecular aglycon delivery toward the synthesis of a branched heptasaccharide fragment of mycobacterial arabinan (RIKEN Advanced Science Institute; ERATO JST) ISHIWATA, Akihiro; ITO, Yukishige
- **2A2–51** Examination of  $\beta$ -mannosylation towards synthesis of anti-freeze xylomannan (RIKEN ASI; Saitama Univ.; ERATO, JST) SAKURAI, Ayaka; ISHIWATA, Akihiro; ITO, Yukishige

#### Monday, March 28, AM

#### Others

Chair: MINAMI, Atsushi  $(9:00\sim10:00)$ 

- \* 8:50-9:00: interval for laptop PC connection.(3A2-01, 3A2-02, 3A2-03, 3A2-04, 3A2-05, 3A2-06)
- 3A2-01 Screening for novel inhibitors of fat accumulation from Valeriana fauriei (Keio Univ.) YUKI, Keiji; IKEDA, Mariko; MIYAMOTO, Kenji; UEMURA, Daisuke
- 3A2-02 Searching for novel inhibitors of fat accumulation from Aloysia triphylla (Dept. of Biosciences and informatics, Keio) IKEDA, Mariko; MIYAMOTO, Kenji; UEMURA, Daisuke
- 3A2-03 Innovation of new extraction protocol of shikimic acid (Graduate School of Science and Engineering, Sophia Univ.) YASUDA, Nanae; SATO, Makiko; FUJITA, Masahiro; RIKUKAWA, Masahiro; USUKI, Toyonobu
- **3A2-04** Photo-degradation of Amyloid β by Fullerene Derivatives and Their Effect on Neuron-like PC12 Cells (Keio Univ.; Faculty of Science and Technology) ISHIDA, Yasunori; FUJII, Tomohiko; OKA, Kotaro; TAKAHASHI, Daisuke; TOSHIMA, Kazunobu
- 3A2-05 Efficient Synthesis of v-Coelenterazine for in vivo Bioluminescence Imaging (Tokyo Med. & Dent. Univ.; Tokyo Inst. Tech.; Chisso Co.;) IIMORI, Rie; SUMIDA, Yuto; YOSHIDA, Suguru; SAHARA, Yuiko; SATO, Junichi; INOUYE, Satoshi; HOSOYA, Takamitsu
- **3A2-06** Studies on the sneeze-induced components of *Chrysaora melanaster* (Faculty of Science and Technology, Keio Univ.) INOUE, Daiki; AKINO, Makiko; MATSUURA, Masanori; SAIKAWA, Yoko; NAKATA, Masaya

Chair: SAIKAWA, Yoko (10:10~11:00)

- \* 10:00-10:10: interval for laptop PC connection.(3A2-08, 3A2-09, 3A2-10, 3A2-11, 3A2-12)
- **3A2-08** Screening for genes encoding enzyme for the biosynthesis of biologically active compounds derived from *Symbiodinium* sp. (Dept. of Biosciences and Informatics, Keio Univ.) FUNABIKI, Chika; MIYAMOTO, Kenii; UEMURA, Daisuke
- 3A2-09 Structural analysis of isopentenyl diphosphate isomerase derived from methanogenic archaea (JASRI/SPring-8; Tokyo Inst. Tech. Grad. Sci. Eng.) HOSHINO, Takeshi; NANGO, Eriko; BABA, Seiki; EGUCHI, Tadashi; KUMASAKA, Takashi
- 3A2-10<sup>#</sup> Biosynthetic study of longestin: unusual mechanism of polyprenyl diphosphate synthesis. (Graduate School of Science, Hokkaido Univ.) SHINDE, Sandip; MINAMI, Atsushi; DAIRI, Tohru; OIKAWA, Hideaki
- 3A2-11 Metagenomic Analysis of the Microbial Consortiaof Halichondria okadai to Exploit the Bioactive CompoundSynthase Conding Gene (Keio Univ.) TAKAHASHI, Yusuke; KISHIGAMI, Mizue; SAKAKIBARA, Yasufumi; MIYAMOTO, Kenji; UEMURA, Daisuke
- 3A2-12 Metagenome Analysis of the Symbiotic Bacterium in Halichondria okadai by Next Generation Sequencers (Keio Univ.) KISHIGAMI, Mizue; NAMIKI, Toshiaki; TAKAHASHI, Yusuke; TOYOTA, Atsushi; HUJIYAMA, Asao; AKIYAMA, Kiyotaka; NAITO, Takayuki; SAKAKIBARA, Yasubumi; MIYAMOTO, Kenii; UEMURA, Daisuke

Chair: OKADA, Masahiro (11:10~12:00)

- \* 11:00-11:10: interval for laptop PC connection.(3A2-14, 3A2-15, 3A2-16, 3A2-17, 3A2-18)
- 3A2-14<sup>†</sup> Cloning of incednine biosynthetic gene cluster (Graduate School of Science and Engineering, Tokyo Institute of Technology) TAKAISHI, Makoto; KUDO, Fumitaka; EGUCHI, Tadashi
- 3A2-15<sup>†</sup> Biosynthetic pathway of macrolactam glycoside antibiotic cremimycin (Graduate School of Science and Engineering Tokyo Institute Of Technology) AMAGAI, Keita; KUDO, Fumitaka; EGUCHI, Tadashi
- 3A2-16 Heterologous expression of tetracyclic diterpene aphidicolin biosynthetic genes (Graduate School of Science, Hokkaido Univ.) FUJII, Ryuya; MINAMI, Atsushi; TSUKAGOSHI, Tae; SAHARA, Takehiko; OUGIYA, Satoru; GOMI, Katsuya; OIKAWA, Hideaki
- 3A2-17 Functional analysis of epoxidase Lsd18 involved in lasalocid A biosynthesis. (Graduate School of Science, Hokkaido Univ.) SHIMAYA,

Mayu; MINAMI, Atsushi; OGURI, Hiroki; OIKAWA, Hideaki

3A2-18 Elucidation of the mechanism on epoxide opening cascades catalyzed by MonBI and MonBII involved in monensin biosynthesis (Graduate school of Science, Hokkaido Univ.) SATO, Kyohei; MINAMI, Atsushi; OGURI, Hiroki; OIKAWA, Hideaki

#### Monday, March 28, PM

Chair: KUDO, Fumitaka (13:10∼14:00)

- \* 13:00-13:10: interval for laptop PC connection.(3A2-26, 3A2-27, 3A2-28, 3A2-29, 3A2-30)
- 3A2-26 Biological activity of self defense toxin Climacostol congener (yonago national college of technology) OOTANI, Kyoko; DOE, Matsumi; USUKI, Yoshinosuke; IIO, Hideo; URUMA, Yoshiyuki
- 3A2-27 Synthetic Studies on Self-defense Toxin Blepharismin of Blepharisma japonicum (Deprtment of Material Science, Graduate School of Science, Osaka City Univ.) TAKAHASHI, Shinnichi; ERUNAWATI, Teni; USUKI, Yoshinosuke; IIO, Hideo
- **3A2-28** Studies on the synthesis of splenocin B, a potent inhibitor of pro-Inflammatory cytokine production (Osaka City Univ.) YOSHIDA, Ken-ichi; USUKI, Yoshinosuke; IIO, Hideo
- 3A2-29 Synthetic Studies on Marine Natural Product, Polymaxenolides (Department of Applied Chemistry, Keio Univ.) MATSUDA, Yutaka; KOYAMA, Takayuki; KAWAGUCHI, Tomonori; SAIKAWA, Yoko; NAKATA, Masaya
- 3A2-30 Synthesis of strigolactone mimics and studies on their structureactivity relationships (Graduate school of Agricultural and life schience, Univ. of Tokyo) FUKUI, Kosuke; ITO, Shinsaku; ASAMI, Tadao

Chair: ISHIKAWA, Yuichi (14:10~15:00)

- \* 14:00-14:10: interval for laptop PC connection.(3A2-32, 3A2-33, 3A2-34, 3A2-35, 3A2-36)
- **3A2-32** Synthetic Studies of Diaporthichalasin (Keio Univ.) TSUNETANI, Yuko; TERADA, Daisuke; TAKAO, Ken-ichi; TADANO, Kin-ichi
- **3A2-33** Synthetic Studies of GKK1032As (Keio Univ.) NAGAI, Satoka; SHIMIZU, Yuta; ISHIZUKA, Yuto; TAKAO, Ken-ichi; TADANO, Kin-ichi
- **3A2-34**\* Synthesis of the Completely Enantiomeric Probe containing the L-galactosamine (Grad. School of Sci., Tohoku Univ.) YANG, Gangqiang; INOMATA, Sho; UEDA, Minoru
- 3A2-35 Development of perfect enantiodifferential approach using click chmeistry on living cell (Graduate School of Science, Tohoku Univ.) MANABE, Yoshiyuki; INOMATA, Syo; YANG, Gangqiang; EBINE, Makoto; UEDA, Minoru
- 3A2-36 Synthesis of molecular probe based on coronatine, elucidating mechanism of stomatal opening (Graduate School of Science, Tohoku Univ.) EGOSHI, Shusuke; OKADA, Masahiro; UEDA, Minoru

Chair: TAKAHASHI, Daisuke (15:10~16:00)

- \* 15:00-15:10: interval for laptop PC connection.(3A2-38, 3A2-40, 3A2-41, 3A2-42)
- 3A2-38\*† In vitro Enzyme Inhibitory Activity of Cyclic Vancomycin Dimers (Graduate School of Life Sciences, Tohoku Univercity) NAKAMURA, Jun; YAMASHIRO, Hidenori; MIURA, Kenji; MAKI, Hideki; XU, Shu; ARIMOTO, Hirokazu
- 3A2-40 Medicinal chemistry of vancomycin using Pd-mediated cross-coupling (3) (Graduate School of Life Sciences, Tohoku Univ.) TOYAMA, Takayuki; NAKAMA, Yuki; YOSHIDA, Osamu; YODA, Masanori; YAMASHIRO, Hidenori; NAKAMURA, Jun; XU, Shu; MAKI, Hideki; ARIMOTO, Hirokazu
- 3A2-41 Synthetic Studies of (-)-Tetrodotoxin and 5-Deoxytetrodotoxin (Keio Univ.) WAKUI, Takashi; TAKARABE, Toshimasa; TAKAO, Ken-ichi; TADANO, Kin-ichi
- **3A2–42** Synthesis of the Lower-Half Segment of Versipelostatin by an Intramolecular Diels-Alder Approach (Keio Univ.) SASAKI, Shu; ISHII, Miho; TAKAO, Ken-ichi; TADANO, Kin-ichi

Chair: OGURI, Hiroki (16:10∼17:10)

- \* 16:00-16:10: interval for laptop PC connection.(3A2-44, 3A2-46, 3A2-47, 3A2-48, 3A2-49)
- 3A2-44\* Evaluation of selective inhibitors for dual-specificity protein phosphatases based on natural product RK-682 (RIKEN-ASI; ERATO-JST) HIRAI, Go; TSUCHIYA, Ayako; OONUMA, Kana; UCHIDA, Takako; NISHIZAWA, Eri; SODEOKA, Mikiko
- 3A2-46 Development of Direct Enrichment Method for Alkyne Tagged Molecule Using Cobalt Complex in Water (JST-ERATO; RIKEN-ASI) EGAMI, Hiromichi; KAMISUKI, Shinji; DODO, Kosuke; ASANUMA, Miwako; HAMASHIMA, Yoshitaka; SODEOKA, Mikiko

3A2-47 Withdrawn

- 3A2-48 Biaryl-linked Molecular Probe Enables Hight-performance Protein Labeling (Graduate School of Science, Tohoku Univ.) MUKAI, Makoto; EBINE, Makoto; INOMATA, Sho; UEDA, Minoru
- 3A2-49 Novel IBX oxidation cleavage of alcohols to the dehomologated carboxylic acids (Tohoku Univ.) SATOH, Masahide; ITTO, Kaori; XU, Shu; ARIMOTO, Hirokazu

Chair: HAYAKAWA, Ichiro (17:20~18:20)

- \* 17:10-17:20: interval for laptop PC connection.(3A2-51, 3A2-52, 3A2-53, 3A2-54, 3A2-56)
- 3A2-51 Modified Clemmesen reduction of aldehyde using TMSCl (Graduate School of Life Sciences, Tohoku Univ.) TOYAMA, Takayuki; NAKAMURA, Jun; XU, Shu; ARIMOTO, Hirokazu
- 3A2-52 Preparation of nitrated RNA and it's reaction protein (Tohoku Univ.; Graduate School of Life Sciences, Kumamoto Univ.; Graduate School of Medical Sciences) NARUSE, Yuuto; SAITO, Yohei; SAWA, Tomohiro; AKAIKE, Takaaki; ARIMOTO, Hirokazu
- **3A2-53** Biomimetic Synthesis of Bioactive Natural Product by Anodic Oxidation (Keio Univ.) SUMI, Takenori; SAITO, Tsuyoshi; NATSUI, Keisuke; YAMAMOTO, Takashi; ISHIKAWA, Yuichi; EINAGA, Yasuaki; NISHIYAMA, Shigeru
- 3A2-54\*# Progress toward a general strategy for the synthesis of transtaganolide/basiliolide natural products (California Institute of Technology) NELSON, Hosea, M; MURAKAMI, Kei; VIRGIL, Scott; STOLTZ, Brian, M.
- 3A2-56 Synthesis and biological activities of 9-Methylstreptimidone delivertives towards the elucidation of inhibitory mechanism (Keio Univ.) OTA, Eisuke; TAKEIRI, Masatoshi; MATSUI, Chino; MIYAMOTO, Natsuki; ISHIKAWA, Yuichi; UMEZAWA, Kazuo; NISHIYAMA, Shigeru

#### Tuesday, March 29, AM

#### Others

Chair: TAKAO, Ken-Ichi (9:00 ∼10:00)

- \* 8:50-9:00: interval for laptop PC connection.(4A2-01, 4A2-03, 4A2-04, 4A2-05, 4A2-06)
- 4A2-01\* Investigation of Novel Endogenous Nitrated Nucleotide (Tohoku Univ.; Graduate School of Life Sciences, Kumamoto Univ.; Graduate School of Medical Sciences) SAITO, Yohei; TANIGUCHI, Junichi; TANOI, Takashi; SAWA, Tomohiro; AKAIKE, Takaaki; ARIMOTO, Hirokazu
- 4A2-03 Elucidation of Novel Physiological fuction of Endogenous Nitrated Nucleotide (Tohoku Univ.; Graduate School of Life Sciences, Kumamoto Univ.; Graduate School of Medical Sciences) ITO, Chiaki; SAITO, Yohei; SAWA, Tomohiro; AKAIKE, Takaaki; ARIMOTO, Hirokazu
- 4A2-04 Study on Novel fluorescent probe based on Nitrated Nucleotide (Tohoku Univ.; Graduate School of Life Sciences, Kumamoto Univ.; Graduate School of Medicinal Sciences) TAKAHASHI, Eriko; SAITO, Yohei; ITO, Chiaki; SAWA, Tomohiro; AKAIKE, Takaaki; ARIMOTO, Hirokazu
- 4A2-05 Synthetic study of carbazole alkaloids using electrochemical methodology (keio Univ.) KAJIYAMA, Daichi; INOUE, Keisuke; ISHIKAWA, Yuuichi; NISHIYAMA, Shigeru
- 4A2-06 The synthesic study of o-methylthalibrine using anodic oxidation (Keio Univ.) KAWABATA, Yuki; NAITO, Yu; ISHIKAWA, Yuichi; NISHIYAMA, Shigeru

#### Alkaloids

Chair: SUZUKI, Toshio (10:10∼11:10)

- \* 10:00-10:10: interval for laptop PC connection.(4A2-08, 4A2-10, 4A2-11, 4A2-12, 4A2-13)
- 4A2-08\*† Total Synthesis of Broussonetine F (Keio Univ.) HAMA, Naoto; MIWA, Shohei; YAMAZAKI, Miki; SATO, Takaaki; CHIDA, Noritaka
- 4A2-10 Total Synthesis of Australine (Keio Univ.) YAMAZAKI, Miki; MIWA, Shohei; HAMA, Naoto; SATO, Takaaki; CHIDA, Noritaka
- 4A2-11 Synthetic Studies of Mannostatin A (Kochi Univ) SAKIYAMA, Naoto; SENTOU, Nozomi; NAKANO, Keiji; ICHIKAWA, Yoshiyasu
- 4A2-12 Synthetic Studies of Manzacidin C (Kochi Univ) MATSUDA, Yasunori; OKUMURA, Ken; NAKANO, Keiji; ICHIKAWA, Yoshiyasu
- 4A2-13 Synthesis of Tetrasubstituted Amines Through N-Oxyiminium Ions (Keio Univ.) KUROSAKI, Yusuke; SHIROKANE, Kenji; SATO, Takaaki; CHIDA. Noritaka

Chair: SUZUKI, Toshio (11:20∼12:20)

- \* 11:10-11:20: interval for laptop PC connection.(4A2-15, 4A2-16, 4A2-17, 4A2-18, 4A2-19, 4A2-20)
- 4A2-15 Synthetic study of Gephyrotoxin via the N-alkoxyamide (Keio Univ.; CHIDA Group) SHIROKANE, Kenji; KUROSAKI, Yusuke; SATO, Takaaki; CHIDA, Noritaka
- **4A2-16** Synthetic Study of K-252d (Keio Univ.; CHIDA group) KAKO, Satoshi; SATO, Takaaki; CHIDA, Noritaka
- 4A2-17 Stereoselective synthesis of cyclopentane skeleton with nitrogencontaining quartenary center by intramolecular 1, 3-dipolar cycloaddition (Tokyo Univ. of Agriculture and Technology) FUKAHORI, Yusuke; IMAOKA, Takuya; NAGASAWA, Kazuo
- 4A2-18 Synthesis of Saxitoxin Derivatives with Focusing on the Development of Sodium Channel Subtype Selective Ligands (Department of Biotechnology and Life, Faculty of Technology, Tokyo Univ. of Agriculture and Technology) AKIMOTO, Takafumi; SHINOHARA, Ryoko; IWAMOTO, Osamu; NAGASAWA, Kazuo
- 4A2-19 Synthetic Studies on Haouamine B (Graduate School of Sci., Osaka City Univ.) TANAKA, Takeshi; INUI, Hiromi; KIDA, Hiroshi; KODAMA,

- Takeshi; OKAMOTO, Takuya; TAKESHIMA, Aki; TACHI, Yoshimitsu; MORIMOTO, Yoshiki
- 4A2-20 Asymmetric Total Synthesis of Lycodine (Graduate School of Science, Tohoku Univ.; Graduate School of Pharmaceutical Science, Kyoto Univ.) TYOU, Raku; TSUKANO, Chihiro; TAKEMOTO, Yoshiji; HIRAMA, Masahiro

#### Tuesday, March 29, PM

Chair: MORIMOTO, Yoshiki (13:30∼14:30)

- \* 13:20-13:30: interval for laptop PC connection.(4A2-28, 4A2-29, 4A2-30, 4A2-31, 4A2-32, 4A2-33)
- 4A2-28<sup>#</sup> Synthetic Studies of Dragmacidin D via Direct C-H Bond Arylation (Dept Chem, Nagoya Univ) MANDAL, Debashis; YAMAGUCHI, Atsushi; UEDA, Kirika; YAMAGUCHI, Junichiro; ITAMI, Kenichiro
- **4A2-29** Studies on the Synthesis of (±)-Rhazinilam through Intramolecular Aryleyanation of Alkenes (Graduate School of Engineering, Kyoto Univ.) YAMADA, Yuuya; EBATA, Shiro; NAKAO, Yoshiaki; HIYAMA, Tamejiro
- **4A2-30** Synthetic Studies on Zoanthenol ABC-ring Based on Radical Reactions (Graduate School of Science, Tohoku Univ.) SUDA, Naoki; YAMASHITA, Shuji; HIRAMA, Masahiro
- **4A2-31**<sup>†</sup> Synthetic Study of Lapidilectine B (Hokkaido Univ.) SUTO, Hiroki; NAMBA, Kosuke; TANINO, Keiji
- 4A2-32 Synthetic Study on Tetracyclic Alkaloid Magellanine (Faculty of Eng. and Grad. School of Sci. and Tec., Niigata Univ.) SUZUKI, Toshio; SHIMIZU, Takeshi; HAGIWARA, Hisahiro; HOSHI, Takashi
- **4A2-33** Synthetic study of spiroisoxazolines (Keio Univ.) MATSUI, Kaori; SAITO, Tsuyoshi; ISHIKAWA, Yuichi; NISHIYAMA, Shigeru

Chair: NAKAO, Yoichi (14:40~15:50)

- \* 14:30-14:40: interval for laptop PC connection.(4A2-35, 4A2-36, 4A2-37, 4A2-38, 4A2-39, 4A2-40, 4A2-41)
- 4A2-35 Synthesis of natural product analogs bearing a bispyrrolidinoindoline skeleton: Alterations of stereochemistries and amino-acid components (Graduate School of Science & Creative Research Initiative"Sousei", Hokkaido Univ.) WADA, Mitsuhiro; MURATA, Takahisa; OGURI, Hiroki; OIKAWA, Hideaki
- 4A2-36 Divergent and concise synthesis of aspidosperma/iboga-type alkaloids by mimicking biosynthetic strategy. (Graduate School of Chemical Sciences and Engineering & Graduate School of Science & Creative Research Initiative "Sousei", Hokkaido Univ.) MIZOGUCHI, Haruki; OGURI, Hiroki; OIKAWA, Hideaki
- 4A2-37 Design and synthesis of truncated norzoanthamine (Univ. of Tokyo; School of Science) INOUE, Hironori; FUKUZAWA, Seketsu; TACHIBANA, Kazuo
- **4A2-38** Search for a real producer of norzoanthamine isolated from *Zoanthus* sp. (Sch. of Sci. Univ. of Tokyo) SUZUKI, Rina; FUKUZAWA, Seketsu; TACHIBANA, Kazuo
- 4A2-39 Search for the binding proteins of ritterazine B, a cytotoxic alkaloid from the tunicate Ritterella tokioka (Univ. of Tokyo; School of Science) FUKUNAGA, Yasutaka; MAEDA, Takahiro; FUKUZAWA, Seketsu; TACHIBANA, Kazuo
- 4A2-40 New Purine Alkaloids from Seeds of Gleditsia japonica That Accelerate Acetylcholinesterase Activity. (Nagahama Institute of Bio-Science and Technology) KAJIMOTO, Tadashi; AOKI, Nobuwa; OHTA, Emi; OHTA, Shinji
- **4A2-41** Studies on Bromotyrosine-derivative Alkaloids from Okinawan Marin Sponge (Keio Univ.) MARU, Norihito; OHNO, Osamu; YAMADA, Kaoru; UEMURA, Daisuke

## Room A3

Bldg. 7 7-21

## Coordination Chemistry, Organometallic Chemistry

#### Saturday, March 26, AM

Chair: UMAKOSHI, Keisuke (9:00  $\sim$ 10:00)

- \* 8:50-9:00: interval for laptop PC connection.(1A3-01, 1A3-02, 1A3-03, 1A3-04, 1A3-05, 1A3-06)
- 1A3-01 Preparation and Sensor properties of 5,10,15,20-Tetraphenylporphyrin Derivatives-Metal Complexes(2) (Niihama National Col. of Tech.; Ehime Uni.) GODA, Reika; FUKUMOTO, Saki; NAKAGAWA, Katsuhiko; TSUTSUMI, Chikara; MABUCHI, Michiaki; SADAOKA, Yoshihiko
- 1A3-02 Construction of Magnus' Salt-type 1D Metal Arrays inside Dinuclear Metallo-Nano-cages (Grad. School of Science, The Univ. of Tokyo) KAWAMURA, Wataru; CLEVER, Guido; TASHIRO, Shohei; SHIONOYA, Mitsuhiko
- 1A3-03 Structures and Properties of Thioglucoside Pt<sup>II</sup> Complexes Linked by Ag<sup>I</sup> Ion (Graduate School of Science, Osaka Univ.) KITANI, Naoki;

- YOSHINARI, Nobuto; IGASHIRA, Asako; TSUKUDA, Toshiaki; KONNO. Takumi
- 1A3-04 Synthesis and Properties of trans-bis(thiosalicylaldiminato)platinum (II) Complexes (Graduate School of Engineering Science, Osaka Univ) KITAGAWA, Tomoki; KOMIYA, Naruyoshi; NAOTA, Takeshi
- 1A3-05 Synthesis and Catalytic Activity of NCN Pincer-type Platinum(II) Complexes Bearing Uracil Moiety (Osaka Univ.) MORIUCHI, Toshiyuk; OHATA, Ryohei; HIRAO, Toshikazu
- 1A3-06 Synthesis and Controlled Arrangement of Luminescent Complexes Bearing Uracil Moiety (Osaka Univ.) MORIUCHI, Toshiyuki; SAKAMOTO, Yuki; HIRAO, Toshikazu

Chair: MORIUCHI, Toshiyuki (10:10~11:10)

- \* 10:00-10:10: interval for laptop PC connection.(1A3-08, 1A3-10, 1A3-11, 1A3-12)
- 1A3-08\* Linkage isomerization of a platinum(II) thiocyanate complex controlled by vapor adsorption/desorption (Hokkaido Univ.) FUKUZAWA, Yuki; KOBAYASHI, Atsushi; CHANG, Ho-chol; KATO, Masako
- 1A3-10 Synthesis and properties of diphenylpyrazolato-bridged dinulear platinum complex with cyclometalated diphenylpyrazolate (Nagasaki Univ.; Hokkaido Univ.) KANEMATSU, Yasunori; UMAKOSHI, Keisuke; ARIKAWA, Yasuhiro; ISHIZAKA, Syoji; KITAMURA, Noboru
- 1A3-11 Synthesis and luminescent properties of mixed-metal complexes with (diimine)platinum unit and group 11 metal ions (Nagasaki Univ.; Hokkaido Univ.) HIGASHITANI, Ami; UMAKOSHI, Keisuke; ARIKAWA, Yasuhiro; ISHIZAKA, Syoji; KITAMURA, Noboru
- 1A3-12\* Electronic states of MMX-type iodide-bridged platinum complexes which have reversible dehydration-hydration ability (Tohoku Univ.; Nagoya Univ.; Kyoto Univ.; Univ. of Tokyo; CREST) IGUCHI, Hiroaki; TAKAISHI, Shinya; MIYASAKA, Hitoshi; YAMASHITA, Masahiro; TANAKA, Hisaaki; ITO, Hiroshi; KURODA, Shin-ichi; KITAO, Shinji; SETO, Makoto; MATSUZAKI, Hiroyuki; OKAMOTO, Hiroshi

Chair: KATO, Masako (11:20~12:20)

- \* 11:10-11:20: interval for laptop PC connection.(1A3-15, 1A3-18, 1A3-20)
- 1A3-15 CSJ Award for Young Chemists Creation of Charge Dynamics and Their Visualization in Quasi-One-Dimensional Halogen-Bridged Metal Complexes with Charge Bistability (Grad. Sch. Sci., Tohoku Univ.) TAKAISHI, Shinya
- 1A3-18\* Metal Complexes as Soft Material(1) Formation of Lyotropic Liquid Crystals and Macroscopic Orientational Control of Lipophilic One-Dimensional Pt-pop Complexes (Graduate School of Engineering, Kyushu Univ., IRCMS and JST CREST) KUWAHARA, Rempei; FUJINO, Keisuke; KUROIWA, Keita; KIMIZUKA, Nobuo
- 1A3-20 Metal Complexes as Soft Material (2) Solution Properties and Fabrication of Microfiber of A Novel Lipophilic Pt-pop Complex (Graduate School of Engineering, Kyushu Univ., IRCMS and JST CREST) TOCHIO, Keigo; KUWAHARA, Rempei; FUJIKAWA, Shigenori; KIMIZUKA, Nobuo

#### Saturday, March 26, PM

Chair: KITA, Yusuke (14:20~15:20)

- \* 14:10-14:20: interval for laptop PC connection.(1A3-33, 1A3-34, 1A3-35, 1A3-37)
- **1A3–33** Synthesis of Metal Complexes with Diimine Ligands Having Paracyclophane Moieties (Tokyo Inst. of Tech., Chem. Res. Lab.) TOJO, Yoshiaki; TAKEUCHI, Daisuke; OSAKADA, Kohtaro
- 1A3-34 Ni(I) Cyclam Complexes Having Thioether Pendants :Temperature Dependent Reversible Structural Conversion Between Tetra- and Penta-Coordination Structures (Graduate School of Science and Research Center for Materials Science, Nagoya Univ.) NISHIGAKI, Junichi; MATSUMOTO, Tsuyoshi; TATSUMI, Kazuyuki
- 1A3-35\* Aerobic Oxidations of Extra-Substrates Catalyzed by a p-Nitrothiophenolato Nickel(II) Complex (Kanagawa Univ) NAKAZAWA, Jun; HIKICHI, Shiro
- 1A3-37\* Excited state proton-coupled electron transfer of the Pd porphycene complex (Kyushu Univ.) OKAWARA, Toru; ABE, Masaaki; SHIMAKOSHI, Hisashi; HISAEDA, Yoshio

Chair: SATAKE, Akiharu (15:30 $\sim$ 16:30)

- \* 15:20-15:30: interval for laptop PC connection.(1A3-40, 1A3-42, 1A3-43, 1A3-44, 1A3-45)
- 1A3-40\* Synthesis and Electronic Communication of Tetraplatinum Clusters Having Ferrocencarboxylate Ligands (Graduate school of Engneering Science, Osaka Univ.) TANAKA, Shinji; TSURUGI, Hayato; MASHIMA, Kazushi
- 1A3-42<sup>#</sup> Syntheses and structure of novel coordination polymeric frames with porphyrin building blocks (Tohoku Univ.) FANG, Fang, TAKAISHI, Shinya; KATOH, Keiichi; MIYASAKA, Hitoshi; YAMASHITA, Masahiro
- 1A3-43 The Synthesis and Property of Ni Dithiolene Complexes, M[Ni(pdt)<sub>2</sub>] 2H<sub>2</sub>O(M = Na,K) (Tohoku Univ.) ISHIHARA, Nozomi; TAKAISHI, Shinya; KUBO, Kazuya; KATOH, Keiichi; MIYASAKA, Hitoshi; YAMASHITA, Masahiro
- **1A3-44** Creation of  $\pi$ -conjugated sheets consisting of triangular trinuclear

- metalladithiolene complex network (The Univ. of Tokyo) KAMBE, Tetsuya; SAKAMOTO, Ryota; NISHIHARA, Hiroshi
- 1A3-45 Palladium(II) complexes bearing a salicylaldiminato ligand with a hydroxyl group: synthesis, acid-base behaviour, and catalysis activity. (Kyoto Univ.; Kuraray Co.Ltd) MURATA, Yusuke; FUJIHARA, Tetsuaki; TERAO, Jun; TSUJI, Yasushi
  - Chair: KUWABARA, Junpei (16:40~17:40)
- \* 16:30-16:40: interval for laptop PC connection.(1A3-47, 1A3-48, 1A3-49, 1A3-50, 1A3-51, 1A3-52)
- 1A3-47 Synthesis and Formation of Stacking Structure of Helical Dinuclear Palladium Complexes Bearing a Biaryl Group (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) NAGUMO, Hiroki; AKINE, Shigehisa; NABESHIMA, Tatsuva
- **1A3–48** Annulated dinuclear palladium(II) phthalocyanine complex as an effective photo-oxidation catalyst for near-infrared region light (Shimane Univ.) IKEUE, Takahisa; SONODA, Makoto; KURAHASHI, Satoshi; TACHIBANA, Haruaki; TERAOKA, Daichi; SUGIMORI, Tamotu; KASUGA, Kuninobu; HANDA, Makoto
- 1A3-49 Preparation and Reactivity of Silsesquioxane Complexes Containining Late Transition Metals (Chem. Res. Lab., Tokyo Inst. of Tech.) MINTCHEVA, Neli; MUTOU, Kohji; TANABE, Makoto; OSAKADA, Kohtaro
- 1A3-50 Synthesis and Structural Characterization of Chiral Pd(II) Binuclear Complexes with Quinonediimine Derivatives. (Graduate School of Engineering, Osaka Univ.) OHMURA, Satoshi; MORIUCHI, Toshiyuki; HIRAO, Toshikazu
- 1A3-51 Synthesis and Properties of Group 10 Metal Complexes with New Tripodal Tetradentate Ligands, Tris(2-alkylthiomethylphenyl)phosphines. (Grad. Sch. Eng., Gunma Univ.) SAHARA, Shinji; TAKEDA, Nobuhiro; UNNO, Masafumi
- 1A3-52 Synthesis and Properties of Pt(II) Complexes of Pyridylthiophene Derivatives prepared from Pt(II) Hexafluoroacetylacetonato Complex as Starting Material and their Applications for OLEDs. (Fac. Sys. Eng., Wakayama Univ.) WAKISAKA, Kazuyuki; OSUGA, Hideji; SAKAMOTO, Hidefumi
  - Chair: AKINE, Shigehisa (17:50 $\sim$ 18:40)
- \* 17:40-17:50: interval for laptop PC connection.(1A3-54, 1A3-55, 1A3-56, 1A3-57, 1A3-58)
- 1A3-54<sup>#</sup> Synthesis and Electronic States of a NovelIodine-bridged Pt Complex with Long Alkyl Chains (Tohoku Univ.) SHIN, Minseob; TAKAISHI, Shinya; KATOH, Keiichi; MIYASAKA, Hitoshi; SAGAYAMA, Hajime; ARIMA, Takahisa; YAMASHITA, Masahiro
- 1A3-55 Synthesis and Emission Properties of trans-Bis(4-diethylaminosalicy-laldiminato)platinum(II) Complexes (Graduate School of Engineering Science, Osaka Univ.) OKADA, Minoru; KOMIYA, Naruyoshi; NAOTA, Takeshi
- **1A3-56** Synthesis, Structure and Luminescent Properties of Methylene Vaulted trans-Bis(o-phenoxyimino)platinum (II) Complexes (Osaka Univ., Graduate School of Engineering Science.) TANAKA, Yoko; KOMIYA, Naruyoshi; NAOTA, Takeshi
- **1A3–57** Structures and reactivities of iron(II) complexes ligated by  $\alpha$ -keto carboxylates (Univ. of Tsukuba; Ibaraki Univ.) NOGUCHI, Naoto; ISHIZUKA, Tomoya; FUJISAWA, Kiyoshi; KOJIMA, Takahiko
- 1A3-58 Synthesis and Reactivity of Iron Complexes Containing Pincer-type Bis(pyrazolyl)pyridine Ligand (Graduate School of Science and Engineering, Tokyo Institute of Technology) UMEHARA, Kazuki; YOSHINARI, Akihiro; KUWATA, Shigeki; IKARIYA, Takao

#### Sunday, March 27, AM

- Chair: YAMADA, Yusuke (9:00  $\sim$ 10:00)
- \* 8:50-9:00: interval for laptop PC connection.(2A3-01, 2A3-02, 2A3-03, 2A3-05, 2A3-06)
- 2A3-01 Trinuclear Platinum Complexes with Catalytic Activity of Water Splitting (Kyushu Univ.) KONNO, Yosuke; SAKAI, Ken
- **2A3-02** A study of Pt(II) coordinaiton polymers acted as water photoreduction catalyst (Kanagawa Univ.) MIYAZAKI, Yuhei; KATAOKA, Ysuke; MORI, Wasuke
- 2A3-03\* Photochemical Hydrogen Production by Ru(II)Pt(II) Complexes Based on Host Guest Interaction (Kyushu Univ.) HIRAHARA, Masanari; MASAOKA, Shigeyuki; SAKAI, Ken
- **2A3-05** Photochemical Hydrogen-Evolving Activity of Dinuclear Platinum(II)
  Complexes Bridged by Pyridinethiolate Ligands (Kyushu Univ.; JST PRESTO) OHNISHI, Yuichiro; MASAOKA, Shigeyuki; SAKAI, Ken
- 2A3-06 Single-Molecular Photo-Hydrogen-Evolving Activity of Pyridinethiolato-Bridged (terpyridine)platinum(II) Dimer (Kyushu Univ.; JST PRESTO) NAKAMURA, Yuki; KOBAYASHI, Masayuki; KONNO, Yosuke; MASAOKA, Shigeyuki; SAKAI, Ken
  - Chair: ARII, Hidekazu (10:10∼11:10)
- \* 10:00-10:10: interval for laptop PC connection.(2A3-08, 2A3-09, 2A3-10, 2A3-12)
- 2A3-08 Reduction of Organoiridium Complex by Aliphatic Alcohols and

- Hydrogen Evolution Controlled by pH in Water at Room Temperature (Graduate School of Engineering, Osaka Univ.) MAENAKA, Yuta; SUENOBU, Tomoyoshi; FUKUZUMI, Shunichi
- 2A3-09 pH-Selective Hydrogen Evolution from NADH and Hydrogenation of NAD<sup>+</sup> Catalyzed by an Organoiridium Complex in Water under an Atmospheric Pressure at Room Temperature (Graduate School of Engineering, Osaka Univ.) MAENAKA, Yuta; JUNG, Jieun; SUENOBU, Tomoyoshi; FUKUZUMI Shunichi
- 2A3-10\* Photo-Hydrogen-Evolving Activity of Chloro(terpyridine)platinum (II) Derivative: Insights into the Reaction Mechanism (Kyushu Univ.; JST PRESTO) KOBAYASHI, Masayuki; MASAOKA, Shigeyuki; SAKAI, Ken
- 2A3-12\* Controlling the Activity and Stability of Pt(II)-based Hydrogen Evolving Molecular Catalysts (Kyushu Univ.; JST PRESTO) YAMAUCHI, Kosei; MASAOKA, Shigeyuki; SAKAI, Ken

#### Sunday, March 27, PM

Chair: OHTSU, Hideki (12:50 $\sim$ 13:50)

- \* 12:40-12:50: interval for laptop PC connection.(2A3-24, 2A3-25, 2A3-26, 2A3-27, 2A3-28, 2A3-29)
- 2A3-24 Development of Ru(II)Pt(II)-based Photo-Hydrogen-Evolving Devices Constructed with a Macrocyclic Viologen Dimer. (Kyushu Univ.; JST PRESTO) SHIBAHARA, Yu; MASAOKA, Shigeyuki; SAKAI, Ken
- 2A3-25 Charge Storage over Ru(bpy)<sup>3</sup><sub>2+</sub> Derivatives Covalently Linked to Multi-viologen Tethered with Peptide Backbones and Their Application to Photoinduced Hydrogen Evolution (Kyushu Univ.; JST PRESTO) KITAMOTO, Kyoji; MASAOKA, Shigeyuki; SAKAI, Ken
- 2A3-26 Photochemical Hydrogen-Evolving Activities of Dinuclear Rhodium (II) Complexes Having Electron Acceptor Moieties (Kyushu Univ.) TANAKA, Saya; MASAOKA, Shigeyuki; HANAN, Garry; SAKAI, Ken
- 2A3-27 Photocatalytic Water Oxidation with Bismuth Vanadate and a Ruthenium Complex as Photocatalysts under Visible Light Irradiation (Graduate School of Engineering, Osaka Univ.) KATO, Satoshi; SUENOBU, Tomoyoshi; FUKUZUMI, Shunichi
- 2A3-28 Mechanism of Water Oxidation Catalyzed by Single-Site Ruthenium Complexes Bearing Heteropolytungstate (Grad. Sch. Eng., Osaka Univ.; Grad. Sch. Life Sci., Univ. of Hyogo) MURAKAMI, Masato; HONG, Dachao; SUENOBU, Tomoyoshi; YAMAGUCHI, Satoru; OGURA, Takashi; FUKUZUMI, Shunichi
- 2A3-29 Kinetics and DFT MO studies on the Oxygen Evolution from Water Catalyzed by Mononuclear Aquaruthenium Complexes (Kyushu Univ.; JST PRESTO) KIMOTO, Ayano; YAMAUCHI, Kosei; YOSHIDA, Masaki; MASAOKA, Shigeyuki; SAKAI, Ken

Chair: KODERA, Masahito (14:00∼15:00)

- \* 13:50-14:00: interval for laptop PC connection.(2A3-31, 2A3-32, 2A3-33, 2A3-34)
- 2A3-31 Hydrogen-Evolving Activity and Stability of Platinum(II)complexes of Thioethers. (Kyushu Univ.; JST PRESTO) SHINTO, Tomohiro; YAMAUCHI, Kosei; MASAOKA, Shigeyuki; SAKAI, Ken
- 2A3-32 Study of photodriven hydrogen evolution utilizing Ru-Co supramolecular complexes (CST, Nihon Univ.) YAMADA, Tomoko; OTSUKI, Joe
- 2A3-33 Reaction conditions of hydrogen production with self-assembled iridium-cobalt systems (CST,Nihon Univ.) HIRUMA, Tamami; YAMADA, Tomoko; SUZUKI, Akira; OTSUKI, Joe
- 2A3-34 Young Scholar Lectures of CSJ Water Splitting Catalyzed by Metal Complexes (Fac. Sci., Kyushu Univ.) MASAOKA, Shigeyuki

Chair: OTSUKI, Joe (15:10 $\sim$ 16:10)

- \* 15:00-15:10: interval for laptop PC connection.(2A3-38, 2A3-40, 2A3-41, 2A3-43)
- 2A3-38\* Mechanism of Water Oxidation Reaction on the Surface of d-MnO<sub>2</sub> Nanoparticle: In situ Electrical and Optical Study of Intermediate Species (The Univ. of Tokyo; JST/ERATO) TAKASHIMA, Toshihiro; NAKAMURA, Ryuhei; HASHIMOTO, Kazuhito
- 2A3-40 CO<sub>2</sub> reduction by ruthenium complexes containing NAD<sup>+</sup>/NADH moieties. (Institute for Molecular Science) KOBAYASHI, Katsuaki; OHTSU, Hideki; FUKUSHIMA, Takashi; TANAKA, Koji
- 2A3-41\* Photocatalytic CO<sub>2</sub> Reduction to Formic Acid using Ru(II) Supramolecular Complexes (Tokyo Tech., Science and Engineering) TAMAKI, Yusuke; KOIKE, Kazuhide; ISHITANI, Osamu
- 2A3-43 Highly efficient photocatalytic CO<sub>2</sub> reduction using ring-shapedtetranuclear Rhenium(I) complexes as photosensitizer (Tokyo Tech.) TANAKA, Marina; MORIMOTO, Tatsuki; KOIKE, Kazuhide; ISHITANI, Osamu

Chair: MORIMOTO, Tatsuki (16:20 $\sim$ 17:20)

- \* 16:10-16:20: interval for laptop PC connection.(2A3-45, 2A3-46, 2A3-48, 2A3-49, 2A3-50)
- 2A3-45 Stereo-electronic effect on the O2-evolution: synthesis, crystal structures, and O2-evolution by water oxidation of sterically hindered mononuclear ruthenium complexes. (Doshisha Univ.) IRIE, Hiroaki; HITOMI, Yutaka; FUNABIKI, Takuzo; KODERA, Masahito
- 2A3-46\* Studies on the Mechanism and the Reactivity Control of Mononuclear Aquaruthenium Complexes Active towards Oxygen Evolution from Water (Kyushu Univ.; JST PRESTO) YOSHIDA, Masaki; MASAOKA,

Shigeyuki; SAKAI, Ken

- 2A3-48 Oxygen-evolving Activity of Mononuclear Aquaruthenium Catalysts Having Proton Dissociative Sites for the Activity Control (Kyushu Univ.; JST PRESTO) OKAMURA, Masaya; YOSHIDA, Masaki; MASAOKA, Shigevuki: SAKAI. Ken
- 2A3-49 Controlling the Surface Arrangement of Mononuclear Ruthenium Catalysts Active Towards Electrocatalytic Oxygen Evolution from Water (Kyushu Univ.; JST PRESTO) KIYOTA, Josaku; MASAOKA, Shigeyuki; SAKAI, Ken
- 2A3-50 Mechanism of Catalytic Water Oxidation by Iridium Complexes (Graduate School of Engineering, Osaka Univ.) HONG, Dachao; MURAKAMI, Masato; YAMADA, Yusuke; FUKUZUMI, Shunichi

#### Monday, March 28, AM

Chair: FUKUDA, Takamitsu (9:00 ∼10:00)

- \* 8:50-9:00: interval for laptop PC connection.(3A3-01, 3A3-02, 3A3-03, 3A3-04, 3A3-05, 3A3-06)
- **3A3-01** Dielectric response of quasi-one-dimensional halogen-bridged metal complexes (Tohoku Univ.) KUMAGAI, Shohei; TAKAISHI, Shinya; MIYASAKA, Hitoshi; YAMASHITA, Masahiro; ABE, Nobuyuki; ARIMA, Takahisa
- 3A3-02\* The single-chain magnets assembled by the salen-type manganese single-molecule magnet units and the bridged ligands with nucleobase moieties (Tohoku Univ.) ZHANG, Weixiong; SHIGA, Takuya; MIYASAKA, Hitoshi; YAMASHITA, Masahiro
- 3A3-03 Magnetoresistance of conductive single molecule magnets (Tohoku univ.) KATOH, Keiichi; KUBO, Kazuya; TAKAISHI, Shinya; MIYASAKA, Hitoshi; YAMASHITA, Masahiro
- 3A3-04 Correlation of magnetic anisotropy between Tb and Er ions in the isostructual Ln(III)-Cu(II) di-nuclear complexes. (Nara Women's Univ.) YOSHIMURA, Yohko; YAMASHITA, Aika; KAJIWARA, Takashi; NAKANO, Motohiro; YAMAMURA, Tomoo
- 3A3-05 Syntheses structures and SMM behaviors of linear Zn(II)-Ln(III)-Zn (II) complexes (Nara Women's Univ.; Osaka Univ.; IMR, Tohoku Univ.) MIYAZAKI, Rie; YAMASHITA, Kei; WATANABE, Akiko; KAJIWARA, Takashi; NAKANO, Motohiro; YAMAMURA, Tomoo
- **3A3-06** Single-Molecule-Magnet behaviors and quantification of magnetic anisotropy of linear Zn(II)-Ln(III)-Zn(II) trinuclear complexes (Nara Women's Univ.; Osaka Univ.; IMR, Tohoku Univ.) YAMASHITA, Kei; MIYAZAKI, Rie; WATANABE, Akiko; KAJIWARA, Takashi; NAKANO, Motohiro; YAMAMURA, Tomoo

Chair: SATO, Osamu (10:10 $\sim$ 11:10)

- \* 10:00-10:10: interval for laptop PC connection.(3A3-08, 3A3-09, 3A3-10, 3A3-11, 3A3-13)
- 3A3-08 Proton conductivity on Prussian blue analogues (School of Science, The Univ. of Tokyo) NAKAGAWA, Kosuke; TSUNOBUCHI, Yoshihide; IMOTO, Kenta; TOMONO, Keisuke; TOKORO, Hiroko; OHKOSHI, Shinichi
- 3A3-09 Vanadium-octacyanoniobate with a high Curie Temperature (School of Schience, The Univ. of Tokyo) IMOTO, Kenta; OHKOSHI, Shin-ichi
- 3A3-10 Humidity-induced magnetism of a 3-D Cobalt octacyanoniobate bimetallic assembly (School of Science, The Univ. of Tokyo) TAKAHASHI, Daisuke; IMOTO, Kenta; KOSAKA, Wataru; ARAI, Michio; TSUNOBUCHI, Yoshihide; TOKORO, Hiroko; OHKOSHI, Shinichi
- 3A3-11\* A cyanide-bridged chain complex which exhibits charge transfer phase transition (Univ. of Tsukuba) HOSHINO, Norihisa; YOSHIDA, Norifumi; SHIGA, Takuya; NIHEI, Masayuki; OSHIO, Hiroki
- 3A3-13 Spin-crossover behavior of Fe<sup>II</sup>-Au<sup>I</sup> Hofmann-like coordination polymer system containing pyridine-derivative ligand (Toho Univ.) TOMORI, Itaru; AKAHOSHI, Daisuke; SAITO, Toshiaki; KITAZAWA, Takafumi

Chair: HAYAMI, Shinya (11:20 $\sim$ 12:20)

- \* 11:10-11:20: interval for laptop PC connection.(3A3-15, 3A3-16, 3A3-18, 3A3-19)
- **3A3-15** Synthesis and Magnetic Properties of Protonated and Deprotonated Forms in Double-decker Terbium Tetraphenylporphyrin complex (Osaka Univ., Graduate School of Science) INOSE, Tomoko; TANAKA, Daisuke; TANAKA, Hirohumi; ISHIKAWA, Naoto; OGAWA, Takuji
- 3A3-16\*† Chiral three-dimensional structures and spin crossover of iron(II) complexes with bidentate ligand containing imidazole and chiral moiety (Univ. of Kumamoto) HASHIBE, Tomotaka; FURUSHO, Daisuke; FUZINAMI, Takeshi; MATSUMOTO, Naohide
- 3A3-18 Spin-crossover Transition Temperature of Iron(II) Complexes Tunable by Ligand and Counter Ion Sizes (The Univ. of Electro-Communications) HIROSAWA, Naoki; ISHIDA, Takayuki
- 3A3-19\*\*\*The geometry in spin-crossover molecules beyond single mode approximation (Institute for Materials Chemistry and Engineering and International Research Center for Molecular Systems, Kyushu Univ.) JUHASZ, Gergely; SHIOTA, Yoshihito; YOSHIZAWA, Kazunari

#### Monday, March 28, PM

Chair: TOKORO, Hiroko (13:30~14:30)

- \* 13:20-13:30: interval for laptop PC connection.(3A3-28, 3A3-29, 3A3-30, 3A3-31, 3A3-32, 3A3-33)
- **3A3-28**<sup>†</sup> Effects of guest molecules and interactive sites on the spin state of Hofmann-type Fe(II)M(II) (M = Pt, Pd, Ni) porous coordination polymers (Kyushu Univ.) YONEDA, Ko; OHTANI, Ryo; GASPAR, Ana B.; REAL, Jose A.; KITAGAWA, Susumu; OHBA, Masaaki
- 3A3-29 The structure of Fe(II) SCO complex with hydrogen-bond network and its hysteresis behavior (Faculty of Science and Technology, Kinki Univ., R.I. for Science and Technology, Kinki Univ.,Japan Synchrotron Radiation Research Institute) KIMURA, Kana; MASUDA, Takayuki; OKUBO, Takashi; MAEKAWA, Masahiko; SUGIMOTO, Kunihisa; KURODASOWA, Takayoshi
- **3A3-30** Correlation between the spin state and host-guest interaction in an iodine clathrate of porous coordination polymer {Fe(pz)[Pd(CN)<sub>4</sub>]} (Kyoto Univ.) OHTANI, Ryo; YONEDA, Ko; OHBA, Masaaki; GASPAR, Ana B.; REAL, Jose A.; KITAGAWA, Susumu
- 3A3-31 Magnetic and luminescence behavior of a porous coordination polymer confining fluorescent molecule (Kyoto Univ.) ARAI, Masashi; OHTANI, Ryo; OHBA, Masaaki; YONEDA, Ko; KITAGAWA, Susumu
- 3A3-32 Preparation and Properties of Valence Tautomeric Cobalt Dimer-Complex Aiming at multi-function (Interdisciplinary Graduate School of Engineering Sciences, Kyushu Univ.) NOBUKUNI, Akihiko; KANEGAWA, Shinji; SATOU, Osamu
- **3A3-33** Change in Magnetization of High-Spin Co(II) Complexes due to Quenching of Orbital Angular Momentum. (Interdisciplinary Graduate School of Engineering Sciences, Kyushu Univ.) NISHIOKA, Junichi; KANEGAWA, Shinji; NAKANO, Motohiro; SATO, Osamu

Chair: OHBA, Masaaki (14:40~15:40)

- \* 14:30-14:40: interval for laptop PC connection.(3A3-35, 3A3-36, 3A3-37, 3A3-38, 3A3-39, 3A3-40)
- **3A3-35** Photo-Switching Properties for Iron(III) Complexes (Kumammoto Univ.) SHIMIZU, Tetsuya; HAYAMI, Shinya
- 3A3-36 The spin transition behavior of Cobalt(II) complexes based on cooperative effect (Kumamoto Univ.) KOMATSU, Yasuka; HAYAMI, Shinya
- 3A3-37 Studies on the spin states of cyanide-bridged decanuclear cobalt-iron cage complexes (Univ. of Tsukuba) TETSUKA, Tamaki; SHIGA, Takuya; SEKINE, Yoshihiro; NEWTON, Graham Neil; NIHEI, Masayuki; OSHIO, Hiroki
- 3A3-38 Spin-transition behavior in a FeCo tetra-nuclear complex. (Univ. of Tsukuba) SEKINE, Yoshihiro; NIHEI, Masayuki; NAKAO, Akiko; MURAKAMI, Youichi; OSHIO, Hiroki
- 3A3-39 Synthesis , Structures and Magnetic Properties of Transition Metal Complexs containing Methoxy-Substituted Phenyl Nitronyl Nitroxide as Ligand (Graduate School of Science , Hiroshima Univ.) KITAO, Hiroki; AKITA, Motoko; NISHIHARA, Sadafumi; INOUE, Katsuya
- **3A3-40** Giant Hyperfine Magnetic Field of Linear Two-Coordinated Fe Complexes (RIKEN) KOBAYASHI, Yoshio; ITO, Mikinao; MATSUO, Tsukasa; ISHII, Yasuyuki; WATANABE, Isao; TAMAO, Kohei

Chair: SHIGA, Takuya (15:50~16:50)

- \* 15:40-15:50: interval for laptop PC connection.(3A3-42, 3A3-43, 3A3-44, 3A3-45, 3A3-46)
- 3A3-42 Hydrothermal Synthesis, Structures and Physical Properties of Cobalt Complexes with Amino acids (Graduate School of Science, Hiroshima Univ.) NOMI, Kotaro; AKITA, Motoko; NISHIHARA, Sadafumi; INOUE, Katsuya
- 3A3-43 Crystal structure and physical properties of Li<sub>2</sub>([18]crown-6)<sub>3</sub>[Ni (dmit)<sub>2</sub>]<sub>2</sub>(H<sub>2</sub>O)<sub>4</sub> salt having an ion channel (Graduate School of Science, Hiroshima Univ.) KONNO, Daisuke; NISHIHARA, Sadafumi; AKITA, Motoko; INOUE, Katsuya; AKUTAGAWA, Tomoyuki; NAKAMURA, Takayoshi
- 3A3-44<sup>†</sup> Magnetic properties of cobalt(III) complexes possessing sulfurcoordination tripod ligands (Osaka Univ.) BABA, Haruyuki; NAKANO, Motihiro
- 3A3-45 Synthesis of Novel Magnetic Ionic-liquids (Kagawa Univ.) TAKAGI, Yumiko; YAMASHITA, Yuki; KUSUNOKI, Yoriko; MIYAGAWA, Hayato
- 3A3-46\* Slow Dynamics of the magnetization on the two-dimensional network based on single-molecule magnet (Toho Univ.) KACHI-TERAJIMA, Chihiro; NAKAMURA, Kenta; AKAHOSHI, Daisuke; SAITO, Toshiaki; KITAZAWA, Takafumi; MIYASAKA, Hitoshi

Chair: MIYASAKA, Hitoshi (17:00 $\sim$ 17:20)

- \* 16:50-17:00: interval for laptop PC connection.(3A3-49, 3A3-50)
- 3A3-49 Proton Conduction and Magnetism of Ru(III)/Ln(III) Assembly Compounds Ln[Ru(ox)<sub>3</sub>]10H<sub>2</sub>O (Ln = La, Ce) (Grad. Sch. Sci., Kyoto Univ.; Fac. Sci., Kyushu Univ.; JST-CREST) OKAWA, Hisashi; SHIGEMATSU, Akihito; SADAKIYO, Masaaki; YAMADA, Teppei; MAESATO, Mitsuhiko; OHBA, Masaaki; KITAGAWA, Hiroshi

**3A3-50** Ferromagnetic oxovanadium(IV) complexes chelated with tetrahalosalen ligands (The The Univ. of Electro-Communications) FUJIWARA, Kei; ISHIDA, Takayuki

#### Tuesday, March 29, AM

Chair: ABE, Masaaki (9:00 ∼10:00)

- \* 8:50-9:00: interval for laptop PC connection.(4A3-01, 4A3-02, 4A3-03, 4A3-05, 4A3-06)
- 4A3-01\* Inclusion of C60 and Porphyrin in a coordination network with 3 nm sized-pore (School of Engineering, The Univ. of Tokyo; CREST) MAHATA, Partha; INOKUMA, Yasuhide; FUJITA, Makoto
- 4A3-02 Bimolecular reactions within crystalline molecular flasks: Successive addition of two different substrates (School of Engineering, The Univ. of Tokyo) KOJIMA, Nodoka; INOKUMA, Yasuhide; FUJITA, Makoto
- 4A3-03\* Enclosure of a Keggin-type heteropolyoxometalate into a tubular p-space of a nonplanar Mo(V)-porphyrin complex via hydrogen bonds (Univ. of Tsukuba) YOKOYAMA, Atsutoshi; KOJIMA, Takahiko; FUKUZUMI, Shunichi
- 4A3-05 Synthesis of Coordination Cages Bearing Anthracene Rings (Chemical Resources Laboratory, Tokyo Institute of Technology) SAKONJI, Mitsuhiro; KISHI, Norifumi; YOSHIZAWA, Michito; AKITA, Munetaka
- 4A3-06 Molecular Recognition Ability of Coordination Capsules Bearing Anthracene Rings (Chemical Resources Laboratory, Tokyo Institute of Technology; Bruker AXS K. K.) KISHI, Norifumi; YOZA, Kenji; YOSHIZAWA, Michito; AKITA, Munetaka

Chair: KOJIMA, Takahiko (10:10∼11:10)

- \* 10:00-10:10: interval for laptop PC connection.(4A3-08, 4A3-10, 4A3-12)
- 4A3-08\*† Syntheses and Intercluster Interaction of Triruthenium Cluster-based Loop-like Structures (Kyushu Univ.) INATOMI, Atsushi; ABE, Masaaki; SHIMAKOSHI, Hisashi; HISAEDA, Yoshio
- 4A3-10\* Synthesis and Proton Conductivity of Metal-Organic Frameworks-Consisting of Phosphonate Groups (Graduate School of Science, Kyoto Univ., JST-CREST) YAMADA, Teppei; KITAGAWA, Hiroshi
- 4A3-12\* Crystal Structures and Charge-Carrier Transport Properties of 3D Mixed-Valence Coordination Polymers with Dithiocarbamate Derivatives (Kinki Univ.; PRESTO; Osaka Univ.) OKUBO, Takashi; TANAKA, Naoya; KIM, Kyung Ho; INUZUKA, Yoshie; SEKI, Shu; SAEKI, Akinori; MAEKAWA, Masahiko; KURODA-SOWA, Takayoshi

Chair: SAKAMOTO, Ryota (11:20 $\sim$ 12:20)

- \* 11:10-11:20: interval for laptop PC connection.(4A3-15, 4A3-16, 4A3-18, 4A3-20)
- 4A3-15 RDC structural analysis of an oligopeptide within a magnetically oriented host (School of Engineering, The Univ. of Tokyo; CREST) MOROHARA, Osamu; FUJITA, Daishi; SATO, Sota; YMAGUCHI, Yoshiki; KATO, Koichi; FUJITA, Makoto
- 4A3-16\* Site-Selective Recognition of Guest Molecules in a Single-Crystalline Nano-Channel with Five Enantiopairs of Molecule Binding Pockets (Grad. School of Science, The Univ. of Tokyo) KUBOTA, Ryou; TASHIRO, Shohei; SHIONOYA, Mitsuhiko
- 4A3-18\*† Synthesis of Cage-Shaped Boron Complexes Bearing a Recognition Site for Aromatic Compounds and Their Application for a Catalytic Reaction (Osaka Univ.) NAKAJIMA, Hideto; YASUDA, Makoto; BABA, Akio
- 4A3-20 Diels-Alder reactions in a porous network complex harnessing guest recognition (School of Engineering, The Univ. of Tokyo; CREST) IKEMOTO, Koki; INOKUMA, Yasuhide; FUJITA, Makoto

#### Tuesday, March 29, PM

Chair: KUME, Shoko (13:30~14:30)

- \* 13:20-13:30: interval for laptop PC connection.(4A3-28, 4A3-29, 4A3-30, 4A3-31, 4A3-32, 4A3-33)
- 4A3-28 One-Dimensional Clustering of Stacked Aromatic Coordination Complexes via Side Chain Modification (School of Engineering, The Univ. of Tokyo; CREST) TAKEUCHI, Ryosuke; MOROHARA, Osamu; SATO, Sota; FUJITA, Makoto
- **4A3-29** Protein immobilization mediated by Ti-binding peptide-coated  $M_{12}L_{24}$  coordination sphere (School of Engineering, The Univ. of Tokyo; Cancer institute, JFCR; CREST) IKEMI, Masatoshi; KIKUCHI, Takashi; MINAMISAWA, Tamiko; MATSUMURA, Sachiko; SHIBA, Kiyotaka; SATO. Sota; FUJITA, Makoto
- 4A3-30 Effects of Metal Ions and Counteranions on the Nano-Spaces formed in Cyclic Metal Complexes with Artificial β- Peptide (Ochanomizu Univ.; The Univ. of Tokyo; Rigaku Co.Ltd; Nagoya Univ.) MIYAKE, Ryosuke; TASHIRO, Shohei; SHIRO, Motoo; TANAKA, Kentaro; SHIONOYA, Mitsuhiko
- **4A3-31** Formation of Metal-Bridged Assemblies Comprising Linearly Arranged Dimers of  $\pi$ -Conjugated Acyclic Ligands (Institute of Science and Engineering, Ritsumeikan Univ.; PRESTO, JST) MAEDA, Hiromitsu; NISHIMURA, Yuki
- **4A3-32** Formation of Metal-Bridged Assemblies Based on  $\pi$ -Conjugated Acyclic Ligands Arranged in Acute Angle (Institute of Science and

- Engineering, Ritsumeikan Univ.; PRESTO, JST) MAEDA, Hiromitsu; AKUTA. Rvo
- 4A3-33 Synthesis of novel coordination polymer consist of alkali metal sulfonate (Nagoya univ.) NOBUTA, Kazuya; MORIYA, Makoto; SAKAMOTO, Wataru: YOGO, Toshinobu

Chair: SATO, Sota (14:40~15:50)

- \* 14:30-14:40: interval for laptop PC connection.(4A3-35, 4A3-36, 4A3-37, 4A3-38, 4A3-39, 4A3-40, 4A3-41)
- 4A3-35 Synthesis of Novel Zinc Cluster Complexes with C<sub>3</sub> Symmetric Trisaloph Ligand (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) IIDA, Masaya; YAMAMURA, Masaki; NABESHIMA, Tatsuya
- **4A3-36** Encapsulation of a Ruthenium(II)-terpyridine Site inside a Cryptand, and the Further Construction (Nagoya Institute of Technology) AOKI Masahiro; FUKUI, Masato; NAGATA, Kojiro; WASADA-TSUTSUI, Yuko; INOMATA, Tomohiko; OZAWA, Tomohiro; FUNAHASHI, Yasuhiro; MASUDA, Hideki
- 4A3-37 Synthesis and Guest Recognition of Trinuclear Metallohosts Having Cryptand-type Tris(saloph) Ligand (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) PIAO, Shunjin; AKINE, Shigehisa; NABESHIMA, Tatsuya
- 4A3-38 Synthesis of porphyrin/phthalocyanine supramolecular arrays via rotaxane formation (Nagoya Univ., Research Center for Materials Science; Nagoya Univ., Graduate School of Science, Department of Chemistry; CREST, JST) YAMADA, Yasuyuki; TANAKA, Kentaro
- 4A3-39 Synthesis and properties of group 9 metal cyclic trinuclear complexes using triphenylenehexathiol (The Univ. of Tokyo) TSUKADA, Satoru; SAKAMOTO, Ryota; NISHIHARA, Hiroshi
- 4A3-40 Guest selectivity of an oxalate-bridged coordination polymer having hydrogen-bonding sites (Kyoto Univ.; JST-CREST) SADAKIYO, Masaaki; YAMADA, Teppei; OKAWA, Hisashi; KITAGAWA, Hiroshi
- **4A3-41** Suppressed Isomerization of Dinuclear Ruthenium Complexes within a M6L4 Hollow Cage (Grad. School of Engineering, The Univ. of Tokyo; CREST) HORIUCHI, Shinnosuke; MURASE, Takashi; FUJITA, Makoto

## Room A4

Bldg. 7 7-31

### Inorganic Chemistry Saturday, March 26, PM

#### Polyoxometalate

Chair: UEHARA, Kazuhiro (14:30∼15:40)

- \* 14:20-14:30: interval for laptop PC connection.(1A4-34, 1A4-36, 1A4-37, 1A4-38, 1A4-39, 1A4-40)
- 1A4-34\* Protonation sites of vanadotellurate anion (Kwansei Gakuin Univ.; Univ. of Hyogo; Nagoya Univ.) OZAWA, Yoshiki; KONAKA, Saki; SHONAKA, Takahiro; YAGASAKI, Atsushi; WATANABE, Shinta
- 1A4-36<sup>†</sup> Synthesis of isopolytantalate in organic solvent (Kwansei Gakuin Univ.; Univ. of Hyogo) OZAWA, Yoshiki; MATSUMOTO, Miki; YAGASAKI, Atsushi
- 1A4-37 Synthesis of a novel hybrid compound of a polyoxometalate and a metal cluster (Tokyo Institute of Technology) OHASHI, Kenji; OZEKI, Tomoji
- 1A4-38<sup>†</sup> Crystal structures of decavanadate anions at various degrees of protonation obtained by controlled additions of base (Tokyo Institute of Technology) OZEKI, Tomoji; KOJIMA, Tatsuhiro
- 1A4-39 Electrical conductivity and structure stability of tri-lacunary Keggin, α-A Na<sub>3</sub>[H<sub>6</sub>PMo<sub>9</sub>O<sub>34</sub>]13H<sub>2</sub>O. (Dept. of Applied Chemistry, College of Engineering, Chubu Univ.) HAYASHI, Yuji; ISHIKAWA, Eri; IMAEDA, Kenichi; SAKURAI, Makoto; WATANABE, Makoto
- 1A4-40 Electrical conductivity of ε-[PMo<sub>12</sub>O<sub>36</sub>(OH)<sub>4</sub>{La(H<sub>2</sub>O)<sub>4</sub>}<sub>4</sub>]Br<sub>5</sub>16H<sub>2</sub>O (Dept. of Applied Chemistry, College of Engineering, Chubu Univ.) ISHIKAWA, Eri; KATO, Masaya; IMAEDA, Kenichi; WATANABE, Makoto

Chair: ISHIKAWA, Eri (15:50∼17:00)

- \* 15:40-15:50: interval for laptop PC connection.(1A4-42, 1A4-44, 1A4-45, 1A4-46, 1A4-47, 1A4-48)
- 1A4-42\* Synthesis and Catalitic Property of Novel Sandwich-Type Silicotungstates with a Hexaprismane Core [{Zn<sub>2</sub>W(O)O<sub>3</sub>}<sub>2</sub>]<sup>4+</sup> (Univ. of Tokyo) KIKUKAWA, Yuji; YAMAGUCHI, Kazuya; MIZUNO, Noritaka
- 1A4-44 Enantioselective synthesis of sandwich-type polyoxometallolanthanoates containing two mono-lacunary Keggin units (Chemical Resources Laboratory, Tokyo Institute of Technology) IIJIMA, Jun; NARUKE, Haruo
- **1A4–45** Fabrication of rare-earth decatungstate  $[Ln(W_5O_{18})_2]^n$ -thin films and their structural and optical properties (Chemical Resources Laboratory, Tokyo Institute of Technology) FUJITA, Yusuke; NARUKE, Haruo
- 1A4-46 Syntheses of polyoxomolybdate-surfactant hybrid layered crystal with long periodicity (School of Science, Tokai Univ.; Rigaku Corporation;

- Chemical Resources Lab., Tokyo Tech.) ITO, Takeru; MIKURUBE, Keisuke: HASEGAWA, Kimiko: NARUKE, Haruo
- 1A4-47 Zeotype Organic-Inorganic Ionic Crystal with Size-Selective Sorption Property (School of Engineering, Univ. of Tokyo) EGUCHI, Ryo; UCHIDA, Savaka: MIZUNO, Noritaka
- 1A4-48 Control of Sorption Properties by Cation-Exchange in Zeotype Organic-Inorganic Ionic Crystals (School of Engineering, Univ. of Tokyo) UCHIDA, Sayaka; EGUCHI, Ryo; MIZUNO, Noritaka

Chair: NARUKE, Haruo (17:10~18:10)

- \* 17:00-17:10: interval for laptop PC connection.(1A4-50, 1A4-52, 1A4-53, 1A4-54, 1A4-55)
- **1A4–50\*** Heterolytic Dissociation of Water on ( $\mu$ -Oxo)divanadium Substituted Polyoxometalate (The Univ. of Tokyo; Japan Science and Technology Agency) UEHARA, Kazuhiro; MIZUNO, Noritaka
- 1A4-52 Application of Electrophoresis Toward the Fine Separation of Polyoxometalate Aqueous Solution (Univ. of Yamaguchi) YOSHIDA, Mamoru; CRONIN, Leroy; TSUNASHIMA, Ryo; ISHIGURO, Katuya

#### Structure and Property

- 1A4-53 Synthesis and Characterization of perovskite compound BaSbO<sub>3</sub> prepared by electrochemical method (Hiroshima Univ. Graduate School of Eng.) YAMAMOTO, Takeshi; INUMARU, Kei
- 1A4-54 Single phase synthesis of cubic MnN by pulsed laser deposition. (Hiroshima Univ. Graduate School of Eng.) TAKATA, Tomohiro; INUMARU, Kei
- 1A4-55 Synthesis of Al-Mg-N ternary compounds by high pressure-high temperature method and sputtering method (Hiroshima Univ. Graduate School of Engineering) HAMADA, Etsuo; INUMARU, Kei

#### Sunday, March 27, AM

#### Radiochemistry

Chair: SAKAI, Yoichi  $(9:00\sim10:00)$ 

- \* 8:50-9:00: interval for laptop PC connection.(2A4-01, 2A4-02, 2A4-03, 2A4-04, 2A4-05, 2A4-06)
- **2A4-01** On-line isothermal gas chromatography of oxychlorides of Db (Z=105) and homologues Nb and Ta (JAEA: Advanced Sci. Res. Center) SATO, Tetsuya; ASAI, Masato; TSUKADA, Kazuaki; TOYOSHIMA, Atsushi; SATO, Nozomi; LI, Zijie; KIKUCHI, Takahiro; KANEYA, Yuusuke: NAGAME, Yuichiro: SCHAEDEL, Mattias
- 2A4-02 Production and Decay Properties of Rutherfordium Isotopes Produced via <sup>248</sup>Cm + <sup>18</sup>O Nuclear Reaction (Niigata Univ.; RIKEN; Osaka Univ.) MURAKAMI, Masashi; GOTO, Shin-ichi; MURAYAMA, Hirofumi; KAJI, Daiya; MORIMOTO, Kouji; HABA, Hiromitsu; KASAMATSU, Yoshitaka; KUDOU, Yuki; YONEDA, Akira; MORITA, Kosuke; KUDO, Hisaaki
- 2A4-03 Studies on isothermal chromatographic behavior of Zr and Hf chlorides for the gas phase chemistry of Rf (Center for Instr. Anal., Niigata Univ.; Graduate School of Sci.and Tech., Niigata Univ.; Fucl. of Sci., Niigata Univ.; Advanced Sci. Res. Center, JAEA) GOTO, Shin-ichi; MURAYAMA, Hirohumi; KOJIMA, Takayuki; MURAKAMI, Masashi; KUDO, Hisaaki; TSUKADA, Kazuaki; ASAI, Masato; SATO, Tetsuya; TOYOSHIMA, Atsushi; SATO, Nozomi; NAGAME, Yuichiro
- 2A4-04 Iron nitrides having rock-salt and zincblende structures synthesized by laser deposition (Tokyo Univ. of Science, RIKEN) USUI, Ryo; YAMADA, Yasuhiro; KOBAYASHI, Yoshio
- 2A4-05 Orientation of hyperfine magnetic fields of iron filmes produced by laser deposition in Ar atmosphere. (Tokyo Univ. of Science) YASUIKE, Mamoru; USUI, Ryo; YAMADA, Yasuhiro; KOBAYASHI, Yoshio
- 2A4-06 Chemical states of <sup>57</sup>Fe arising from <sup>57</sup>Mn implantation in MgO (RIKEN; ICU; Tokyo Univ. Sci.; Osaka Univ.; Kanazawa Univ.; Nihon Univ.; NIRS) NAGATOMO, Takashi; KOBAYASHI, Yoshio; KUBO, Kenya; YAMADA, Yasuhiro; MIHARA, Mototsugu; SATO, Wataru; MIYAZAKI, Jun; SATO, Shinji; KITAGAWA, Atsushi

Chair: ITO, Takeru (10:10~11:10)

- \* 10:00-10:10: interval for laptop PC connection.(2A4-08, 2A4-09, 2A4-11, 2A4-12. 2A4-13)
- **2A4-08** Temperature-dependent <sup>57</sup>Fe-Mossbauer Spectra of a Mixed-valence Trinuclear Iron Pentafuluoro-benzoate Complex (Daido Univ.: Toho Univ.: Toray Research Center; Kobe Univ.) SAKAI, Yoichi; ONAKA, Satoru; TAKAYAMA, Tsutomu; OGISO, Ryo; TAKAHASHI, Masashi; NAKAMOTO, Tadahiro; MOCHIDA, Tomoyuki

#### Structure and Property

- **2A4-09\*** High-Pressure Synthesis of A-Site-Ordered Perovskites (Inst. Chem. Res., Kyoto Univ.) SAITO, Takashi; TOHYAMA, Takenori; WOODWARD, Patrick M.; SHIMAKAWA, Yuichi
- **2A4-11** Preparation of rare-earth 1,3,5-benzenetriphosphonates (Tokyo Univ. of Agriculture and Technology) ARAKI, Takahiro; MAEDA, Kazuyuki; KONDO, Atsushi

- **2A4-12** Luminescence properties of near-infrared to visible up-conversion phosphors prepared by polynuclear lanthanide clusters as precursors (Chemical Resources Laboratory, Tokyo Institute of Technology) HAYASHI, Shunji; NARUKE, Haruo
- 2A4-13 The Effect of Al<sub>2</sub>O<sub>3</sub> Addition to Amorphous Li<sub>3</sub>PS<sub>4</sub> on Its Lithium-ion Conducting Properties (Fac. of Sci. and Eng., Konan Univ.) OBATA, Chiaki; MACHIDA, Nobuya; NAITO, Muneyuki; SHIGEMATSU, Toshihiko; KONDO, Shigeo

Chair: MAEDA, Kazuyuki (11:20~12:20)

- \* 11:10-11:20: interval for laptop PC connection.(2A4-15, 2A4-16, 2A4-17, 2A4-18, 2A4-19, 2A4-20)
- 2A4-15 Electrolysis of Water with BCN Electrode (Yonago Natl. Coll. Tech.) SUMI, Erika; AOKI, Kaoru; ODA, Kohei
- 2A4-16 Conversion reaction of CoMoO<sub>4</sub>:3/4H<sub>2</sub>O under hydrothermal conditions (Graduate School of Sciences, Kobe Univ.) EDA, Kazuo; NISHIDA, Takamasa; OHSHIRO, Yu; SUGITANI, Takamitsu

#### Layered Compound

- 2A4-17 Fabrication and characterization of hollow layered double hydroxide via carbon nanosphere template (Iwate Univ.) SUGA, Daisuke; AISAWA, Sumio; TAKAHASHI, Satoshi; HIRAHARA, Hidetoshi; NARITA, Eiichi
- 2A4-18 Preparation and fluorescent property of Zn-Al layered double hydroxide thin films intercalated with sulforhodamine B (Osaka prefecture Univ.) SUEZAWA, Ryoya; TADANAGA, Kyoharu; TATSUMISAGO, Masahiro
- 2A4-19# Topochemical synthesis of Co-Fe LDHs at varied Fe/Co ratios (International Center for Materials Nanoarchitectonics, National Institute for Materials Science) MA, Renzhi; LIANG, Jianbo; TAKADA, Kazunori; SASAKI, Takavoshi
- 2A4-20 Synthesis of brookite from K<sub>0.8</sub>Ti<sub>1.73</sub>Li<sub>0.27</sub>O<sub>4</sub>: An alkali-metal ion extracted layered compound as a precursor for metastable phase synthesis (International Center for Materials Nanoarchitectonics, NIMS) OZAWA. Tadashi C.; SASAKI, Takayoshi

#### Sunday, March 27, PM

#### Layered Compound

Chair: MOCHIZUKI, Dai (13:20∼14:20)

- \* 13:10-13:20: interval for laptop PC connection.(2A4-27, 2A4-28, 2A4-30,
- $2A4-31,\ 2A4-32)$   $\textbf{2A4-27}^{\dagger}\ \text{Construction of perovskite type niobate nanosheets } (Ca_2Na_{n-3}Nb_nO_{3n}$ 1) films by use of Langmuir-Blodgett procedure (International Center for Materials Nanoarchitectonics, NIMS) AKATSUKA, Kosho; EBINA, Yasuo; OSADA, Minoru; SASAKI, Takayoshi
- **2A4-28**\*† Fabrication of LDH nanosheet/dendrimer composite multilayer film through layer-by-layer method (Okayama Univ.) TANAKA, Toshiyuki; NISHIMOTO, Shunsuke; KAMESHIMA, Yoshikazu; TAKAGUCHI, Yutaka; MIYAKE, Michihiro
- 2A4-30 Synthesis of perovskite niobate nanosheets, Ca2Nan-3NbnO3n <sub>+1</sub> (MANA, NIMS) EBINA, Yasuo; AKATSUKA, Kosho; FUKUDA, Katsutoshi; SASAKI, Takayoshi
- 2A4-31 Synthesis of tungstate nanosheets with 2D bronze structure (Shinshu Univ. NanoFIC) FUKUDA, Katsutoshi; SATO, Jun; SUGIMOTO, Wataru; KIMURA, Mutsumi; EBINA, Yasuo; SASAKI, Takayoshi
- 2A4-32 Laver-by-Laver Construction of Well-ordered Titania Nanosheet Multilayer Films through Dip Coating of Its Organic Solvent Dispersion (ISHIHARA SANGYO KAISHA, Ltd.; National Institute for Materials Science) UESUSUKI, Yusuke; IIDA, Masaki; EBINA, Yasuo; SASAKI, Takayoshi

Chair: EBINA, Yasuo (14:30~15:30)

- \* 14:20-14:30: interval for laptop PC connection.(2A4-34, 2A4-35, 2A4-36, 2A4-38, 2A4-39)
- **2A4-34** Synthesis of sandwich layered nanostructures using thiol-ene reaction of organic-modified metal oxides (School of Engineering, Tokyo Institute of Technology) KUMAGAI, Kozue: MOCHIZUKI, Dai: MAITANI, Masato: WADA, Yuii
- **2A4-35** Photophysical properties of dye molecules in layered silica-organic nanostructures under high pressure (School of Engineering, Tokyo Institute of Technology) MOCHIZUKI, Dai; TAMURA, Shinichi; MAITANI, Masato; WADA, Yuii
- 2A4-36\* Intercalation of Magnesium into Graphite-like Layered Material of Composition BC<sub>2</sub>N (Osaka Electro-Communication Univ...) KAWAGUCHI, Masayuki; YAMADA, Kaoru; KURASAKI, Akihiro
- 2A4-38 Preparation and properties of pillared layered titanate (Univ. of Hyogo) MAEDA, Katsuya; MATSUO, Yoshiaki
- 2A4-39 Preparation and adsorption properties of pillared layered silicate (Univ. of Hyogo) YAMAUCHI, Yusuke; MATSUO, Yoshiaki

Chair: INAGUMA, Yoshiyuki (15:40∼16:40)

\* 15:30-15:40: interval for laptop PC connection.(2A4-41, 2A4-43, 2A4-44, 2A4-45, 2A4-46)

**2A4-41\*** Low-temperature reduction and oxidation in AMO<sub>3</sub> (B=Fe, Co, Ni) perovskite oxide thin films (Inst. for Chem. Res. Kyoto Univ.) ICHIKAWA, Noriya; KAWAI, Masanori; INOUE, Satoru; SHIMAKAWA, Yuichi

#### solid state chemistry

- 2A4-43 Structural and Morphological Variations of Layered Octosilicate by Hydrothermal Treatment (Faculty of Science and Engineering, Waseda Univ.; Kagami Memorial Institute for Materials Science and Technology, Waseda Univ.) ARAI, Takako; OSADA, Shimon; TAKAHASHI, Nobuyuki; KURODA, Kazuyuki
- **2A4–44** Preparation of GTS-type Titanosilicates Ion-exchanged by Co<sup>2+</sup> and Their Dehydration Behavior (Yamaguchi Univ.) FUJIWARA, Keiko; TAMAKI, Tatsuya; SUGIMOTO, Hirokazu; NAKATSUKA, Akihiko; NAKAYAMA, Noriaki
- 2A4-45 Synthesis of Iron Phosphates by Solvothermal method (Ichinoseki National College of Technology; Tohoku Univ.; Tokyo Institute of Technology; Tohoku Fukushi Univ.) YOSHIDA, Kazuki
- 2A4-46 High-pressure synthesis and structures of new sodium germanides (Hiroshima Univ.) FUKUOKA, Hiroshi; SAITO, Daisuke; TOMOMITSU, Yusuke; INUMARU, Kei

Chair: FUKUOKA, Hiroshi (16:50∼18:00)

- \* 16:40-16:50: interval for laptop PC connection.(2A4-48, 2A4-50, 2A4-51, 2A4-52, 2A4-53, 2A4-54)
- 2A4-48\* High-pressure synthesis, structure, and physical properties of polar oxides with LiNbO<sub>3</sub>-type structure (Gakushuin Univ.; Tokai Univ.) INAGUMA, Yoshiyuki; AIMI, Akihisa; TANAKA, Kie; SAKURAI, Daichi; MORI, Daisuke; KATSUMATA, Tetsuhiro
- **2A4-50** Preparation of Ti-containing octosilicate (Waseda Univ.; Department of Earth Sciences) MORITA, Masashi; OGAWA, Makoto
- 2A4-51<sup>†</sup> Synthesis and characterization of uniform-sized nanoporous titaniasilica hybrid spherical particles (Waseda Univ.; Graduate School of Creative Science and Engineering) SHIBA, Kota; OGAWA, Makoto
- 2A4-52 Adsorption of 2-phenylphenol on layered octosilicate with octadecyl and phenyl groups (Waseda Univ.; Graduate School of Creative Science and Engineering) IWASAKI, Shota; OGAWA, Makoto; IDE, Yusuke
- 2A4-53 Structural Phase Transition and Microstructures of Li<sub>2</sub>CoSiO<sub>4</sub> (Yamaguchi Univ.; Univ. Tokyo) NAKAYAMA, Noriaki; ITOYAMA, Takanobu; SUEMOTO, Kentaro; FUJIWARA, Keiko; NAKATSUKA, Akihiko; UEDA, Yutaka
- 2A4-54 Dispersion of metal on graphene materials produced from graphite oxide compounds (Okayama Univ.; Industrial Tech. Center of Okayama Pref.) GOTOH, Kazuma; HASHIMOTO, Hideki; NISHINA, Yuta; FUJII, Eiji; KAWAI, Ryo; TAHARA, Yuki; OHKUBO, Takahiro; ISHIDA, Hiroyuki

## Natural Products Chemistry

### Monday, March 28, AM

#### Amino Acids, Peptides

Chair: KAWAKAMI, Toru (9:00  $\sim$ 9:50)

- \* 8:50-9:00: interval for laptop PC connection.(3A4-01, 3A4-02, 3A4-03, 3A4-04, 3A4-05)
- **3A4-01**\* Characterization of natural Nod1 ligands from bacterial culture supernatant for elucidation of immune system activation on the environment (Osaka Univ.) PRADIPTA, Ambara Rachmat; HASEGAWA, Mizuho; INOHARA, Naohiro; FUJIMOTO, Yukari; FUKASE, Koichi
- **3A4-02** Synthetic study on labeled ligands of intracellular innate immune receptor Nod 1 (Graduate school of science, Osaka Univ.) ITO, Yoko; SHIMOYAMA, Atsushi; KAWASAKI, Akiko; FUJIMOTO, Yukari; FUKASE, Koichi
- 3A4-03 Synthesis of immunoadjuvant complex containing peptidoglycan partial structures (Grad. Sch. of Sci., Osaka Univ.) KAJIKI, Yasunori; KATSUMOTO, Mami; SEYA, Tsukasa; FUJIMOTO, Yukari; FUKASE, Koichi
- 3A4-04 Synthesis of α-Aminosquaric acid-containing Peptide Library (Graduate School of Sci., Osaka City Univ.) KINIWA, Yuuichi; SHINADA, Tetsuro; OHFUNE, Yasufumi
- **3A4-05** Exploration of The Venom Component of a Solitary Bee. (Graduate School of Sci., Osaka City Univ.) KAWAKAMI, Hiroko; SHINADA, Tetsuro; OHFUNE, Yasufumi; SHIGA, Sakiko; GOTO, Shinsuke

Chair: FUJIMOTO, Yukari (10:00 $\sim$ 11:00)

- \* 9:50-10:00: interval for laptop PC connection.(3A4-07, 3A4-08, 3A4-09, 3A4-10, 3A4-11)
- 3A4-07 Stereoselective Synthesis of E- α, β-dehydroamino Acid Ester: Effect of Additive on Stereoselectivity (Graduate School of Sci., Osaka City Univ.) YASUNO, Yoko; YAMADA, Takeshi; SHINADA, Tetsuro; OHFUNE, Yasufumi
- 3A4-08 Synthesis and Neuro Biological Activity of Kaitocephalin Analogs (Graduate School of Sci., Osaka City Univ.) OCHI, Saori; SHINADA, Tetsuro; OFUNE, Yasufumi; SHIMAMOTO, Keiko

- **3A4-09** Synthetic studies of Antimycin A Derivatives on Solid Support (Department of Applied Chemistry, Graduate School of Science and Engineering, Tokyo Institute of Technology) IIJIMA, Yusuke; KIMATA, Osamu; TAKAHASHI, Takashi
- **3A4-10**<sup>†</sup> Synthetic study of mannopeptimycin aglycon (Tokyo Institute of Technology) KOINUMA, Hirotsugu; KINBARA, Atsushi; FUSE, Shinichirou; TAKAHASHI, Takashi; DOI, Takayuki
- 3A4-11\* Isolation of membrane related peptides and proteins using a redox linker (Inst. for Protein Research, Osaka Univ.) HARA, Toshiaki; YAJIMA, Nao; EUIS, Maras Purwati; AIMOTO, Saburo

Chair: SHINADA, Tetsuro (11:10~12:10)

- \* 11:00-11:10: interval for laptop PC connection.(3A4-14, 3A4-15, 3A4-16, 3A4-18)
- 3A4-14 Preparation of peptide thioesters by a modified Cys-Pro ester (CPE) autoactivating unit (Osaka Univ; IPR) KAMAUCHI, Akitaka; KAWAKAMI, Toru; AIMOTO, Saburo
- 3A4-15 Formation of a thioester in liposome by using the Cys-Pro Ester (CPE) autoactivating unit (Osaka Univ.) KARIYAZONO, Hirokazu; KAWAKAMI, Toru; AIMOTO, Saburo
- 3A4-16\*† Structure-Function Analysis of Polytheonamide B (Graduate School of Pharmaceutical Science, The Univ. of Tokyo) SHINOHARA, Naoki; ITOH, Hiroaki; MATSUOKA, Shigeru; INOUE, Masayuki
- 3A4-18\* Determination of Active Conformation of the Side Chain of Antillatoxin (The Univ. of Tokyo) OKURA, Ken; MATSUOKA, Shigeru; INOUE, Masavuki

#### Monday, March 28, PM

Chair: FUKUZAWA, Seketsu (13:20~14:10)

- \* 13:10-13:20: interval for laptop PC connection.(3A4-27, 3A4-28, 3A4-29, 3A4-30, 3A4-31)
- **3A4-27** Asymmetric synthesis of amino acids (Graduate School of Nanobioscience, Yokohama City Univ.) SUZUKI, Yuki; OIKAWA, Masato
- **3A4-28** Total synthesis of dysibetaine CPa (Graduate School of Nanobioscience, Yokohama City Univ.) SASAKI, Shota; SAKAI, Michihiro; SAKAI, Ryuichi; OIKAWA, Masato
- 3A4-29 Synthetic study on Miuraenamide A, an antimicrobial cyclic depsipeptide (Faculty of Science and Technology, Keio Univ.) TOKUZUMI, Keita; TORIIHARA, Eisuke; ITO, Kayoko; TERUYA, Toshiaki; SUENAGA, Kiyotake
- 3A4-30 Isolation and structure determination of the bioactive compound from marine cyanobacteria (Faculty of Science and Technology, Keio Univ.) KAJIYAMA, Yuji; SUENAGA, Kiyotake; OHNO, Osamu; TERUYA, Toshiaki
- 3A4-31 Synthetic study on bisebromoamide and its analogue, novel acyclic peptides (Faculty of Science and Technology, Keio Univ.) WATANABE, Atsushi; TODOROKI, Seiji; TERUYA, Toshiaki; OHNO, Osamu; SUENAGA, Kiyotake

Chair: OHNO, Osamu (14:20∼15:10)

- \* 14:10-14:20: interval for laptop PC connection.(3A4-33, 3A4-34, 3A4-35, 3A4-36, 3A4-37)
- 3A4-33 Synthetics Study of ChymostatinA (Kochi Univ) KUSABA, Shohei; HASEGAWA, Tomoyuki; NAKANO, Keiji; ICHIKAWA, Yoshiyasu
- 3A4-34 Characterization of the Chemical Structure of Basic Poly(amino acid)s Biosynthesized by Streptomyces Strains, and Their Antimicrobial Activity (The Univ. of Shiga Prefecture) MURO, Shogo; OONISHI, Naoki; INABA, Haruka; TAKEHARA, Munenori; KUMAGAI, Tsutomu
- 3A4-35 Synthetic Study of Crosslinking Amino Acids of Elastin by Sonogashira Coupling (Graduate School of Science and Engineering, Sophia Univ.) YAMADA, Haruka; LIN, Yong Y.; USUKI, Toyonobu
- **3A4–36**\* The Utility of N–Methoxy–glycine that Enable Specific Modification of N–Terminal of Synthetic Peptides (IPR, Osaka Univ.) PURWATI, EUIS MARAS; TAINOSHO, Akira; AIMOTO, Saburo; HARA, Toshiaki
- **3A4-37** Studies on chemical synthesis of hydrophobic peptides (Tokai Univ.) TANO, Chiharu; KATAYAMA, Hidekazu; HOJO, Hironobu

Chair: NAKANO, Keiji (15:20∼16:00)

- \* 15:10-15:20: interval for laptop PC connection.(3A4-39, 3A4-40, 3A4-41, 3A4-42)
- 3A4-39 Synthesis of amino acid conjugates of epi-jasmonic acid (Department of Biomolecular Engineering; Tokyo Institute of Technology) OGAWA, Narihito; KOBAYASHI, Yuichi
- 3A4-40 Search for calyculin A binding protein from the marine sponge Discodermia calyx (Univ. of Tokyo; School of science) MIYAKE, Haruko; FUKUZAWA, Seketsu; TACHIBANA, Kazuo
- 3A4-41<sup>#</sup> Synthesis of Anticancer Antimycin A<sub>3</sub> Analogues (Graduate School of Materials Science, Nara Institute of Science and Technology (NAIST))
  ARSIANTI, Ade; TANIMOTO, Hiroki; MORIMOTO, Tsumoru;
  KAKIUCHI, Kiyomi
- 3A4-42 Development of the Practical Synthesis of 2'-Deoxymugineic Acid (Hokkaido Univ.; Suntory Institute for Bioorganic Research; Tokushima Bunri Univ.) KOBAYASHI, Kaori; NAMBA, Kosuke; TANINO, Keiji; MURATA, Yoshiko; KUSUMOTO, Shoichi; NISHIZAWA, Mugio

#### Steroids, Terpenes

Chair: FUSE, Shinichiro (16:10~17:00)

- \* 16:00-16:10: interval for laptop PC connection.(3A4-44, 3A4-45, 3A4-46, 3A4-47, 3A4-48)
- 3A4-44 Synthetic study on Vinigrol (Hokkaido Univ.) KANO, Kunihiro; UMEZAWA, Taiki; MATSUDA, Fuyuhiko
- **3A4-45** Synthetic Studies on Tubiferal A (Hokkaido Univ.) HIRAMATSU, Takahiro; TAKAHASHI, Motomasa; TANINO, Keiji
- **3A4-46** Synthesis of DEFGH-ring Moiety of Physalins and Evaluation of Its Biological Activity (ASI, RIKEN) MORITA, Masaki; HIRAI, Go; TSUCHIYA, Ayako; TAMURA, Satoru; ONUMA, Kana; SODEOKA, Mikiko
- **3A4-47** Development of Cascade Michael Reaction and Synthetic Studies on Bruceantin (Dept. of Chem. and BioChem., Adv. Sch. of Sci. and Engin., Waseda univ.) FUJII, Tomohiro; NIWA, Takashi; NAKADA, Masahisa
- 3A4-48 Synthetic Study of Ouabain (Graduate School of Pharmaceutical Sciences, The Univ. of Tokyo) KASUYA, Satoshi; URABE, Daisuke; INOUE, Masayuki

Chair: TACHI, Yoshimitsu (17:10~18:10)

- \* 17:00-17:10: interval for laptop PC connection.(3A4-50, 3A4-51, 3A4-52, 3A4-54, 3A4-55)
- 3A4-50 Construction of AB ring of pyripyropene A by way of Ti-catalyzed radical cyclization (Tokyo institute of technology) FUSE, Shinichiro; IKEBE, Ayako: KARASAWA, Tomoya: TAKAHASHI, Takashi
- **3A4-51** Synthetic study of pyripyropene A (Department of Applied Chemistry, Graduate School of Science and Engineering, Tokyo Institute of Technology) FUSE, Shinichiro; OOSUMI, Kazuya; IKEBE, Ayako; KARASAWA, Tomoya; TAKAHASHI, Takashi
- 3A4-52\* Construction of the ABC ring system of taxanes based on the stereoselective one-pot three-component coupling reaction. (Department of Applied Chemistry, Graduate School of Science and Engineering, Tokyo Institute of Technology) FUSE, Shinichiro; SERIZAWA, Takayuki; MIYAMOTO, Shigeru; DOI, Takayuki; TAKAHASHI, Takashi
- 3A4-54 Synthesis of Estradiol from Benzene as Carbon Sources. (Waseda Univ.) NAGANO, Yu; NIIZEKI, Kazuma; SHIMIZU, Yusuke; TAKAHASHI, Shuhei; ENZU, Masaki; SHIMIZU, Isao
- 3A4-55 Synthesis of ent-estradiol. (Waseda Univ.) KOBAYASHI, Shun; YAMADA, Yohko; OKAMOTO, Mayumi; SHIMIZU, Isao

#### Tuesday, March 29, AM

#### Steroids, Terpenes

Chair: MINAMI, Atsushi (9:00  $\sim$ 9:50)

- \* 8:50-9:00: interval for laptop PC connection.(4A4-01, 4A4-02, 4A4-03, 4A4-04, 4A4-05)
- **4A4-01** Withdrawn
- **4A4-02** Study on Substrate Specificity of Farnesyl Diphosphate Synthase by Using Substrate Analogs Containing the Hydroxyl Group (Fac. Sci., Yamagata Univ.) YOKOTA, Saki; ISHIGURO, Terumi; NAGAKI, Masahiko; SAGAMI, Hiroshi; OHYA, Norimasa
- 4A4-03 Synthetic study of carnosic acid based on enzyme-mediated remote control of the stereochemistry in chiral acetal (Faculty of Pharmacy, Keio Univ.) MACHIDA, Takuya; UEMURA, Koichi; HIGASHI, Toshinori; SHOJI, Mitsuru: SUGAI, Takeshi
- 4A4-04 Identification and structure elucidation of strigolactones from dokudami. (Weed Science Center, Utsunomiya Univ.) KISUGI, Takaya; XIE, Xiaonan; AZEGAMI, Nanako; NOMURA, Takahito; YONEYAMA, Koichi
- 4A4-05<sup>#</sup> Isolation and Cytotoxicity of Ursolic Acid Derivatives from Bangladeshi Medicinal Plants, Surauja roxburghii (Osaka Univ.) MAZUMDER, Kishor; SIWU, Eric R. O.; TANAKA, Katsunori; FUKASE, Koichi

Chair: HAYAKAWA, Ichiro (10:00 $\sim$ 11:00)

- \* 9:50-10:00: interval for laptop PC connection.(4A4-07, 4A4-08, 4A4-09, 4A4-11, 4A4-12)
- 4A4-07 Total Synthesis and Determination of the Absolute Configuration of (-)-Neroplofurol Based on the Biomimetic Cyclization (Graduate School of Sci., Osaka City Univ.) AOKI, Shingo; KODAMA, Takeshi; TACHI, Yoshimitsu; MORIMOTO, Yoshiki
- 4A4-08 A Model of Cyclization Reactions of Biogenetic Precursor Model Polyepoxides (Graduate School of Sci., Osaka City Univ.) HOSHINO, Akihiro; TAKEUCHI, Eriko; MORINO, Miyako; TACHI, Yoshimitsu; MORIMOTO, Yoshiki
- 4A4-09\* An elucidation of the energy transfer ability of marine carotenoids in photosynthesis based on organic synthesis (Kwansei Gakuin Univ.) KAJIKAWA, Takayuki; OKUMURA, Satoshi; HASEGAWA, Shinji; IWASHITA, Takashi; FRANK, H.A.; HASHIMOTO, Hideki; KATSUMURA, Shigeo
- 4A4-11 Stereoselective total synthesis of fucoxanthin and its derivatives (Kwansei Gakuin Univ.) KAJIKAWA, Takayuki; OKUMURA, Satoshi; IWASHITA, Takashi; HASHIMOTO, Hideki; KATSUMURA, Shigeo

**4A4-12** Synthesis of ylidenbutenolide shifted-peridinin derivative (Kwansei Gakuin Univ.) HANANOKI, Shohei; HASEGAWA, Shinji; KAJIKAWA, Takayuki; KATSUMURA, Shigeo

Chair: TANAKA, Katsunori (11:10 $\sim$ 12:10)

- \* 11:00-11:10: interval for laptop PC connection.(4A4-14, 4A4-16, 4A4-17, 4A4-18)
- **4A4-14\*** First Enantioselective Total Synthesis of (+)-Ophiobolin A (Dept. of Chem. and BioChem., Adv. Sch. of Sci. and Engin., Waseda Univ.) TSUNA, Kazuhiro; NOGUCHI, Naoyoshi; NAKADA, Masahisa
- 4A4-16 Stereoselective synthesis of acyclic terpenes by means of a repetitive unit-linkage reaction (Graduate School of Sci., Osaka City Univ.) MANABE, Atsushi; KAIHARA, Kanako; SHINADA, Tetsuro; OHFUNE, Yasufumi
- 4A4-17 Efficient Synthesis of the Carotenoids Based on the Development of a New Horner-Wadsworth-Emmons Reagent (OCARINA, Osaka City Univ.) YAMADA, Takeshi; OKADA, Keiji; SHINADA, Tetsuro; OHFUNE, Yasufumi; HASHIMOTO, Hideki
- 4A4-18\* Synthetic study on 13-oxyingenol (Univ. of Tsukuba) OHYOSHI, Takayuki; MIYAZAWA, Yamato; FUNAKUBO, Shota; HAYAKAWA, Ichiro; KIGOSHI, Hideo

Chair: SHINADA, Tetsuro (12:20 $\sim$ 13:00)

- \* 12:10-12:20: interval for laptop PC connection.(4A4-21, 4A4-23, 4A4-24)
- 4A4-21\* Design, synthesis and evaluation of mode3 selective 14-3-3 modulator. (Institute of Scientific and Industrial Research, Osaka Univ.) HIGUCHI, Yusuke; HARANOSONO, Yu; BENJAMIN, Schumacher; ANDERS, Caroline; OTTAMNN, Christian; NITTA, Hajime; OHKANDA, Junko; KATO, Nobuo
- 4A4-23 Synthetic study for the structure elucidation of an endogenous sperm activating and attracting factor isolated from eggs of the ascidian Ascidia sydneiensis. (Osaka Univ.) SHIBATA, Hajime; TSUCHIKAWA, Hiroshi; MATSUMORI, Nobuaki; MURATA, Michio; OISHI, Tohru; YOSHIDA, Manabu; MORISAWA, Masaaki
- 4A4-24 Synthetic Study of Limonin (Graduate School of Science, Tohoku Univ.) NARUKO, Akito; NAKAZAWA, Yuki; YAMASHITA, Shuji; HIRAMA, Masahiro

### Room A5

Bldg. 7 7-32

#### Coordination Chemistry, Organometallic Chemistry

#### Saturday, March 26, AM

Chair: NAKAJIMA, Takayuki (9:00 $\sim$ 10:00)

- \* 8:50-9:00: interval for laptop PC connection.(1A5-01, 1A5-02, 1A5-03, 1A5-04, 1A5-05, 1A5-06)
- 1A5-01 Linkage of the Cobalt(III) Complexes with a Hexadentate Sulfur-Containing Amino Acid by Copper(I) Ions (Graduate School of Science, Osaka Univ.) HARAGUCHI, Shoko; YOSHINARI, Nobuto; IGASHIRA, Asako; TSUGE, Kiyoshi; KONNO, Takumi
- 1A5-02 Selective Metal-substitution Reactions of Heterotrimetallic Coordination Polymers in Single Crystals. (Graduate School of Science, Osaka Univ.) YOSHINARI, Nobuto; TAGUCHI, Mai; IGASIRA, Asako; KONNO, Takumi
- 1A5-03 Analysis of Formation Behavior of Transition Metal-Organic Network Structures Supported by Tripodal Ligands Bearing Triethylbenzene Core (Osaka City Univ.) KAWAI, Masahiro; MORIMOTO, Yoshiki; TACHI, Yoshimitsu
- **1A5-04** Metal Ion Complexing Behavior of Alkane Derivatives Bearing Hydrazone Moieties at Both Ends (Wakayama Univ.) MOTOIKE, Hirotsugu; OSUGA, Hideji; KIMURA, Keiichi; SAKAMOTO, Hidefumi
- 1A5-05 Mechanistic Studies on the C-H Bond Activation by Copper-Dioxygen Complexes Using TPA-based Ligands (Kyoto Univ.) TAKI, Masayasu; MIZUKAWA, Tomoaki; SAKAI, Naoko; YAMAMOTO, Yukio
- 1A5-06 Synthesis and properties of transition metal complexes with organic amine (Hiroshima Univ.) HAN, Jing; FUNAMORI, Hirokazu; INOUE, Katsuya; NISHIHARA, Sadafumi

Chair: TACHI, Yoshimitsu (10:10~11:10)

- \* 10:00-10:10: interval for laptop PC connection.(1A5-08, 1A5-09, 1A5-11, 1A5-12, 1A5-13)
- 1A5-08 Influence of aromatic thiolato Ligand in the formation of silver and cobalt mixed complex (1) (Kochi Univ.) YAKURA, Teruyoshi; ISHIGAYASUMI, Masaki; MATSUMOTO, Kenji; OZAWA, Tomohiro; YONEMURA, Toshiaki
- 1A5-09\*† Synthesis and Heterometallic Reactions of Cyclic Group 11 Metal Complexes Derived from Benzothiazolines (Graduate School of Science, Osaka Univ.) TAKINO, Yusuke; IGASHIRA, Asako; KAWAMOTO,

Tatsuya; KONNO, Takumi

- 1A5-11 Syntheses and characterizations of hexameric silver(I) complexes bridged by pyrazoles having halogen substituents (Ibaraki Univ.) MORISHIMA, Yui; FUJISAWA, Kiyoshi
- 1A5-12 Synthesis of Tetranuclear Gold(I) Complexes with Linear Tetraphosphine Ligands of Racemic Dpmppm. (Nara Women's Univ.) NISHIDA, Tomoko: KURE, Bunsho: NAKAJIMA, Takayuki: TANASE, Tomoki.
- 1A5-13 Synthesis and dynamically controlled assembled phases of ionic benzenedithiolato Au complexes with long alkyl chains (Hokkaido Univ., Faculty of Science) SAKAMOTO, Misaki; MATSUMOTO, Takeshi; YANAGIDA, Mayu; HONDA, Hirotaka; KOBAYASHI, Atsushi; CHANG, Ho-chol; KATO, Masako

Chair: CHANG, Hochol (11:20~12:20)

- \* 11:10-11:20: interval for laptop PC connection.(1A5–15, 1A5–16, 1A5–18, 1A5–19, 1A5–20)
- **1A5-15** Synthesis and Property of a Silver Complex Having a Pendant Aromatic Ring (Doshisha Univ.) NAGAI, Toshiyuki; IWASAKI, Yuki; HITOMI, Yutaka; FUNABIKI, Takuzo; KODERA, Masahito
- 1A5-16\* Structure building of Au clusters in use of weak Au-Au interaction and their optical properties (Hokkaido Univ. Environmental; CREST) SHICHIBU, Yukatsu; KAMEI, Yutarou; KONISHI, Katsuaki
- 1A5-18 Synthesis and functions of subnanometer-sized Au clusters with cluster-to-cluster transformations (Faculty of Environmental Earth Science, Hokkaido Univ. and JST CREST) KAMEI, Yuutarou; SHICHIBU, Yukatsu; KONISHI, Katsuaki
- 1A5-19 Synthesis of metal complex capsule with hydroxyl group and the coloration property (Shizuoka Univ.; Center for Instrumental Analysis) HANDA, Ayako; KONDO, Mitsuru
- **1A5-20** Redox Behaviors of Porphyrin Complexes with Amide Group in the Framework (Shizuoka Univ.; Center for Instrumental Analysis) INOUE, Erina; YAMANISHI, Katsunori; KONDO, Mitsuru

#### Saturday, March 26, PM

Chair: KONDO, Mitsuru (14:20~15:20)

- \* 14:10-14:20: interval for laptop PC connection.(1A5-33, 1A5-34, 1A5-35, 1A5-37, 1A5-38)
- **1A5–33** Structural and Physicochemical Properties of Copper(I) Complexes Supported by Thioether-loading Ligands (Kyoto Univ.) YOSHIDA, Hiroshi; IYOSHI, Shohei; TAKI, Masayasu; YAMAMOTO, Yukio
- 1A5-34 A novel metal-organic gel using N-acetylaspartic acid-DABCO-Cu (NO3)2 system. (Kansai Univ.) YOSHIMURA, Takuya; TANAKA, Koichi
- 1A5-35\* Dynamic Intramolecular Electron Transfer Controlled by Rotation of Coordinated Pyrimidine on Copper(I) (The Univ. of Tokyo) KUME, Shoko; NISHIHARA, Hiroshi
- **1A5–37** Roles of the electron donor site on O2-activation in D  $\beta$  M: Synthesis of a O<sub>2</sub>-reactive Cu(I) complex attached by an electron donor Cu(I) complex and the intramolecular C-H hydroxylation (Doshihsa Univ.) KODERA, Masahito; KISHIMA, Yoshihisa; HITOMI, Yutaka; FUNABIKI, Takuzo
- 1A5-38 Efficient radical-controlled phenol polymerization catalyzed by octanuclear copper(II) complexes with phOH<sup>4-X</sup>-dpmOH ligands (Doshihsa Univ.) KODERA, Masahito; NAKAGAWA, Tomoyuki; HITOMI, Yutaka; FUNABIKI, Takuzo

Chair: KAWAMOTO, Tatsuya (15:30 $\sim$ 16:30)

- \* 15:20-15:30: interval for laptop PC connection.(1A5-40, 1A5-41, 1A5-42, 1A5-43, 1A5-44, 1A5-45)
- 1A5-40 Photo- and thermal-transformations of halogen-bridged dinuclear copper(I) complexes and their luminescence properties (Hokkaido Univ., Faculty of Science) KOMATSU, Kahori; KOBAYASHI, Atsushi; CHANG, Ho-chol; KATO, Masako
- 1A5-41 Ligand Effects on Chemical Properties of Mononuclear Copper(II)-Alkylperoxo Complex (Osaka Univ.; Univ. of Hyogo) TANO, Tetsuro; YAMAGUCHI, Satoru; OGURA, Takashi; SUGIMOTO, Hideki; FUJIEDA, Nobutaka: ITOH. Shinobu
- 1A5-42 H-Atom Abstraction Mechanism by Mononuclear Copper(II)-Alkylperoxo Complexes (Osaka Univ.) TANO, Tetsuro; OHKUBO, Kei; SUGIMOTO, Hideki; FUJIEDA, Nobutaka; FUKUZUMI, Shunichi; ITOH. Shinobu
- 1A5-43 Synthesis of metal-pyrene phosphonate and Characterization of fluorescence behavior (Tokyo Univercity of Agriculture and Technology) KURODA, Tomova: MAEDA, Kazuvuki; KONDO, Atsushi
- 1A5-44 Coordination Behavior of a Trigold(I) Complex Containing Triphosphine and D-Penicillaminate toward Cobalt(II) Ion (Graduate School of Science, Osaka Univ.) MATSUSHITA, Natsuko; YOSHINARI, Nobuto; IGASHIRA, Asako; TSUKUDA, Toshiaki; TSUGE, Kiyoshi; KONNO, Takumi
- 1A5-45 Synthesis and Metalloring-Expansion Reaction of a Cyclic Au<sup>1</sup><sub>2</sub>Co<sup>III</sup><sub>2</sub> Tetranuclear Complex with N-Methyl-D-penicillaminate (Graduate School of Science, Osaka Univ.) OJI, Katsuya; YOSHINARI, Nobuto; IGASHIRA, Asako; TSUKUDA, Toshiaki; KONNO, Takumi

Chair: FUJIEDA, Nobutaka (16:40~17:40)

\* 16:30-16:40: interval for laptop PC connection.(1A5-47, 1A5-49, 1A5-51,

1A5-52)

- 1A5-47\* Synthesis and reduction properties of a dinuclear iridium complex with alloxazine as a bridging ligand (Grad. Sch. Eng., Osaka Univ.; Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba; Ewha Womans Univ.) INUI, Yuji; KOJIMA. Takahiko: FUKUZUMI. Shunichi
- 1A5-49\* Synthesis of heterobimetallic Complexes by Condensation Reaction of Amino and Formyl Groups Bound to Mononuclear Complexes (Osaka Univ.; Graduate School of Engineering Science) NAKAO, Keisuke; TSURUGI, Havato: MASHIMA. Kazushi
- 1A5-51 Preparation of NO selective Co(III) complex and its modified electrode (NAGOYA INSTITUTE OF TECHNOLOGY,GRADUATE SCHOOL OF ENGINEERING) TSURUDOME, Daisuke; INOMATA, Tomohiko; FUNAHASHI, Yasuhiro; OZAWA, Tomohiro; MASUDA, Hideki
- 1A5-52 Synthesis of a Half-cubane Type Multinuclear Cobalt Complex with a New Pyrrole Ring-containing Cryptand (Nagoya Institute of Technology) MORIMI, Yuka; FUKUI, Masato; NAGATA, Kojiro; WASADA-TSUTSUI, Yuko; INOMATA, Tomohiko; OZAWA, Tomohiro; FUNAHASHI, Yasuhiro; MASUDA, Hideki

#### Sunday, March 27, AM

Chair: SUZAKI, Yuji  $(9:00\sim10:00)$ 

- \* 8:50-9:00: interval for laptop PC connection.(2A5-01, 2A5-02, 2A5-03, 2A5-04, 2A5-05, 2A5-06)
- 2A5-01 Control of the Hierarchical Structure of Porous Coordination Polymers by the Reactivity of Metal Salts (Kyoto Univ.) FUKUSHIMA, Tomohiro; HORIKE, Satoshi; KITAGAWA, Susumu
- 2A5-02 Uptake and release of photo-responsive macromolecule in porous coordination polymers. (Kyoto Univ.) WASHINO, Gosuke; UEMURA, Takashi; YANAI, Nobuhiro; KITAGAWA, Susumu
- **2A5-03** Proton Conductivity of Solid Solution Type Coordination Polymers  $Al(OH)(bdc-NH_2)_x(bdc-OH)_{1-x}$  (bdc = 1,4-benzenedicarboxylate) and its Dependence of Ligand Ratios (Grad. Sch. Sci., Kyoto Univ. ; JST-CREST) SHIRAI, Yuki; SHIGEMATSU, Akihito; YAMADA, Teppei; KITAGAWA, Hiroshi
- 2A5-04 Proton Conductivity of M(OH)(bdc)(M = Al, Fe, bdc = 1,4-benzenedicarboxylate) Coordination Polymers under Ammonia Atmosphere and its Gas Pressure Dependence (Fac. Sci., Kyushu Univ.; Grad. Sch. Sci., Kyoto Univ.; JST-CREST) SHIGEMATSU, Akihito; YAMADA, Teppei; KITAGAWA, Hiroshi
- 2A5-05 Gas Adsorption Properties of Layered Porous Coordination Polymers Based on 4,4'-Sulfonyldibenzoic acid (Kyoto Univ.) SUGIMOTO, Masayuki; HIJIKATA, Yuh; HORIKE, Satoshi; KITAGAWA, Susumu
- 2A5-06 Anhydrous High Proton Conduction of Histamine-confining Porous Coordination Polymer (Kyoto Univ.) UMEYAMA, Daiki; HORIKE, Satoshi; KITAGAWA, Susumu

Chair: YAMADA, Teppei (10:10∼11:10)

- \* 10:00-10:10: interval for laptop PC connection.(2A5-08, 2A5-09, 2A5-10, 2A5-12)
- 2A5-08<sup>†</sup> Syntheses of Solid Solutions of One-Dimensional Copper Complexes and Their Gas and Vapor Adsorption Properties (Research Institute for Electronic Science, Hokkaido Univ.) FUKUHARA, Katsuo; NORO, Shinichiro; KUBO, Kazuya; NAKAMURA, Takayoshi
- 2A5-09 Novel porphyrin-based metal carboxylate framework [Cu<sub>2</sub>(MDDCPP)]: syntheses and gas adsorption studies (Univ. of Kanagawa) ENDO, Nanako; MATSUNAGA, Satosi; MORI, Wasuke
- 2A5-10\* Hierarchical Functionalization of Porous Coordination Polymer Crystals (Kyoto Univ.) HIRAI, Kenji; FURUKAWA, Shuhei; KITAGAWA, Susumu
- 2A5-12\* Guest Induced Structural Transition of Porous Coordination PolymersOnly at Single-Crystal Interfaces (Kyoto Univ. iCeMS) KONDO, Mio; FURUKAWA, Shuhei; KITAGAWA, Susumu

#### Sunday, March 27, PM

Chair: KUBO, Kazuya (12:50∼13:50)

- \* 12:40-12:50: interval for laptop PC connection.(2A5-24, 2A5-25, 2A5-26, 2A5-28)
- 2A5-24 Preparation of functional porous coordination polymers with photodimerizable groups. (Faculty of science, Hokkaido Univ.) NAGATA, Shunjiro; SUGIKAWA, Kouta; ISHIWATA, Takumi; KOKADO, Kenta; SADA, Kazuki
- 2A5-25 Gas adsorptive property and structure stability of porous metal complexes based on elongated porphyrin building block. (Univ. of Kanagawa) KITAMURA, Naoki; MATSUNAGA, Satoshi; NOMIYA, Kenji; MORI, Wasuke
- 2A5-26\* Design of size and morphology of porous coordination polymer nanocrystals towards the fabrication of adsorption sensor (Kyoto Univ. iCeMS) FURUKAWA, Shuhei; DIRING, Stephane; UEHARA, Hiromitsu; UMEMURA, Ayako; KITAGAWA, Susumu
- 2A5-28\* Mesosize effect of a dynamic porous coordination polymer crystal on its property (Kyoto Univ. iCeMS) SAKATA, Yoko; FURUKAWA, Shuhei; KITAGAWA, Susumu

Chair: HASEGAWA, Miki (14:00∼15:00)

- \* 13:50-14:00: interval for laptop PC connection.(2A5-31, 2A5-32, 2A5-33, 2A5-35)
- 2A5-31 Synthesis, Structure and Emission Properties of Platinum(II) Complexes with Benzaldimine and Salicylaldimine Ligands. (Graduate School of Engineering Science, Osaka Univ) KASHIWABARA, Takashi; KOMIYA, Naruyoshi; NAOTA, Takeshi
- 2A5-32 pH Dependency of luminescence and circular dichroism of nona-coordinated lanthanide complexes (Graduate Schools of Science, Osaka City Univ. and JST, CREST) SHINODA, Satoshi; YASUEDA, Yuki; TSUKUBE, Hiroshi
- 2A5-33\* Theoretical study of optical properties of luminescent dinuclear complex; DFT and TD-DFT approach (Grad. Sch. Sci., Osaka Univ.) KATAOKA, Yusuke; KITAGAWA, Yasutaka; SAITO, Toru; NAKANISHI, Yasuyuki; YASUDA, Natsumi; KAWAKAMI, Takashi; OKUMURA, Mitsutaka; YAMAGUCHI, Kizashi
- 2A5-35\*† Intense circularly polarized luminescence of chiral Eu(III) complexes characteristic for their nonacoordinated coordination structures (Nara Inst. Sci. Tech., Graduate School of Materials Science) HARADA, Takashi; TSUMATORI, Hiroyuki; YUASA, Junpei; HASEGAWA, Yasuchika; KAWAI, Tsuyoshi

Chair: NOZAKI, Koichi (15:10∼16:10)

- \* 15:00-15:10: interval for laptop PC connection.(2A5-38, 2A5-39, 2A5-40, 2A5-41, 2A5-42)
- 2A5-38 Photoisomerization of cyclometalated iridium complex with a phosphorus ligand. (AIST) KONNO, Hideo; YOSHIDA, Takunori; KOIKE, Kazuhide
- 2A5-39 Highly efficient blue phosphorecent iridium complex with dipyridylamine ligand (ISC, Advanced Industrial Science and Technology) ABE, Taichi: KONNO, Hideo
- 2A5-40 Synthesis of novel cyclometallated binuclear Ir complexes bearing benzimidazole groups and their pH sensitive luminescent behaviors (Chuo Univ.) YOSHIKAWA, Shinpei; KANAIZUKA, Katsuhiko; HAGA, Masaaki
- 2A5-41 Synthesis of Blue Color Emitting Cyclometalated Ir(III) Complexes Based on Regioselective Substitution Reaction (Faculty of Pharmaceutical Sciences, Tokyo Univ. of Science) HISAMATSU, Yosuke; OHWADA, Hiroki; MATSUO, Yasuki; OTAWA, Shuhei; MOROMIZATO, Shinsuke; KITAMURA, Masanori; AOKI, Shin
- 2A5-42\* Phosphorescence and orientation characteristics of linear-shaped acetylacetonato Pt(II) complex (CFC, Kyushu Univ.) TANEDA, Masatsugu; YASUDA, Takuma; MATSUNAMI, Shigeyuki; ADACHI, Chihaya

Chair: TANEDA, Masatsugu (16:20 $\sim$ 17:20)

- \* 16:10-16:20: interval for laptop PC connection.(2A5-45, 2A5-46, 2A5-47, 2A5-48, 2A5-49, 2A5-50)
- 2A5-45 Synthesis and optical properties of chlorophyll dimers bridged by cisand trans-forms of Pt(II) bis-acetylide complexes (Ritsumeikan Univ.) YAMAMOTO, Youhei; TAMIAKI, Hitoshi
- 2A5-46 Photophysical Properties of Synthetic Chlorophylls Directly π-Conjugated with a Metal β-Diketonate (Ritsumeikan Univ.) KINOSHITA, Yusuke; YAMAMOTO, Youhei; TAMIAKI, Hitoshi
- 2A5-47 Color Control in Solid-State Emission of Methoxy-Substituted Bis (salicylaldiminato)platinum Complexes (School of Engineering Science, Osaka Univ) KANETA, Kenji; OKADA, Minoru; KOMIYA, Naruyoshi; NAOTA, Takeshi
- 2A5-48 Phosphorescent states and emission mechanism in highly luminescent-platinum(II)-silver(I) hexanuclear complex (Toyama Univ.; Nagasaki Univ.) KAWAKAMI, Hiroaki; NOZAKI, Koichi; IWAMURA, Munetaka; UMAKOSHI, Keisuke
- 2A5-49 Synthesis and Emission Properties of Bis(salicylaldiminato)platinum Complexes Bearing Macrocyclic Poly(oxyethylene) Units (Graduate School of Engineering Science, Osaka Univ.) FUKUMOTO, Kanako; KOMIYA, Naruyoshi; NAOTA, Takeshi
- 2A5-50 Sonication Induced Emission Enhancement of Cyclic Dinuclear Platinum Complexes with Salicylaldimine Ligand (Graduate School of Engineering Science, Osaka Univ.) MIYANAGA, Maiko; KOMIYA, Naruyoshi; NAOTA, Takeshi

#### Monday, March 28, AM

Chair: YOSHIMURA, Takashi (9:20 $\sim$ 10:00)

- \* 9:10-9:20: interval for laptop PC connection.(3A5-03, 3A5-04, 3A5-05, 3A5-06)
- **3A5-03** Circularly polarized luminescence of achiral rare earth complexes induced by S(R)-2-pyrrolidone-5-carboxylic acid. (Univ. of Toyama; Department of the chemistry) KIMURA, Yoshihiro; MIYAMOTO, Risa; IWAMURA, Munetaka; NOZAKI, Koichi
- 3A5-04 Preparation of nanocrystals of Eu(III) complex and photoluminescence properties (Nara Inst. Sci. Tech.) NAMIKI, Kazuhiko; HASEGAWA, Yasuchika; KAWAI, Tsuyoshi
- 3A5-05 Preparation of a highly emissive LB film with a Eu compound (College of Science and Engineering, Aoyama Gakuin Univ.) FUKAWA,

Tomonori; TAKAHASHI, Isao; HASEGAWA, Miki

**3A5-06** Luminescence property of the gyroidal Tb complex (College of Science and Engineering, Aoyama Gakuin Univ.) KODAMA, Daisuke; YOSHIMURA, Yu; OHTSU, Hideki; TAKAHASHI, Isao; HASEGAWA, Miki

Chair: TAKAHASHI, Isao (10:10~11:10)

- \* 10:00-10:10: interval for laptop PC connection.(3A5-08, 3A5-09, 3A5-10, 3A5-11, 3A5-12, 3A5-13)
- 3A5-08 Synthesis and luminescence of copper(I) complexes bearing N-heterocyclic carbene and diphosphine ligands. (Seikei Univ.) KIMURA, Kaoru; TAKAO, Koichiro; TSUBOMURA, Taro
- 3A5-09 Quantitative Explanation of Absorption and Emission Spectrum of Metal Complex by means of Electronic Theory (Kagawa Univ.; Okayama Univ. of Sci.; Tohoku Univ.) ISHII, Tomohiko; KENMOTSU, Masahiro; WATANABE, Yohei; SAKANE, Genta; YAMASHITA, Masahiro; BREEDLOVE, Brian
- 3A5-10 Synthesis and characterization of the hexarhenium complex with the MLCT emission (Graduate School of Science, Osaka Univ., Graduate School of Science, Hokkaido Univ., Graduate School of Chemical Sciences and Engineering, Hokkaido Univ.) YOSHIMURA, Takashi; ISHIZAKA, Shoji; ITO, Akitaka; SAKUDA, Eri; SHINOHARA, Atsushi; KITAMURA, Noboru
- 3A5-11<sup>†</sup> Luminescence of Tetracyanonitridorhentate(V) Complex (Grad. Sch. Sci., Osaka Univ.) IKEDA, Hayato; YOSHIMURA, Takashi; SHINOHARA, Atsushi
- 3A5-12 Synthesis and Photochemical Multielectron Accumulation Properties of Hybrid Systems Constructed with a Ring-shaped Rhenium (I) Tetranuclear Complex and a Polyoxometalate (Tokyo Institute of Technology) ASATANI, Tsuyoshi; NAKAGAWA, Yuki; MORIMOTO, Tatsuki; YUI, Tatsuto; ISHITANI, Osamu
- 3A5-13 Ratiometric emission spectral change with temperature in water-soluble europium complexes (Graduate School of Materials Scinence, Nara Institute of Science and Technology) MUKAI, Ryusuke; YUASA, Junpei; HASEGAWA, Yasuchika; KAWAI, Tsuyoshi

Chair: KOIZUMI, Takeaki (11:20 $\sim$ 12:20)

- \* 11:10-11:20: interval for laptop PC connection.(3A5-15, 3A5-16, 3A5-17, 3A5-19)
- 3A5-15 Synthesis and structural analysis of the Ru(II) complex of planarchiral terpyridine (Waseda Univ.) KANOMATA, Nobuhiro; KOTANI, Kyohei
- 3A5-16 Preparation, Structure, and the Conversion of Ligand Coordination Modes in Ru(II) Complexes with Hydrazone Ligands (Dept. Chem., Aichi Univ. of Edu.; Hokkaido Univ.) MORI, Asami; KOBAYASHI, Atsushi; CHANG, Ho-chol; KATO, Masako; NAKAJIMA, Kiyohiko
- **3A5–17\*** Control of the spin equilibrium by using of the cation size effect for  $(n-C_nH_{2n+1})_4N[Zn^{II}Fe^{III}(C_2O_3S)\ (n=2-4)\ (Univ.\ of\ Tokyo)\ KAGESAWA,$  Koichi; OKAZAWA, Atsushi; KOJIMA, Norimichi
- 3A5-19\*†C-H Activation Reactions at the Ethylene Arm of Ruthenium Complexes Bearing Ethylbis(2-pyridylethyl)amine (Faculty Sci. Technol., Sophia Univ.) FUKUI, Sohei; SUZUKI, Noriyuki; NAGAO, Hirotaka

#### Monday, March 28, PM

Chair: NAGAO, Hirotaka (13:30∼14:30)

- \* 13:20-13:30: interval for laptop PC connection.(3A5-28, 3A5-29, 3A5-30, 3A5-31, 3A5-32, 3A5-33)
- **3A5-28** Stability of Mononuclear Iron Nitrosyl {FeNO}<sup>6</sup> Complexes (Doshisha Univ.) SUEMOTOS, Naoya; ARAKAWA, Kengo; HITOMI, Yutaka; FUNABIKI, Takuzo; KODERA, Masahito
- **3A5-29** Properties of Double-Decker Complexes with N-Fused Porphyrinato Ligands (Graduate School of Engineering, Kyushu Univ.) SATO, Ayumi; TOGANOH, Motoki; FURUTA, Hiroyuki
- **3A5-30** Electrochemical Properties of Ru(II) ComplexesBearing Thioamide Derivatives as a Ligand (Tokyo Institute of Technology, Chemical Resources Laboratory) TAKATSUMA, Shuhei; TERATANI, Takuya; KOIZUMI, Take-aki; KANBARA, Takaki
- 3A5-31 Intramolecular Proton-Coupled Electron Transfer in Ruthenium(II)-Pyridylamine Complexes Bearing a Copper(II)-2, 2'-Bipyridine Pendant (Univ. of Tsukuba) TOBITA, Kengo; ISHIZUKA, Tomoya; KOJIMA, Takahiko
- 3A5-32 The influence of Protonation on Photochromic Behaviors of Rutheniumu(II)- Pyridylamine Complex (Univ. of Tsukuba) SAWAKI, Takuya; ISHIZUKA, Tomoya; KOJIMA, Takahiko
- 3A5-33 Formation of Aminylradical from Ammonia molecule by using of A Ruthenium Complex (Rikkyo Univ.) MIYAZATO, Yuji; WADA, Tohru; TANAKA, Koji

Chair: ISHIZUKA, Tomoya (14:40 $\sim$ 15:40)

- \* 14:30-14:40: interval for laptop PC connection.(3A5-35, 3A5-36, 3A5-37, 3A5-38, 3A5-39, 3A5-40)
- **3A5-35** Conversion Reactions of Nitrile Compounds Using Ruthenium Complexes Having a Nitrosyl Ligand (Sophia Univ.) ITOHIYA, Toshiyuki; NAGAO, Hirotaka

- 3A5-36 Intramolecular B-C coupling reaction on a triruthenium complex with a μ 3 -borylene ligand. (Graduate School of Science and Engineering, Tokyo Institute of Technology) SUWA, Hitoshi; OKAMURA, Rei; TAKAO, Toshirou; SUZUKI, Hiroharu
- 3A5-37 Dioxygen activation and predominant alkene epoxidation with various oxidants catalyzed by diiron complexes supported by bis-tpa type ligands,6-hpa and 6-hpa<sup>4NO2</sup> (Doshisha Univ.; Bioinorganic chemistry and Chemical Biology Loboratory) KODERA, Masahito; KUDARA, Takamasa; HITOMI, Yutaka; HUNABIKI, Takuzou
- 3A5-38 Synthesis of iron complex with using SNS thioamide pincer ligand (Department of Frontier Materials, Nagoya Institute of Technology) SUZUKI, Tatsuya; MATSUMOTO, Jun; KAJITA, Yuji; MASUDA, Hideki
- 3A5-39 Synthesis of an [8Fe-7S] Cluster using Fe2Mes4 as a Precursor (Graduate School of Science and Research Center for Materials Science, Nagoya Univ.) HASHIMOTO, Takayoshi; OHKI, Yasuhiro; TATSUMI, Kazuvuki
- 3A5-40 Dioxygen activation of nonheme diiron center surrounded by carboxylate-rich environment (Doshisha Univ.) YASUNAGA, Tomohiro; KODERA, Masahito; HITOMI, Yutaka; FUNABIKI, Takuzo

#### Chair: TAKAO, Toshiro (15:50~16:50)

- \* 15:40-15:50: interval for laptop PC connection.(3A5-42, 3A5-43, 3A5-44, 3A5-45, 3A5-46)
- 3A5-42 Syntheisis of Iron Complexes Having Carboxylate and Amidate Ligands and Their Reactivity toward Hydrogen Peroxide (Doshisha Univ.) HIRAMATSU, Kazuaki; ARAKAWA, Kengo; HITOMI, Yutaka; FUNABIKI, Takuzo; KODERA, Masahito
- 3A5-43 Oxidation Reaction Catalyzed by Iron Complexes Having an Amidate Coordination (Doshisha Univ.) ARAKAWA, Kengo; HITOMI, Yutaka; FUNABIKI, Takuzo; KODERA, Masahito
- 3A5-44 Oxidation Reaction of Trichloridoethylbis(2-pylidylmethyl)amineruthenium Complex (Faculty Sci. Technol., Sophia Univ.) YONEZAWA, Haruka; FUKUI, Sohei; NAGAO, Hirotaka
- 3A5-45 Mechanistic Insights into Oxygenation Reactions of Hydrocarbons by a Ruthenium(IV)-Oxo Complex (Graduate School of Engineering, Osaka Univ.) NAKAYAMA, Kazuya; KOJIMA, Takahiko; FUKUZUMI, Shunichi
- **3A5-46\*** Mechanism of Highly Selective *cis-*1,2-Dihydroxylation of Alkenes with Hydrogenperoxide Catalyzed by TPA-Osmium Complex (Graduate School of Engineering, Osaka Univ.) SUGIMOTO, Hideki; KITAYAMA, Kazuhiro; ITOH, Shinobu

#### Chair: WADA, Tohru (17:00∼18:00)

- \* 16:50-17:00: interval for laptop PC connection.(3A5-49, 3A5-50, 3A5-51, 3A5-52, 3A5-53, 3A5-54)
- 3A5-49 Synthesis and Functional Property of New Mixed-Metal Trinuclear Cluster Complexes Modified with Ferrocenyl Units (Kyushu Univ.) IKEGAMI, Atsushi; ABE, Masaaki; SHIMAKOSHI, Hisashi; HISAEDA, Yoshio
- 3A5-50 Linckage-induced chirality in dinuclear Ru(III) complexes (Toho Univ.; Ehime Univ.) TAKASE, Ryoichi; SATO, Hisako; YAMAGISHI, Akihiko; KITAZAWA, Takafumi
- 3A5-51 Preparation and Electrochromic Behavior of Electropolymerized Triruthenium Cluster Films (Kyushu Univ.) MATSUSE, Rumiko; ABE, Masaaki; TOMIYASU, Yuki; SHIMAKOSHI, Hisashi; HISAEDA, Yoshio
- 3A5-52 Activation of acetone by light irradiation in the presence of binuclear ruthenium complex (Department of Applied Chemistry, Graduate School of Science and Engineering, Tokyo Institute of Technology) MUROI, Yuki; SUZUKI, Hiroharu
- 3A5-53 Synthesis and Characterization of Ru Complex with N2S3 Coordination Environment Similar to the Active Center of Nitrile Hydratase (DEPARTMENT OF FRONTIER MATERIALS, NAGOYA INSTITUTE OF TECHNOLOGY) WADA, Takashi; INOMATA, Tomohiko; HUNAHASHI, Yasuhiro; OZAWA, Tomohiro; MASUDA, Hideki
- 3A5-54 Preparation and Reactivity of High-valent Ruthenium-nitrido Complexes with Pentadentate Polypyridylamine Ligands (Univ. of Tsukuba) KYO, Ka; ISHIZUKA, Tomoya; KOJIMA, Takahiko

#### Chair: SHIMAKOSHI, Hisashi (18:10 $\sim$ 18:40)

- \* 18:00-18:10: interval for laptop PC connection.(3A5-56, 3A5-57, 3A5-58)
- 3A5-56 Solvents Effect toward Reactions of the Azide Ion Coordinated to the Ruthenium Complex (Faculty Sci. Technol., Sophia Univ.) UEHARA, Ryo; YAMAZAKI, Chisaki; NAGAO, Hirotaka
- **3A5-57** Redox Properties of Ruthenium Complexes Containing the NAD Model Ligand, pbn(2-(pyridin-2-yl)benzo[b][1,5]naphthyridine) (IMS) OHTSU, Hideki; FUKUSHIMA, Takashi; TANAKA, Koji
- **3A5-58** Redox reaction of Ru complexes with two NAD/NADH analogous sites (IMS) MIYACHI, Mariko; KOSHIYAMA, Tamami; TSUKAHARA, Yuhei; TANAKA, Koji

#### Tuesday, March 29, AM

#### V, Mo, W

Chair: SUZUKI, Takayoshi (9:50 $\sim$ 10:50)

- \* 9:40-9:50: interval for laptop PC connection.(4A5-06, 4A5-08, 4A5-10)
- 4A5-06\* Isomerization Reaction of the Reduced Form of Keggin-type Polyoxometalate (Kochi Univ.; Kobe Univ.) UEDA, Tadaharu; YASUDA, Yuka; HIMENO, Sadayuki
- 4A5-08\* Syntheses and Reactivities of Dichalcogenolato-molybdenum Multi-nuclear Complexes. (Hokkaido Univ., Faculty of Science) MATSUMOTO, Takeshi; YANO, Hirokazu; WAKIZAKA, Masanori; CHANG, Ho-chol; KOBAYASHI, Atsushi; KATO, Masako
- 4A5-10\* Theoretical study on the mechanism of nitrogen fixation catalyzed by a Mo-Fe complex (IMCE, Kyushu Univ., School of Engineering, The Univ. of Tokyo) TANAKA, Hiromasa; SASADA, Akira; KOUNO, Tomohisa; YUKI, Masahiro; MIYAKE, Yoshihiro; NISHIBAYASHI, Yoshiaki; YOSHIZAWA, Kazunari

Chair: KOBAYASHI, Atsushi (11:00 $\sim$ 12:00)

- \* 10:50-11:00: interval for laptop PC connection.(4A5-13, 4A5-14, 4A5-15, 4A5-16, 4A5-17, 4A5-18)
- 4A5-13 Synthesis of V(III) thiolate complexes having a phenoxide-phosphine [O,P,O] or phenoxide-phosphineoxide [O,O,O] ligand and their reactions with elemental sulfur and iron-thiolate complexes (Graduate School of Science, and Research Center for Materials Science, Nagoya Univ.) TANIYAMA, Nobuhiro; OHKI, Yasuhiro; TATSUMI, Kazuyuki
- 4A5-14 Synthesis of Imidovanadium Complexes Bearing Phenol Ligands (Osaka Univ.) MORIUCHI, Toshiyuki; IKEUCHI, Kousuke; HIRAO, Toshikazu
- 4A5-15<sup>†</sup> One-pot Synthesis of Aliphatic Imidovanadium(V) Complexes (Osaka Univ.) NISHINA, Masafumi; MORIUCHI, Toshiyuki; HIRAO, Toshikazu
- 4A5-16 Stabilization of unusual molecular structures of transition-metal complexesbearing 8-(dipheynylphosphanyl)quinoline (Okayama Univ.; Nagoya Univ.) NAKAMURA, Go; SUZUKI, Takayoshi; SUNATSUKI, Yukinari; D. TAKAGI, Hideo
- 4A5-17 Synthesis and Sulfur Transfer Reactivity of Sulfido- and Disulfidotungsten(VI) Complexes (Graduate School of Engineering, Osaka Univ.) HATAKEDA, Kohei; SUGIMOTO, Hideki; ITOH, Shinobu
- 4A5-18 Syntheses of Alkylgermanium-substituted Phosphotungstates and their Caesium Salts (Hokkaido Univ.) MIURA, Yuki; KAMIYA, Yuichi

### Room A6

Bldg. 7 7-33

## Coordination Chemistry, Organometallic Chemistry

Saturday, March 26, PM

#### Si, Cyclic Compound

Chair: NAMAMOTO, Masaaki (14:20 $\sim$ 15:20)

- \* 14:10-14:20: interval for laptop PC connection.(1A6-33, 1A6-34, 1A6-35, 1A6-36, 1A6-37, 1A6-38)
- 1A6-33 Synthesis and Reactions of 2,2,4,4-Tetra-tert-butyl-1,1-dichlorocyclo-tetrasilane (Grad. Sch. Eng., Gunma Univ.) ANZAWA, Hideki; KURIBARA, Takayoshi; OTSUKA, Kyohei; KANNO, Ken-ichiro; KYUSHIN, Soichiro
- 1A6-34 Reactions of Hexa-tert-butylbicyclo[1.1.0]tetrasilane with Ketones (Grad. Sch. Eng., Gunma Univ.) KOGANEZONO, Makoto; NAKABAYASHI, Takashi; ISHIDA, Shintaro; KYUSHIN, Soichiro; KONNO, Yuta; KUDO, Takako
- 1A6-35 Synthesis and structure of silicon analogue of [2]staffane (Tohoku Univ.) TSUSHIMA, Daisuke; ISHIDA, Shintaro; ISOBE, Hiroyuki; IWAMOTO, Takeaki
- 1A6-36 Synthesis, Structures, and Properties of Spirosiloxanes (Sagami Chem. Res. Inst.) TANAKA, Ryoji; AKIYAMA, Eiichi
- 1A6-37 Reactions of an Octasilacuneane Derivative (Grad. Sch. Eng., Gunma Univ.) OTSUKA, Kyohei; ISHIDA, Shintaro; KYUSHIN, Soichiro 1A6-38<sup>†</sup> Ring Inversion of an Organosilicon Belt-Shaped Cyclophane (Grad.
- 1A6-38 Ring Inversion of an Organosilicon Belt-Shaped Cyclophane (Grad. Sch. Eng., Gunma Univ.) TOMA, Yuki; KANNO, Ken-ichiro; KYUSHIN, Soichiro

Chair: ISHIDA, Shintaro (15:30 $\sim$ 16:30)

- \* 15:20-15:30: interval for laptop PC connection.(1A6-40, 1A6-41, 1A6-42, 1A6-43, 1A6-44, 1A6-45)
- 1A6-40 Structure and Unique Reactivity of Pentafluorophenylcyclobutadiene (Univ. of Tsukuba) INAGAKI, Yusuke; NAKAMOTO, Masaaki;

- SEKIGUCHI, Akira
- 1A6-41 Synthesis and Reactivity of Novel Sulfur-substitued Tetrahedrane (Univ. of Tsukuba) OCHIAI, Tatsumi; NAKAMOTO, Masaaki; SEKIGUCHI, Akira
- 1A6-42 Synthesis of Dibenzosilaborins by Intramolecular Cyclization of σ-Hydrosilyl(boryl)benzenes (Graduate School of Science, Hiroshima Univ.) MORISAKI, Hiroshi: KAWACHI, Atsushi: YAMAMOTO, Yohsuke
- 1A6-43 Synthesis of silaborin derivatives and investigation of its property variation by fluoride ion (Saitama Univ., graduate school of science & engneering) IKEGAMI, Masato; KOYAMA, Tetsuo; MATSUOKA, Koji; HATANO, Ken
- 1A6-44 Synthesis and Reduction of Tetrachloro-1, 3-Disilacyclobutane (Univ. of Tsukuba) ENDO, Masahisa; NAKAMOTO, Masaaki; SEKIGUCHI, Akira
- 1A6-45 Synthetic Studies of 1,4-Phosphasilabenzene and Its Derivatives (Institute for Chemical Research, Kyoto Univ.) MORIKAWA, Satoshi; MIZUHATA, Yoshiyuki; TOKITOH, Norihiro

#### Si, Low Coordination Compound

Chair: SASAMORI, Takahiro (16:40~17:40)

- \* 16:30-16:40: interval for laptop PC connection.(1A6-47, 1A6-48, 1A6-49, 1A6-51)
- 1A6-47 Synthesis, Structures, and Reactivities of Silyl-substituted Silylene-NHC Adducts (Univ. of Tsukuba) TANAKA, Hiroaki; ICHINOHE, Masaaki; SEKIGUCHI, Akira
- 1A6-48 Synthesis, Structure, and Reactions of Novel Isolable Dialkylsilylenes (Graduate School of Science, Tohoku Univ.) ABE, Takashi; TANAKA, Ryoji; ISHIDA, Shintaro; KIRA, Mitsuo; IWAMOTO, Takeaki
- 1A6-49\* Synthesis and Structure of an N-heterocyclic carbene (NHC)-stabilized disilenyl cation (Univ. of Tsukuba) YAMAGUCHI, Torahiko; SEKIGUCHI, Akira
- 1A6-51\* Thermal Dissociation of Dibromodisilene to Bromosilylene andIt's Trapping as a Lewis Base Adduct (RIKEN ASI) SUZUKI, Katsunori; MATSUO, Tsukasa; HASHIZUME, Daisuke; TAMAO, Kohei

Chair: KANNO, Ken-Ichiro (17:50~18:50)

- \* 17:40-17:50: interval for laptop PC connection.(1A6-54, 1A6-55, 1A6-56, 1A6-57, 1A6-58, 1A6-59)
- 1A6-54<sup>†</sup> Non-empirical Reaction Route Search for Isomerizations of Disilenes (Graduate School of Science, Tohoku Univ.) YOSHIDA, Naoki; ISIDA, Shintarou; MAEDA, Satoshi; OHNO, Koichi; IWAMOTO, Takeaki
- **1A6-55** Synthetic Study of Expanded pi-Conjugated Disilene Utilizing Ethynylene Units (Institute for Chemical Research, Kyoto Univ.) SATO, Takahiro; MIZUHATA, Yoshiyuki; TOKITOH, Norihiro
- 1A6-56<sup>#</sup> Isolation and Photophysical Properties of Soluble pi-Conjugated Disilene Oligomers by Introduction of Bulky Rind Groups Having a Long Alkoxy Chain (RIKEN) LI, Liangchun; MATSUO, Tsukasa; HASHIZUME, Daisuke; TAMAO, Kohei
- 1A6-57 Reaction of Alkylthio-substituted Disilene with Alcohol and Phenol (Univ. of Tsukuba) YAMAGUCHI, Takahiro; ICHINOHE, Masaaki; SEKIGUCHI, Akira
- 1A6-58 Synthesis and Electronic Properties of pi-Conjugated Disilenes Bearing Heterocyclic Groups (RIKEN Advanced Science Institute) KOBAYASHI, Megumi; HASHIZUME, Daisuke; FUKUNAGA, Takeo; MATSUO, Tsukasa; TAMAO, Kohei
- 1A6-59 Substituent Effects on the Reaction of Cyclotrisilene with Parasubstituted Phenylacethylenes (Univ. of Tsukuba) OHMORI, Yu; MATSUNO, Tadahiro; ICHINOHE, Masaaki; SEKIGUCHI, Akira

#### Sunday, March 27, PM

#### Si, Low Coordination Compound

Chair: MATSUO, Tsukasa (12:30~13:30)

- \* 12:20-12:30: interval for laptop PC connection.(2A6-22, 2A6-23, 2A6-25, 2A6-27) **2A6-22** Synthesis of a Novel Silene by Isomerization of a Silacyclopropani-
- mine and Its Molecular Structure (Tohoku Univ.) OHNISHI, Nobuyoshi; ISHIDA, Shintaro; MAEDA, Satoshi; OHNO, Koichi; IWAMOTO, Takeaki **2A6-23\*** Synthetic studies of a stable 1-fluoro-2-hydrosilene (Institute for
- Chemical Research, Kyoto Univ.) MIEDA, Eiko; SASAMORI, Takahiro; SASE, Shohei; GOTO, Kei; TOKITOH, Norihiro
- **2A6–25\*** Syntheses, Structures, and Properties of  $Si_2N_2$  4-Membered Ring Biradicaloids (Univ. of Tsukuba) TAKEUCHI, Katsuhiko; ICHINOHE, Masaaki; SEKIGUCHI, Akira
- 2A6-27 Formation and Properties of the Radical Anions of tert-Butyl- and tert-Butyldimethylsilyl-Substituted Octasilacubanes (Grad. Sch. Eng., Gunma Univ.) UCHIDA, Tomoshi; OTSUKA, Kyohei; ISHIDA, Shintaro; KYUSHIN, Soichiro

Chair: MIZUHATA, Yoshiyuki  $(13:40{\sim}14:10)$ 

- \* 13:30-13:40: interval for laptop PC connection.(2A6-29, 2A6-30, 2A6-31)
- 2A6-29 Synthesis and Reactivity of Amino-substituted Silyl Radical (Univ. of Tsukuba) TAIRA, Kanako; ICHINOHE, Masaaki; SEKIGUCHI, Akira

- 2A6-30 Synthesis, Structure, and Property of Tris(silyl radical)with a Quartet Ground State (Univ. of Tsukuba) NOZAWA, Takeshi; ICHINOHE, Masaaki; SEKIGUCHI, Akira
- 2A6-31 Reaction of Dimagnesiosilane with Chlorosilanes (Univ. of Tsukuba) FURUYA, Takumi; ICHINOHE, Masaaki; SEKIGUCHI, Akira

#### Si, Properties

Chair: KOBAYASHI, Junji (14:20∼15:20)

- \* 14:10-14:20: interval for laptop PC connection.(2A6-33, 2A6-34, 2A6-35, 2A6-36, 2A6-37)
- 2A6-33 Synthesis and investigation of inhibition photo-degradation of a novel polysilane with silole group in the side chain (Graduate School of Science and Engineering, Saitama Univ.) ISOBE, Yuuki; KAMIBAYASHI, Satoshi; KOYAMA, Tetsuo; MATSUOKA, Koji; TERUNUMA, Daiyo; FUKUDA, Takeshi; KAMATA, Norihiko; HATANO, Ken
- 2A6-34 Preparation and application of silole derivatives for electric materials (Saitama Univ.) MORI, Keita; KIMURA, Sho; KOBAYASHI, Ryohei; FUKUDA, Takeshi; KAMATA, Norihiko; KOYAMA, Tetsuo; MATSUOKA, Koji; HATANO, Ken
- 2A6-35 Synthesis, Structure, and Properties of a Tetraphenylporphyrin-Fluoromethylsilicon Complex (Grad. Sch. Eng., Gunma Univ.) SUGIKI, Makoto; KYUSHIN, Soichiro
- 2A6-36 Synthesis and properties of polysilanes with phthalocyanine moieties (Saitama Univ., Graduate School of Science and Engineering) WADAI, Masaki; FUKUDA, Takeshi; KAMATA, Norihiko; HATANO, Ken; ISHIMARU, Yoshihiro
- 2A6-37\* Room-Temperature Phosphorescence from the crystals of 9-Phenyl-9,10-disilatriptycene (Grad. Sch. Eng., Gunma Univ.) KURIBARA, Takayoshi; ISHIDA, Shintaro; KYUSHIN, Soichiro; HUANG, Haixiang; HORIUCHI, Hiroaki; HIRATSUKA, Hiroshi; KUDO, Takako

#### Ge, Sn

Chair: SAITO, Masaichi (15:30~16:10)

- \* 15:20-15:30: interval for laptop PC connection.(2A6-40, 2A6-41, 2A6-42, 2A6-43)
- **2A6-40**<sup>#</sup> Novel Reactivity of a Highly Twisted Digermene (Univ. of Tsukuba) MCNEICE, Kiera; LEE, Vladimir Ya.; SEKIGUCHI, Akira
- 2A6-41 Reactivity of a Stable 1,2-Bis(ferrocenyl)digermene (Institute for Chemical Research, Kyoto Univ.) MIYAMOTO, Hisashi; SASAMORI, Takahiro; TOKITOH, Norihiro
- 2A6-42 Synthesis and Structure of Sandwich Type Transition Metal Complex Featuring Tetragermacyclobutadiene Ligand (Univ. of Tsukuba) ITO, Yuki; LEE, Vladimir Ya.; SEKIGUCHI, Akira
- 2A6-43 Synthesis of Kinetically Stabilized Stannabenzene and its Properties (Institute for Chemical Research, Kyoto Univ.) NODA, Naoya; MIZUHATA, Yoshiyuki; TOKITOH, Norihiro

#### Sn, Pb, Group 13

Chair: ICHINOHE, Masaaki (16:20~17:10)

- \* 16:10-16:20: interval for laptop PC connection.(2A6-45, 2A6-46, 2A6-47, 2A6-48, 2A6-49)
- 2A6-45 Reactions of Stable Trilithiostannane and Trihalides (Department of Chemistry, Graduate School of Science and Engneering, Saitama Univ.) TOMIZAWA, Katsuya; SAITO, Masaichi
- 2A6-46 Synthesis of Chiral Stannyllitium Isolated by the Complexation of (-)-Sparteine and the Nuclephilic Reaction to Alkylhalides (Gakushuin Univ.) YAMADA, Hanae; ARII, Hidekazu; NANJO, Masato; MOCHIDA, Kunio
- 2A6-47 Synthesis and Structure of PlumbacyclopentadienylideneStabilized by N-Heterocyclic Carbene (Department of Chemistry, Graduate School of Science and Engineering, Saitama Univ.) KANEKO, Misumi; SAITO, Masaichi
- 2A6-48 Synthesis, Structures and Reactions of N-Heterocyclic Carbene Adducts of Aluminum Trihalides (Department of Chemistry, Graduate School of Science and Engineering, Saitama Univ.) MATSUOKA, Ryota; SAITO, Masaichi
- 2A6-49 Ortho Magnesiation of a Boron-substituted Benzene: X-ray Crystal-lographic Analysis of Ortho Magnesiated Compound (Graduate School of Science, Hiroshima Univ.) KAWACHI, Atsushi; NAGAE, Saori; HARADA, Osamu: YAMAMOTO, Yohsuke

#### Monday, March 28, AM

#### Bioinorganic

Chair: FUNAHASHI, Yasuhiro (9:00 ∼10:00)

- \* 8:50-9:00: interval for laptop PC connection.(3A6-01, 3A6-03, 3A6-04, 3A6-06)
- 3A6-01\*†Construction of Zn-substituted Hemoprotein Assembly on Gold Electrode for Photocurrent Generation (Osaka Univ; Devision of Engineering) KAKIKURA, Yasuaki; ONODA, Akira; HAYASHI, Takashi 3A6-03\* Ratiometric Emission Change in Well-Defined Self-Assembling with

- Zinc Ion (Graduate School of Materials Science, Nara Institute of Science and Technology) OGAWA, Takuya; YUASA, Junpei; KAWAI, Tsuyoshi
- **3A6-04\*** Catalytic Four-Electron Reduction of O2 with Copper Complexes and the Catalytic Mechanism (Osaka Univ.; Ewha Womans Univ.; Johns Hopkins Univ.) KOTANI, Hiroaki; TAHSINI, Laleh; KARLIN, Kennth D.; FUKUZUMI, Shunichi
- 3A6-06<sup>†</sup> Synthesis and Reactions of [1:3] Site-differentiated [4Fe-4S] Cluster Carrying a Hydrosulfide and a Tridentate Thiolate Ligand (Grad. Sch. Sci. and Res. Ctr. Mat. Sci, Nagoya Univ.) TERADA, Tamaki; MATSUMOTO, Tsuyoshi; TATSUMI, Kazuyuki

Chair: MATSUMOTO, Tsuvoshi (10:10~11:10)

- \* 10:00-10:10: interval for laptop PC connection.(3A6-08, 3A6-09, 3A6-10, 3A6-12)
- 3A6-08 Synthesis of a Tetranuclear Copper Complex as an Active Site Model of Nitrous Oxide Reductase (Nagoya Institute of Technology) KINOSHITA Wataru; NAGATA, Kojiro; FUKUI, Masato; WASADA-TSUTSUI, Yuko; INOMATA, Tomohiko; OZAWA, Tomohiro; FUNAHASHI, Yasuhiro; MASUDA, Hideki
- 3A6-09 Coordination Property of Model Compopunds of Copper Active Site of PHM (Osaka Univ.) OKUBO, Yuri; SUGIMOTO, Hideki; FUJIEDA, Nobutaka; ITOH, Shinobu
- 3A6-10\* Investigation of Superoxide Reduction Mechanism in NiSOD Using Ni(II) Complexes with N<sub>2</sub>S<sub>2</sub>- Type Square Planar Structure (Graduate Scool of Frontier Materials, Nagoya Institute of Technology) NAKANE, Daisuke; FUNAHASHI, Yasuhiro; OZAWA, Tomohiro; MASUDA, Hideki
- $\begin{array}{lll} \textbf{3A6-12}^* \ \ \text{Vitamin} \ \ B_{12} \ \ \text{catalysed} \ \ \text{Arsenic Detoxification} \ \ \text{Reaction} \ \ \text{(Nippon Sheet Glass Co.Ltd)} \ \ \text{NAKAMURA, Koichiro} \end{array}$

Chair: SUGIMOTO, Hideki (11:20~11:50)

- \* 11:10-11:20: interval for laptop PC connection.(3A6-15, 3A6-16)
- 3A6-15 Linkage between an [Fe<sub>4</sub>S<sub>4</sub>] Cluster and a Mono-nuclear Iron Complex by a Thiolate-bridge (Grad. Sch. Sci., RCMS, Nagoya Univ.) TANIFUJI, Kazuki; OHKI, Yasuhiro; TATSUMI, Kazuyuki
- **3A6-16\*** Preparation of Proteins HavingIron Carbonyl Cluster Directed to Hydrogenase Model and Catalytic Activity of Hydrogen Evolutionin Complete Aqueous Media (Graduate School of Engineering, Osaka Univ.) SANO, Yohei; ONODA, Akira; HAYASHI, Takashi

# Asian International Symposium -Coordination Chemistry, Organo-metallic Chemistry-

Monday, March 28, PM

Chair: ITOH, Shinobu  $(13:00{\sim}14:00)$ 

- **3A6-25\* Invited Lecture** Structure and function of the iron-guanylyl-pyridinol (FeGP) cofactor of [Fe]-hydrogenase (Max-Planck-Institute for Terrestrial Microbiology, Germany; JST PRESTO) SHIMA, Seigo (13:00 ~13:20)
- 3A6-27<sup>#</sup> Invited Lecture Water oxidation by mononuclear ruthenium (II) monoaquo complexes: activity controls by stoichiometric photoisomerization (Niigata Univ.; JST PRESTO) YAGI, Masayuki (13:20∼13:40)
- 3A6-29<sup>#</sup> Invited Lecture O<sub>2</sub>-Activation on Di/Tricopper Complexes as Biomimetic Model Systems (Nagoya Institute of Technology; JST PRESTO) FUNAHASHI, Yasuhiro (13:40∼14:00)

Chair: TAKAHASHI, Tamotsu (14:00 $\sim$ 15:10)

- **3A6-31**<sup>#</sup> Keynote Lecture CuAAC click reaction and its application in functional coordination polymers assembly (Nat. Univ., Singapore) Shi-Oiang BAI (14:00∼14:30)
- **3A6-34<sup>#</sup> Invited Lecture** Chiral Ar-M Complexes Mediated Asymmetric Synthesis of Functionalized Chiral Phosphines (Nangyang Technological Univ., Singapore) Pak-Hing Leung (14:30∼14:50)
- 3A6-36<sup>#</sup> Invited Lecture Molecular motions with helicity inversion in chiral lanthenide(III) and cobalt complexes (Osaka City Univ.) Janusz Gregolinski (14:50∼15:10)

Chair: OSAKADA, Kohtaro (15:10~16:30)

- 3A6-38<sup>#</sup> Keynote Lecture Biomimetic applications of functional porphyrin derivatives (Yonsei Univ., Korea) Woo-Dong Jang (15:10∼15:40)
- **3A6-41**<sup>#</sup> Keynote Lecture Emerging Horizons of Functionalized N-heterocyclic Carbenes: Catalysis and Beyond (Indian Institute of Technology Bombay, India) Prasenjit Ghosh (15:40∼16:10)
- **3A6-44<sup>#</sup> Invited Lecture** Coupling of Cp Ligand with Diene Moiety of Titanacyclopentadienes (Hokkaido Univ.) Zhiyi Song (16:10∼16:30)

## Coordination Chemistry, Organometallic Chemistry

#### Tuesday, March 29, AM

#### Bioinorganic, Fe

Chair: HITOMI, Yutaka (9:00 ~10:00)

- \* 8:50-9:00: interval for laptop PC connection.(4A6-01, 4A6-02, 4A6-03, 4A6-04, 4A6-06)
- 4A6-01 Development of Novel Ratiometric Copper(I) Probes Based on Reduced Fluorescein Platform. (Kyoto Univ.) IYOSHI, Shohei; TAKI, Masayasu; YAMAMOTO, Yukio
- 4A6-02 Synthesis and Structure of a [8Fe-6S-O] Cluster Having an Oxygen Atom in the Cluster Core (Graduate School of Science and Research Center for Materials Science, Nagoya Univ.) OHTA, Shun; OHKI, Yasuhiro; TATSUMI, Kazuyuki
- 4A6-03 Synthesis and skeletal transformation of [6Fe-5S-3Fe] cluster having a trigonal-prismatic 6Fe core. (Graduate School of Science and Research Center for Materials Science, Nagoya Univ.) MIKI, Miku; OHKI, Yasuhiro; TATSUMI, Kazuyuki
- 4A6-04\* Hydrogen Tunneling Effect on Alkane Hydroxylation by High-valent Oxoiron Porphyrin Model Complexes (IMS.OIIB) CONG, Zhiqi; KURAHASHI, Takuya; FUJII, Hiroshi
- 4A6-06 A Reaction between a Distorted Non-heme Type Iron Complex and a Perbenzoic Acid (Nagoya Institute of Technology) INAGAKI, Yoshiyuki; INAZUMI, Takanori; WASADA-TSUTSUI, Yuko; KAJITA, Yuji; INOMATA, Tomohiko; OZAWA, Tomohiro; FUNAHASHI, Yasuhiro; MASUDA, Hideki

Chair: OKAMURA, Takaaki (10:10∼11:10)

- \* 10:00-10:10: interval for laptop PC connection.(4A6-08, 4A6-10, 4A6-11, 4A6-12)
- 4A6-08\* Vibrational spectroscopic study of oxygen activating functional heme models (Kyushu Univ., IMCE and I2CNER, JASRI/Spring-8, Kyoto Univ., Res. React. Inst.) OHTA, Takehiro; LIU, Jing-gang; NARUTA, Yoshinori; YODA, Yoshitaka; SAITO, Makina; KOBAYASHI, Yasuhiro; SETO, Makoto
- 4A6-10 Development of Fluorescent Probes Having a Metal Reaction Site for Reactive Oxygen Species Probes (Doshisha Univ.) TAKEYASU, Toshiyuki; HITOMI, Yutaka; FUNABIKI, Takuzo; KODERA, Masahito
- 4A6-11 Oxygenation of Toluene Derivatives by a Nonheme Oxoiron(IV) Complex Activated by Scandium Ion (Osaka Univ.) MORIMOTO, Yuma; KOTANI, Hiroaki; LEE, Yong-min; NAM, Wonwoo; FUKUZUMI, Shunichi
- 4A6-12\* Flavin-mediated extracellular electron transfer mechanism of electrogenic Shewanella bacteria (Univ. of Tokyo, JST/ERATO) OKAMOTO, Akihiro; NAKAMURA, Ryuhei; HASHIMOTO, Kazuhito

#### Bioinorganic

Chair: ITOH, Shinobu (11:20~12:20)

- \* 11:10-11:20: interval for laptop PC connection.(4A6-15, 4A6-17, 4A6-18, 4A6-20)
- 4A6-15\* Development of nanosheets and microtubes formed from amphiphilic Ru complexes and their properties. (Sojo univ.) ZAITSU, Yutaka; NOGUCHI, Kosuke; KUROIWA, Keita
- 4A6-17<sup>#</sup> Synthesis and Characterization of Iodosobenzene Adducts of Salen Manganese(IV) Complex as a Reactive Intermediate for Asymmetric Oxidation (SOKENDAI; OIIB; IMS) WANG, Chunlan; KURAHASHI, Takuya; FUJII, Hiroshi
- 4A6-18\* Mixed-Valence Property of Ligand Radicals from Manganese Salen Complexes (IMS; OIIB) KURAHASHI, Takuya; FUJII, Hiroshi
- 4A6-20 SOD Activities of Mononuclear Manganese Complexes (Doshisha Univ.) KASHIDA, Akihiro; HITOMI, Yutaka; FUNABIKI, Takuzo; KODERA, Masahito

#### Tuesday, March 29, PM

#### Bioinorganic

Chair: YOSHIZAWA, Kazunari (13:30~14:30)

- \* 13:20-13:30: interval for laptop PC connection.(4A6-28, 4A6-29, 4A6-30, 4A6-31, 4A6-32, 4A6-33)
- 4A6-28 Synthesis of dinuclear Mn(II) complexes having bulky O-donor ligands and their reactions with O<sub>2</sub> (School of Science and Research Center for Materials Science, Nagoya Univ.) KOGAWA, Yumiko; OHKI, Yasuhiro; TATSUMI. Kazuvuki
- 4A6-29 The Influence of the Number of NHS Hydrogen Bonds and Substituents on Molybdoenzyme Models (Grad. Sch. Sci., Osaka Univ.) USHIJIMA, Yasuhito; HASENAKA, Yuki; OKAMURA, Taka-aki; ONITSUKA, Kiyotaka
- **4A6-30** Synthesis of a Siloxy-Bridged Dicubane Cluster from [MoFe<sub>3</sub>S<sub>4</sub>] Cubane Clusters Carrying an O,N,N-Tridentate Ligand (Graduate School of

- Science and Research Center for Materials Science, Nagoya Univ.) SENDA, Shunsuke; OHKI, Yasuhiro; TATSUMI, Kazuyuki
- 4A6-31 Synthesis of tri-nuclear [Mo-2Fe-4S] clusters and an asymmetric [Mo-5Fe-9S] cluster using half-sandwich molybdenum trisulfido complex as a precursor (Graduate School of Science and Research Center for Materials Science, Nagoya Univ.) MIYAZAKI, Kousuke; NAGASAWA, Takayuki; OHKI, Yasuhiro; TATSUMI, Kazuyuki
- 4A6-32 Synthesis and Properties of Tungustoenzyme Models Having Two Intramolecular NHS Hydrogen Bonds (Grad. Sch. Sci., Osaka Univ.) OMI, Yui; USHIJIMA, Yasuhito; OKAMURA, Taka-aki; ONITSUKA, Kiyotaka
- **4A6-33** Synthesis and Properties of Soluble Tungstoenzyme Model Complexes in Nonpolar Solvents (Grad. Sch. Sci., Osaka Univ.) HASENAKA, Yuki; KAMEDA, Naoki; OKAMURA, Taka-aki; ONITSUKA, Kiyotaka

### Room A7

Bldg. 7 7-34

#### Coordination Chemistry, Organometallic Chemistry

Saturday, March 26, AM

#### Group 11, 10

Chair: KOGA, Yuji  $(9:00\sim10:00)$ 

- \* 8:50-9:00: interval for laptop PC connection.(1A7-01, 1A7-02, 1A7-04, 1A7-05)
- 1A7-01 Synthesis and Characterization of Nonanuclear Copper Hydride Complexes Supported by Tetraphosphine Ligands (Nara Women's Univ.) NAKAMAE, Kanako; TABARA, Sanae; TAKEMURA, Yukie; KURE, Bunsho; NAKAJIMA, Takayuki; TANASE, Tomoaki
- 1A7-02\* Silver-Catalyzed Intramolecular Chloroamination of Allenes and Tandem Cyclization of 7-Amino-4-heptyn-1-ol Derivatives Leading to the Formation of Oxa-Aza Spirocycles (Kyoto Univ.) SAI, Masahiro; MATSUBARA, Seijiro
- 1A7-04<sup>#</sup> Synthesis of Bioorganometallic Gold(I) Complex Bearing Guanosine Moiety (Osaka Univ.) MENG, Xiangtai; MORIUCHI, Toshiyuki; HIRAO, Toshikazu
- 1A7-05\*† Synthesis and reactivity of six-membered hetero-nickelacycles by oxidative addition of cyclopropyl ketones and their derivatives to Ni(0) (Faculty of Engineering, Osaka Univ.) TAMAKI, Takashi; OGOSHI, Sensuke; OHASHI, Masato

#### Group 10

Chair: TANABE, Makoto (10:10 $\sim$ 11:10)

- \* 10:00-10:10: interval for laptop PC connection.(1A7-08, 1A7-09, 1A7-10, 1A7-11, 1A7-12, 1A7-13)
- **1A7-08** Reactions of dinuclear nickel(I) complexes bearing a bulky NHC ligand with aryl halides (Fukuoka Univ., Faculty of Science) YAMAMOTO, Hitomi; MIYAZAKI, Satosh; KOGA, Yuji; MATSUBARA, Kouki
- 1A7-09 Synthesis of Amido-Bridged Tri- and Tetranuclear Palladium Complexes with Linear Metal Arrangement (Graduate School of Science, Osaka Prefecture Univ.) HISAKAWA, Yoshinori; TAKEMOTO, Sin; MATSUZAKA, Hiroyuki
- 1A7-10 Synthesis of Amido-Bridged Multinuclear Complexes Using Di- and Tetraamido Platinum Complexes (Dept. Chem., Osaka Prefecture Univ.) OSHIMO, Masaki; HISAKAWA, Yoshinori; TAKEMOTO, Shin; MATSUZAKA, Hiroyuki
- 1A7-11 Alkylation Reaction of Tetrafluoroethylene. (School of Engineering, Osaka Univ.) KAMURA, Ryohei; KAMBARA, Tadashi; HATANAKA, Tsubasa; OHASHI, Masato; OGOSHI, Sensuke
- 1A7-12 Pd(0)-catalyzed reduction of tetrafluoroethylene with diethyl zinc. (School of Engineering, Osaka Univ.) DOI, Ryohei; KAMBARA, Tadashi; HATANAKA, Tsubasa; OHASHI, Masato; OGOSHI, Sensuke
- **1A7-13** Synthesis and structure of Palladium complex of 9-hydroxy-l-phenalenone-derived β-diketimine ligand. (Kochi Univ. Faculty of Science) NAGAYAMA, Kiyotaka; NAKANO, Keiji

Chair: KOMINE, Nobuyuki (11:20~12:20)

- \* 11:10-11:20: interval for laptop PC connection.(1A7-15, 1A7-16, 1A7-17, 1A7-18, 1A7-19, 1A7-20)
- 1A7-15 Preparation and Reactivity of Planar Hexagonal Multinuclear Complexes with Its Pd<sub>3</sub>Pt Core (Chem. Res. Lab., Tokyo Inst. of Tech.) YUMOTO, Ryouhei; TANABE, Makoto; OSAKADA, Kohtaro
- 1A7-16\* Preparation of Pd and Pt Complexes with Bridging Silylene Ligands and Their Reactivity towards Alkynes (Chem. Res. Lab., Tokyo Inst. of Tech.; Kyoto Univ.) JIANG, Jian; TANABE, Makoto; OSAKADA, Kohtaro; OHMURA, Toshimichi; SUGINOME, Michinori
- 1A7-17 Novel Multinuclear Palladium Complexes Derived from μ-silylene-dipalladium Complex with tolylsilanes (Graduate School of Science, Tohoku

- Univ.) INAGAWA, Yuichiro; ISHIDA, Shintaro; KIRA, Mitsuo; IWAMOTO. Takeaki
- **1A7–18** Evaluation of  $\Delta$   $\Delta$  G of the Oxidative Addition of Benzoyl Halides to Palladium(0) Utilizing Ligand Exchange Reaction (Graduate School of Engineering, Osaka Univ.) SANAGAWA, Atsushi; KUNIYASU, Hitoshi; IWASAKI, Takanori; KAMBE, Nobuaki
- 1A7-19 Palladium-catalyzed selective synthesis of terminal acetals from alkenes or dienes and pinacol (Faculty of Science, Nara Women's Univ.) YAMAMOTO, Mayumi; URA, Yasuyuki; KATAOKA, Yasutaka
- 1A7-20 Synthesis of new bulky phosphine ligand and its application to immobilized complex catalyst (AIST; Coll. Sci., Ibaraki Univ.) IITSUKA, Ayumi; FUKAYA, Norihisa; ORIYAMA, Takeshi; YASUDA, Hiroyuki

#### Saturday, March 26, PM

#### Group 10

Chair: URA, Yasuyuki (14:20~15:20)

- \* 14:10-14:20: interval for laptop PC connection.(1A7-33, 1A7-34, 1A7-35, 1A7-36, 1A7-37, 1A7-38)
- 1A7-33 Synthesis and Reactivities of Dinuclear Palladium Complexes with New NPPN Tetradentate Ligands Derived from Diphosphines (Nara Women's Univ.) TSUJI, Minori; HAMADA, Naoko; KURE, Bunsho; NAKAJIMA, Takayuki; TANASE, Tomoaki
- **1A7–34** Multinuclear Palladium Sandwich Complexes of Naphthalene or Anthracene (Graduate School of Engineering, Osaka Univ., PRESTO-JST) TAKASE, Kohei; MURAHASHI, Tetsuro; OGOSHI, Sensuke
- 1A7-35 Synthesis and Intramolecular sp³ C-H Bond Cleavage Reaction of Bis (2,6-dimethylbenzenethiolato)palladium(II) Complexes (Tokyo Univ. of A & T) HARA, Yusuke; KOMINE, Nobuyuki; HIRANO, Masafumi; KOMIYA, Sanshiro
- 1A7-36 C-H Bond Cleavage of Thiophenes by Arylpalladium Acetate Complexes (Institute for Chemical Research, Kyoto Univ.) NAKAMURA, Yuki; WANG, Qifeng; TAKITA, Ryo; WAKIOKA, Masayuki; OZAWA, Fumiyuki
- 1A7-37 Interconnection between Arylpalladium Acetate and Herrmann Catalyst (Institute for Chemical Research, Kyoto Univ.) WAKIOKA, Masavuki: WANG. Oifeng: OZAWA, Fumivuki
- 1A7-38 Formation of (3-Oxobuthyl)thiolato-Bridged Complex by Reaction of Heterodinuclear Methyl Palladium Complex with Thiirane (Tokyo Univ. of A & T) TANAKA, Shin-ichi; TONOSAKI, Kiwamu; KOMINE, Nobuyuki; HIRANO, Masafumi; KOMIYA, Sanshiro

#### Group 10

Chair: NAKAMURA, Masaharu (15:30 $\sim$ 16:30)

- \* 15:20-15:30: interval for laptop PC connection.(1A7-40, 1A7-41, 1A7-42, 1A7-43, 1A7-45)
- 1A7-40 Synthesis and Reactivity of New Pincer-Type Palladium Complexes Containing Group 14 Element (Tokyo Institute of Technology) NAKAMURA, Shuhei; TAKAYA, Jun; IWASAWA, Nobuharu
- 1A7-41 Synthesis and Reactivity of Borylpalladium Complexes Bearing a PSiP-Pincer Type Ligand (Tokyo Institute of Technology) KIRAI, Naohiro; TAKAYA, Jun; IWASAWA, Nobuharu
- 1A7-42 Synthesis and Reactivity of Benzylpalladium Complexes Having an SNS Ligand with N-Heterocycles as Auxiliary Groups (Faculty of Science, Nara Women's Univ.) KAWADA, Yumi; URA, Yasuyuki; KATAOKA, Yasutaka
- 1A7-43\* Syntheses of C<sub>2</sub> Symmetric Chiral Bidentate NHC Ligands with o-Xylylene Framework and Their Complexes and its Application to Asymmetric Allylic Alkylation Reaction (Graduate School of Engineering, Yokohama National Univ.) ANEZAKI, Satoshi; YAMAGUCHI, Yoshitaka; ASAMI, Masatoshi
- 1A7-45 Synthesis and Reactivities of (Pt<sub>2</sub>PdHg) <sub>2</sub> Octanuclear Complexes Supported by Tridentate Phosphine Ligands (Nara Women's Univ.) HOSOKAWA, Aya; KURE, Bunsho; NAKAJIMA, Takayuki; TANASE, Tomoaki

Chair: ONITSUKA, Kiyotaka (16:40∼17:40)

- \* 16:30-16:40: interval for laptop PC connection.(1A7-47, 1A7-48, 1A7-49, 1A7-50, 1A7-51)
- 1A7-47 Reactivity of Cyclic Platinum Oligogermane Complexes (Chem. Res. Lab., Tokyo Inst. of Tech.) DEGUCHI, Takashi; TANABE, Makoto; OSAKADA, Kohtaro
- 1A7-48 Catalytic Polymerization and Metal Complexation via Dehydrocoupling Reaction of Hydrosilanes (Chem. Res. Lab, Tokyo Inst. of Tech.) TAKAHASHI, Atsushi; FUKUTA, Tomoko; TANABE, Makoto; OSKADA, Kohtaro
- **1A7-49** Synthesis and Photochemical Properties of NCN Pt(II)- and Pd(II)-Pincer Complex Bound to Norvalines (International Research Center for Elements Science, Institute for Chemical Research, Kyoto Univ.) SASANO, Daisuke; OGATA, Kazuki; YOKOI, Tomoya; ISOZAKI, Katsuhiro; SEIKE, Hirofumi; TAKAYA, Hikaru; NAKAMURA, Masaharu
- **1A7-50** Synthesis and Functions of NCN Pincer Transition-Metal-Bound Norvaline Peptides (International Research Center for Elements Science,

- Institute for Chemical Research, Kyoto Univ.) SASANO, Daisuke; OGATA, Kazuki; YOKOI, Tomoya; ISOZAKI, Katsuhiro; SEIKE, Hirofumi; TAKAYA, Hikaru; NAKAMURA, Masaharu
- 1A7-51\*† Development of Supramolecular Catalysts-Based on Self-Assembly of NCN Pincer Pd-Complex-Bound Norvalines (International Research Center for Elements Science, Institute for Chemical Research, Kyoto Univ.) OGATA, Kazuki; SASANO, Daisuke; YOKOI, Tomoya; ISOZAKI, Katsuhiro: SEIKE, Hirofumi: TAKAYA, Hikaru: NAKAMURA, Masaharu

#### Group 10, 9

Chair: YAMAGUCHI, Yoshitaka (17:50~18:50)

- \* 17:40-17:50: interval for laptop PC connection.(1A7-54, 1A7-55, 1A7-56, 1A7-57, 1A7-58)
- 1A7-54 Synthesis and optical property of NCN pincer Pt complex having amido moiety (Univ. of Tsukuba TIMS) CHOI, SEONG JIB; KUWABARA, Junpei; KANBARA, Takaki
- 1A7-55 Synthesis and Properties of Multinuclear Platinum-acetylide Complexes Bridged by Triarylborane Derivatives (Graduate School of Sciencee, Osaka Univ.; Graduate School of Sciencee, Osaka Prefecture Univ.) HIRAI, Ayumi; OKAMURA, Taka-aki; MATSUBARA, Hiroshi; ONITSUKA, Kiyotaka
- 1A7-56 Synthesis of hydrideplatinum complex utilizing formation of BH<sub>3</sub>-phosphine adduct (Grad. School of Sci., Hiroshima Univ.) OZAWA, Masanori; KUBO, Kazuyuki; MIZUTA, Tsutomu
- 1A7-57 Synthesis of Arylplatinum Phosphine Complexes and Their C-H Bond Cleavage Reactions of Arenes (Institute for Chemical Research, Kyoto Univ.) HIHARA, Yoshihiro; WAKIOKA, Masayuki; OZAWA, Fumiyuki
- 1A7-58\* Syntheses, Structures, and Proerties of Novel 4-Membered Aromatics Isolated inside Bowl-shaped Confined Spaces (The Univ. of Tokyo) MARUYAMA, Masashi; NAKAMURA, Eiichi; MATSUO, Yutaka

#### Sunday, March 27, AM

#### Group 9

Chair: HIRANO, Masafumi (9:00  $\sim$ 10:00)

- \* 8:50-9:00: interval for laptop PC connection.(2A7-01, 2A7-02, 2A7-03, 2A7-04, 2A7-05, 2A7-06)
- 2A7-01 Synthesis and Reaction of Isobenzothiophyne-Dicobalthexacarbonyl Complex (Tokyo Institute of Technology) SUGA, Takuya; TAKAYA, Jun; IWASAWA, Nobuharu
- 2A7-02 Catalytic Hydrofluorination of epoxides by Polynuclear Rhodium Complexes Bearing PNNP Ligand. (Tokyo Institute of Technology; Chemical Resources Laboratory) ASADA, Kanako; KOIKE, Takashi; AKITA, Munetaka
- 2A7-03 Intramolecular Hydroalkoxylation of Alkynols catalyzed by Dinuclear Rhodium Complex with PNNP Ligand (Chemical Resources Laboratory, Tokyo Institute of Technology) TONOYA, Masashi; KOIKE, Takashi; AKITA, Munetaka
- 2A7-04 Silylcarbonylation of propargyl derivatives catalyzed by polysiloxane gel which both rhodium and base are encapsulated (Institute for Materials Chemistry and Engineering, Kyushu Univ.) SUZUKAWA, Takayuki; MOTOYAMA, Yukihiro; NAGASHIMA, Hideo
- **2A7-05** Enantioselective Alkynylation of Ketones Catalyzed by Chiral Rhodium Complexes with Electronically Tuned Phebox Ligand (Osaka Univ.) TAKEUCHI, Yosuke; KAWABATA, Takahito; OHSHIMA, Takashi: MASHIMA, Kazushi
- 2A7-06 Synthesis and Reactivity of Bis(sulfonylamido)rhodium Complex with Pentamethylcyclopentadienyl Ligand (Tokyo Institute of Technology, Graduate school of Science and Engineering) MORI, Ayumi; KAYAKI, Yoshihito; IKARIYA, Takao

#### Sunday, March 27, PM

#### Group 9

Chair: KOIKE, Takashi (12:30~13:30)

- \* 12:20-12:30: interval for laptop PC connection.(2A7-22, 2A7-23, 2A7-24, 2A7-25, 2A7-26)
- 2A7-22 Desulfurization of Primary Thioamides at a Cp\*Rh Complexes (Faculty of Science and Engineering, Chuo Univ.) SAKIGAWARA, Masahiro; NIIYAMA, Ippei; MUTOH, Yuichiro; ISHII, Youichi
- 2A7-23 Syntheses of N,N'-Bis(arylsulfonyl) Substituted N-Heterocyclic Carbene Rhodium Complexes (Graduate School of Engineering, Tohoku Univ.; Environment Conservation Reseach Institute, Tohoku Univ.) SATO, Tetsuo; HIROSE, Yoichi; YOSHIOKA, Daisuke; TAKANO, Hisae; OI, Shuichi
- 2A7-24 Synthesis of Tridentate Ligands Containing Bent-Alkyne Moiety and Structure of Its Rhodium Complexes (Kyoto Univ.) OKAMOTO, Kazuhiro; OMOTO, Yusuke; OHE, Kouichi
- 2A7-25 Synthesis of chiral diamine ligands bearing binaphthyl backboneand its Coodination to Cp\*Ir fragments. (Tokyo Institute of Technology, Graduate School of Science and Engineering) KAWATA, Yuichi; KAYAKI, Yoshihito; IKARIYA, Takao
- 2A7-26\*† Oxidants-Accelerated Stereoselective Reductive Elimination from the

Iridium(III) Silyl Alkenyl Complexes (Department of Chemistry, Faculty of Science, Nara Women's Univ.) TSUBAKIMOTO, Aya; URA, Yasuyuki; KATAOKA, Yasutaka

Chair: INAGAKI, Akiko (13:40~14:40)

- \* 13:30-13:40: interval for laptop PC connection.(2A7-29, 2A7-30, 2A7-31, 2A7-32, 2A7-34)
- 2A7-29 Synthesis and Catalytic Properties of iridium Complexes Bearing a C-N chelate Oxime Ligand (Tokyo Institute of Technology, Graduate School of Science and Engineering) WATANABE, Megumi; KASHIWAME, Yohei; KUWATA, Shigeki; IKARIYA, Takao
- **2A7-30** Synthesis and Reactivity of Half-sandwich Iridium and Ruthenium Complexes Bearing a Hydrazone Ligand (Tokyo Institute of Technology, Graduate School of Science and Engineering) TAKAMI, Yoshie; KASHIWAME, Yohei; KUWATA, Shigeki; IKARIYA, Takao
- 2A7-31 Asymmetric autoinduction in asymmetric hydrogenation of quinoxalines catalyzed by iridium(III) complexes (Graduate School of Engineering Science, Osaka Univ.) IIMURO, Atsuhiro; NAGANO, Takuto; KITA, Yusuke; MASHIMA, Kazushi
- 2A7-32\* Mechanistic study of the asymmetric autoinduction in asymmetric hydrogenation of quinoxalines catalyzed by iridium(III) complexes (Graduate School of Engineering Science, Osaka Univ.) NAGANO, Takuto; IIMURO, Atsuhiro; KITA, Yusuke; MASHIMA, Kazushi
- 2A7-34 Kinetic and thermodynamic control of the metal-centered chirality of the iridium(III) silyl hydride complexes (Department of Chemistry, Faculty of Science, Nara Women's Univ.) KOTERA, Megumi; YAMAMOTO, Midori; URA, Yasuyuki; KATAOKA, Yasutaka

Chair: SUNADA, Yuusuke (14:50~15:50)

- \* 14:40-14:50: interval for laptop PC connection.(2A7-36, 2A7-37, 2A7-38, 2A7-39, 2A7-40, 2A7-41)
- 2A7-36# Kinetic Study on the Cyclometallation of 2-Phenylpyridine Derivatives with Benzoate-Ir(carbene)(cod) affording Bis(cyclometalated)Ir Complexe (Graduate School of Engineering Science, Osaka Univ.) CHOI, Gyeongshin; TSURUGI, Hayto; MASHIMA, Kazushi
- 2A7-37# Aromatic and Vinylic C-H Bond Activations by Carboxylate-Ir (carbene)(cod) and Reactivity of Bis(cyclometalated)iridium Complexes (Graduate School of Engineering Science, Osaka Univ.) CHOI, Gyeongshin; TSURUGI, Hayto; MASHIMA, Kazushi
- 2A7-38 Synthetic Studies of Cp\*Ir complexes bearing C-N chelate ligands by cyclometalation of aromatic amines (Tokyo Institute of Technology, Graduate School of Science and Engineering) SATO, Yasuhiro; KAYAKI, Yoshibito: IKARIYA Takao
- 2A7-39 Synthesis and Reactivities of Thiairidacycle Derived from Benzylthiols (Tokyo Institute of Technology, Graduate School of Science and Engineering) YAMAMOTO, Naoki; SATO, Yasuhiro; KAYAKI, Yoshihito; IKARIYA, Takao
- 2A7-40 Syntheses of Palladium-alkyl Complexes Containing Iridium Cyclometalated Unit as a Visible-light Sensitizer (Tokyo Institute of Technology; Chemical Resources Laboratory) YASU, Yusuke; INAGAKI, Akiko; AKITA, Munetaka
- 2A7-41<sup>†</sup> Syntheses of Metal Complexes Bearing UV-vis Light Harvesting Dendrimers and Their Palladium-Alkyl Adducts (Tokyo Institute of Technology; Chemical Resources Laboratory) NITADORI, Hiroyuki; INAGAKI, Akiko; AKITA, Munetaka

#### Group 9, 8

Chair: KAYAKI, Yoshihito (16:00 $\sim$ 17:00)

- \* 15:50-16:00: interval for laptop PC connection.(2A7-43, 2A7-44, 2A7-46, 2A7-47, 2A7-48)
- 2A7-43 Synthesis, Structures, and Reactivities of Dinuclear Iridium Complexes Supported by a Tetraphosphine Ligand Dpmppp. (Nara Women's Univ.) NODA, Sayo; KURAI, Sachi; KURE, Bunsho; NAKAJIMA, Takayuki; TANASE, Tomoaki
- 2A7-44\* Synthesis of Thiolato-Bridged Diiron and Diruthenium Complexes and Application to Catalytic Reduction of Hydrazine (School of Engineering, The Univ. of Tokyo) YUKI, Masahiro; MIYAKE, Yoshihiro; NISHIBAYASHI, Yoshiaki
- 2A7-46 New Heptanuclear Iron Carbonyl Cluster for Iron-catalyzed Hydrosilane Reduction of Carboxamides (Institute for Materials Chemistry and Engineering, Kyushu Univ.) TSUTSUMI, Hironori; SUNADA, Yusuke; NAGASHIMA. Hideo
- 2A7-47<sup>†</sup> Photochromism and Unique Electrochemical Reactivity of Mononuclear Complexes with Ethynyldithienylethene Ligand (Tokyo Institute of Technology, Chemical Resources Laboratory) LI, Huifang; KOIKE, Takashi; AKITA, Munetaka
- 2A7-48 Synthesis and Chromism of Organometallics Containing Dithienyl-phenathroline Moiety (Tokyo Institute of Technology, Chemical Resources Laboratory) UJIHARA, Teppei; KOIKE, Takashi; AKITA, Munetaka

#### Monday, March 28, AM

#### Group 8

Chair: OHKI, Yasuhiro  $(9:00\sim10:00)$ 

- \* 8:50-9:00: interval for laptop PC connection.(3A7-01, 3A7-02, 3A7-03, 3A7-04, 3A7-05, 3A7-06)
- **3A7-01** C=S Bond Cleavage Reaction of Isothiocyanate by a Transition Metal Complex (Osaka City Univ.) HAYASAKA, Kazumasa; KOTANI, Kengo; FUKUMOTO, Kouzo; NAKAZAWA, Hiroshi
- 3A7-02 C=S Bond Cleavage of Thioamide by an Iron Complex (Osaka City Univ.) SAKAI, Akane; FUKUMOTO, Kouzo; KOTANI, Kengo; NAKAZAWA, Hiroshi
- 3A7-03 Structures and functions of Iron complex supported by the asymmetric pyrrolidinyl amine ligand (Osaka City Univ.) OHNO, Yuki; MORIMOTO, Yoshiki; TACHI, Yoshimitsu
- **3A7-04** Synthesis of the iron hydride complexes having the linear tetraphosphine ligand (IIS, The Univ. of Tokyo) YASUDA, Ryoga; SEINO, Hidetake; MIZOBE, Yasushi
- 3A7-05 Synthesis of (η<sub>6</sub>-arene)Fe(IV) dihydride complexes and their arene exchange reaction (Institute for Materials Chemistry and Engineering, Graduate School of Engineering Sciences, Kyushu Univ...) SUNADA, Yusuke; IMAOKA, Tsuyoshi; NAGASHIMA, Hideo
- **3A7-06** Synthesis and Properties of Fe(I) Aryl and Alkyl Complexes Bearing aBis(phosphaethenyl)pyridine Ligand (Institute for Chemical Research, Kyoto Univ.) NAKAJIMA, Yumiko; OZAWA, Fumiyuki

Chair: MURAOKA, Takako (10:10~11:10)

- \* 10:00-10:10: interval for laptop PC connection.(3A7-08, 3A7-09, 3A7-10, 3A7-11, 3A7-12, 3A7-13)
- **3A7-08** Synthesis and Reactions of Iron Complexes Having Tridentate Bisaryloxide Ligands (Tokyo Tech.) HATANAKA, Tsubasa; KAWAGUCHI, Hiroyuki
- 3A7-09 Synthesis and Structures of Homoleptic Fe(I) and Fe(0) Complexes Bearing/N- Heterocyclic Carbenes (Graduate School of Science and Research Center for Materials Science, Nagoya Univ.) HOSHINO, Ryoko; HASHIMOTO, Takayoshi; HATANAKA, Tsubasa; OHKI, Yasuhiro; TATSUMI, Kazuyuki
- 3A7-10 The novel syntheses of iron complexes from diene-ironcomplexes (Kyushu Institute of Technology) SATA, Naoki; INADOME, Masato; KITAMURA, Mitsuru; OKAUCHI, Tatsuo
- **3A7-11** Syntheses and Properties of Binuclear Iron and Ruthenium Molecular Wires with a Porphyrin linker (Tokyo Institute of Technology; Chemical Resources Laboratory) FUKUDA, Keiko; MURAI, Masahito; KOIKE, Takashi; AKITA, Munetaka
- 3A7-12 Synthesis and assembly of porphyrin derivatives containing redoxactive Fe and Ru fragments. (Chemical Resources Laboratory, Tokyo Institute of Technology) MURAI, Masahito; TANAKA, Yuya; KOIKE, Takashi; AKITA, Munetaka
- 3A7-13<sup>#</sup> Ferrocene-containing [2]rotaxanes synthesized by azide-alkyne Huisgen cycloaddition of a terminal acetylene functionalized axle (Tokyo Inst. of Tech., Chem. Res. Lab.) YU, Gilbert; SUZAKI, Yuji; OSAKADA, Kohtaro

Chair: TAKEMOTO, Shin (11:20~12:20)

- \* 11:10-11:20: interval for laptop PC connection.(3A7-15, 3A7-16, 3A7-17, 3A7-18, 3A7-19, 3A7-20)
- 3A7-15 Synthesis of thiolato- and cathecolatogallyliron complexes from a dibutylgallyliron complex (Grad. Sch. Eng., Gunma Univ.) MURAOKA, Takako; MOTOHASHI, Hideaki; UENO, Keiji
- 3A7-16 Selective Synthesis of Cyclic and Linear Germoxanes Catalyzed by an Iron Complex (Osaka City Univ.) TADA, Ryosuke; KAMITANI, Masahiro; ITAZAKI, Masumi; NAKAZAWA, Hiroshi
- **3A7-17** Double Hydrophosphination of Alkyne Catalyzed by an Iron Complex. (Osaka City Univ.) TAMIYA, Chihiro; KAMITANI, Masahiro; ITAZAKI, Masumi; NAKAZAWA, Hiroshi
- 3A7-18 Intraannular Double Friedel-Crafts Acylation of Phosphametallocenes (Catalysis Research Center, Hokkaido Univ.; Aichi Univ. of Edu.) OGASAWARA, Masamichi; OGURA, Morihiko; WATANABE, Susumu; SAKAMOTO, Takeshi; ARAE, Sachie; NKAJIMA, Kiyohiko; TAKAHASHI, Tamotsu
- 3A7-19 Synthesis and Reactivities of Ruthenium Tellurocarbonyl Complexes with Isocyanide Ligands (Faculty of Science and Engineering, Chuo Univ.) KOZONO, Naoki; MUTOH, Yuichiro; ISHII, Youichi
- 3A7-20 Reversible Isomerization of Internal Alkyne-Disubstituted Vinylidene at an Indenylruthenium Complex (Faculty of Science and Engineering, Chuo Univ.) IMAI, Kohei; KIMURA, Yusuke; IKEDA, Yousuke; MUTOH, Yuichiro; ISHII, Youichi

#### Monday, March 28, PM

#### Group 8

Chair: TAKAO, Toshiro (13:30 $\sim$ 14:30)

\* 13:20-13:30: interval for laptop PC connection.(3A7-28, 3A7-29, 3A7-30,

- 3A7-31, 3A7-32, 3A7-33)
- 3A7-28 Theoretical studies on the structures and photoreactivities of palladium catalysts containing photosensitizing ruthenium(II) polypyridyl unit (Tokyo Institute of Technology, Chemical Resources Laboratory) MURATA, Kei; INAGAKI, Akiko; AKITA, Munetaka; COSTUAS, Karine; HALET, Jean-francois
- 3A7-29 Synthesis of Anionic Ruthenium Amido Complexes (Dept. Chem., Osaka Prefecuture Univ.) YUMOTO, Yoshihiro; TAKEMOTO, Shin; MATSUZAKA, Hiroyuki
- **3A7-30** Synthesis and Structures of Rutheinum Complexes Bearing a 2,6-Bis (phosphaethenyl)pyridine Ligand (Institute for Chemical Research, Kyoto Univ.) OKAMOTO, Yuki: NAKAJIMA, Yumiko: OZAWA, Fumivuki
- 3A7-31 Selective synthesis of normal-aldehydes and direct synthesis of normal-alcohols from 1-alkenes by rational design of Ru catalyst (The Univ. of Tokyo, Graduate School of Engineering) TAKAHASHI, Kohei; YAMASHITA, Makoto; NOZAKI, Kyouko; TANAKA, Yoshiyuki
- **3A7–32** Reactions of *N*-Containing Unsaturated Organic Molecules with Hydrosilane Catalyzed by Bis(silyl) Ruthenium Complexes (Graduate School of Science, Tohoku Univ.) ONO, Rikima; KOMURO, Takashi; TOBITA, Hiromi
- 3A7-33 Synthesis and electrochemical property of ruthenium(IV) hydride complex having two ferrocenylsilyl groups (Osaka City Univ.) SHIGESATO, Yuka; ISHII, Sho; ITAZAKI, Masumi; NAKAZAWA, Hiroshi

Chair: ARIKAWA, Yasuhiro (14:40~15:40)

- \* 14:30-14:40: interval for laptop PC connection.(3A7-35, 3A7-36, 3A7-38, 3A7-39, 3A7-40)
- **3A7-35** Synthesis and Functions of Ruthenium ONO Pincer Complex Tethered to Norvalines (International Research Center for Elements Science, Institute for Chemical Research, Kyoto Univ.) YOKOI, Tomoya; SASANO, Daisuke; OGATA, Kazuki; ISOZAKI, Katsuhiro; SEIKE, Hirofumi; TAKAYA, Hikaru; NAKAMURA, Masaharu
- 3A7-36\*† Dehydrogenation of Amine-boranes Catalyzed by Heterobimetallic Complexes Composed of Group VIII Metals and Group IV Metallocenes and Investigation of the Reaction Pathways (School of Engineering, The Univ. of Tokyo) MIYAZAKI, Takamasa; TANABE, Yoshiaki; YUKI, Masahiro; MIYAKE, Yoshihiro; NISHIBAYASHI, Yoshiaki
- **3A7–38** Reaction of Dinuclear Ruthenium Amido Complex [Cp\*Ru(m-NHPh)]2 with Zinc Reagents: Formation of Ru2Zn Clusters Containing Unbridged Ru-Zn Bonds (Dept. Chem., Osaka Prefecture Univ.) YOSHII, Kaname; TAKEMOTO, Shin; MATSUZAKA, Hiroyuki
- **3A7-39** Synthesis, Structure, and Reactivity of Dinuclear Ruthenium Imido Allene Complex (Department of Chemistry, Graduate School of Science, Osaka Prefecture Univ.) OHATA, Jun; TAKEMOTO, Shin; MATSUZAKA, Hiroyuki
- 3A7-40 Inter conversion of an μ <sub>3</sub>-(//)-alkyne ligand into a <sub>3</sub>-vinyl ligand on a triruthenium cluster (Graduate School of Science and Engineering, Tokyo Institute of Technology) TAHARA, Atsushi; TAKAO, Toshiro; SUZUKI, Hiroharu

Chair: KOCHI, Takuya (15:50∼16:50)

- \* 15:40-15:50: interval for laptop PC connection.(3A7-42, 3A7-43, 3A7-44, 3A7-45, 3A7-46)
- 3A7-42 Oxidative coupling of Ruthenium complexescontaining thiophene moieties leading to molecular wires. (Tokyo Institute of Technology, Chemical Resources Laboratory) IDEI, Hidekazu; JOHNO, Keita; MURAI, Masahito; TANAKA, Yuya; KOIKE, Takashi; AKITA, Munetaka
- **3A7-43** Syntheses and Reactivities of Mononitrosyl Dinuclear Ruthenium Complexes having Tp Ligands (Nagasaki Univ.) IKEDA, Ayumi; MATSUMOTO, Naoki; ARIKAWA, Yasuhiro; UMAKOSHI, Keisuke
- **3A7-44** Syntheses and Reactivity of Alkyl Ruthenium Complexes having a NO Ligand (Nagasaki Univ.) HAIGE, Ryohei; ARIKAWA, Yasuhiro; UMAKOSHI, Keisuke; ONISHI, Masayoshi
- **3A7-45** Study of intermediates for intramolecular sp<sup>3</sup>C-H bond cleavage of (2,6-dimethylphenoxo)ruthenium(II) complexes (Tokyo Univ. of A & T) YANAGISAWA, Yasuto; KOMINE, Nobuyuki; HIRANO, Masafumi; KOMIYA, Sanshiro
- 3A7-46\* Ruthenium-catalyzed transfer hydrogenation/cyclization of 1,6-diynes (Grad. Sch. of Eng., Nagoya Univ.) YAMASHITA, Ken; NAGASHIMA, Yuki; YAMAMOTO, Yoshihiko; NISHIYAMA, Hisao

Chair: YAMAMOTO, Yoshihiko (17:00 $\sim$ 18:00)

- \* 16:50-17:00: interval for laptop PC connection.(3A7-49, 3A7-50, 3A7-52, 3A7-53, 3A7-54)
- 3A7-49 Aerobic Oxidation of Sulfides Catalyzed by Cyclometallated Ru Complex (Univ. of Tsukuba TIMS; Tokyo Tech) TAKETOSHI, Ayako; KOIZUMI, Take-aki; KANBARA, Takaki
- 3A7-50\* Substituent Effects on Cleavage and Catalytic Functionalization of Aromatic C-N Bonds by Ruthenium Complexes (Keio Univ.) KOREEDA, Tetsuro; KOCHI, Takuya; KAKIUCHI, Fumitoshi
- 3A7-52 Cross Dimerization Reaction for Conjugated Dienes at Ruthenium(0) (Tokyo Univ. of A & T) INOUE, Haruka; KOMINE, Nobuyuki; HIRANO, Masafumi; KOMIYA, Sanshiro
- 3A7-53 Chemoselective Cross Dimerization between Conjugate Diene and

- Conjugate Carbonyl Compound by Ruthenium(0) Complex (Tokyo Univ. of A & T) ARAI, Yasutomo; KOMINE, Nobuyuki; HIRANO, Masafumi; KOMIYA, Sanshiro
- 3A7-54 Chemo-, Regio- and Diastereoselective Codimerization of Methyl Methacrylate with 2,5-Dihydrofuran Catalyzed by Ru(naphthalene)(1,5-COD) (Tokyo Univ. of A & T) YUKI, Hiroi; KOMINE, Nobuyuki; HIRANO, Masafumi; KOMIYA, Sanshiro

#### Tuesday, March 29, AM

#### Group 8

Chair: MIYAKE, Yoshihiro  $(9:00 \sim 10:00)$ 

- \* 8:50-9:00: interval for laptop PC connection.(4A7-01, 4A7-02, 4A7-03, 4A7-04, 4A7-05, 4A7-06)
- 4A7-01 Synthesis and Structure of Novel Stannylene-bridged Ru Complex (Department of Chemistry, Graduate School of Science and Engineering, Saitama Univ.; Department of Computational Science, Graduate School of System Informatics, Kobe Univ.; Institute for Molecular Science) KUWABARA, Takuya; SAITO, Masaichi; ISHIMURA, Kazuya; GUO, Jing-dong; NAGASE, Shigeru
- 4A7-02 Mechanism on Michael Reaction of Nitriles Catalyzed by Ruthenium Cyanocarbanion Complexes (Graduate School of Engineering Science, Osaka Univ) HIRAKO, Kenjiro; KOMIYA, Naruyoshi; NAOTA, Takeshi
- 4A7-03 Efficient linear codimerization of 2-norbornene with acrylates catalyzed by ruthenium chloride/zinc-copper couple (Faculty of Science, Nara Women's Univ.) URA, Yasuyuki; FUKUZAWA, Hiroko; HIRAI, Ayumi; KATAOKA, Yasutaka
- 4A7-04 Synthesises of Pd-acetate complexes containing a photosensitizing Ru (bisbipyridyl) unit and their reactivities on photocatalytic reductive dimerization of cinnamyl acetates. (Chemical Resource Laboratory, Tokyo Institute of Technology) MORITA, Masahiro; INAGAKI, Akiko; AKITA, Munetaka
- 4A7-05 Photocatalytic Coupling Reaction by Ni Complexes Combined with the Visible-Light Active Ru(II) Trisbipyridyl Complex (Chemical Resources Laboratory, Tokyo Institute of Technology) TAKIGUCHI, Shuhei; INAGAKI, Akiko; AKITA, Munetaka; OSAWA, Masahisa
- 4A7-06 The Synthesis and Properties of [Ru(bpy)<sub>3</sub>]<sup>2+</sup> Derivatives with Long Alkyl Chains (Chemical Resources Laboratory, Tokyo Institute of Technology) NISHIDA, Kazuhiro; KOIKE, Takashi; AKITA, Munetaka

#### Group 6

Chair: MURAOKA, Takako (10:10 $\sim$ 11:10)

- \* 10:00-10:10: interval for laptop PC connection.(4A7-08, 4A7-09, 4A7-10, 4A7-11, 4A7-12, 4A7-13)
- 4A7-08 Synthesis and Reactivity of Heterobimetallic Complexes Composed of Molybdenum and Zirconocene Moieties (School of Engineering, The Univ. of Tokyo) MIYAZAKI, Takamasa; TANABE, Yoshiaki; MIYAKE, Yoshihiro; NISHIBAYASHI, Yoshiaki
- 4A7-09 Catalytic Nitrogen Fixation under Mild Reaction Conditions: Synthesis and Substituent Effects of Dinuclear Molybenum Dinitrogen Complexes Bearing PNP-type Pincer Ligands (School of Engineering, The Univ. of Tokyo) KURIYAMA, Shogo; ARASHIBA, Kazuya; MIYAKE, Yoshihiro; NISHIBAYASHI, Yoshiaki
- 4A7-10 Synthesis, Structure, and Reactions of (Aminosilyl)tungsten Complexes Having a C-H Agostic Interaction (Faculty of Science and Graduate School of Science, Tohoku Univ.) FURUYAMA, Keisuke; KOMURO, Takashi: TOBITA. Hiromi
- 4A7-11 Controlled Radical Generation by Dinuclear Group 6 Metal Paddle-wheel Complexes and Their Application for Radical Coupling Reaction (Graduate School of Engineering Science, Osaka Univ.) SUGINO, Yoshitaka; TSURUGI, Hayato; MASHIMA, Kazushi
- 4A7-12 Synthesis of a New Hydrido(silylene)tungsten Complex and Its Reactionswith Unsaturated Compounds (Faculty of Science and Graduate School of Science, Tohoku Univ.) FUJII, Shunsuke; HASHIMOTO, Hisako; TOBITA, Hiromi
- 4A7-13 Synthesis, Structure, and Reactivity of an Acetylide-Germylene Tungsten Complex (Tohoku Univ., Graduate School of Science) ARAI, Yasuhiro; SUGANUMA, Kensei; KWON, Eunsang; SAKABA, Hiroyuki

#### Group 6,5

Chair: SHIMA, Takanori (11:20 $\sim$ 12:20)

- \* 11:10-11:20: interval for laptop PC connection.(4A7-15, 4A7-16, 4A7-17, 4A7-18, 4A7-19, 4A7-20)
- **4A7-15** Reducing Ability of a Ditantalum Aryloxide Complex via Reversible Intramolecular C-H Activation (Tokyo Tech.) KUROGI, Takashi; ISHIDA, Yutaka; KAWAGUCHI, Hiroyuki
- **4A7–16** Preparation and Unique Redox Behavior of Tantalum Complexes with α-Diimine Ligands (Graduate School of Engineering Science, Osaka Univ.) SAITO, Teruhiko; TSURUGI, Hayto; MASHIMA, Kazushi
- 4A7-17 Electron Transfer Reaction of High-valent Tantalum Complexes Supported by Redox-active α-Diimine Ligands (Graduate School of Engineering Science, Osaka Univ.) SAITO, Teruhiko; TSURUGI, Hayto; MASHIMA, Kazushi

- 4A7-18 Reduction of WCl6 by Bis(trimethylsilyl)cyclohexadiene Derivatives Giving Low-valent Tungsten Complexes (Graduate School of Engineering Science, Osaka Univ.) TANAHASHI, Hiromasa; TSURUGI, Hayato; MASHIMA, Kazushi
- 4A7-19 Catalytic reduction of hydrazines by MoIr<sub>3</sub>S<sub>4</sub> sulfido clusters having a catecholate ligand (IIS, The Univ. of Tokyo) MANAKA, Yuta; SEINO, Hidetake: MIZOBE, Yasushi
- 4A7-20 Synthesis of hydrazine bridged dimers of cubane-type TaIr<sub>3</sub>S<sub>4</sub> clusters (IIS, The Univ. of Tokyo) SHIBATA, Yusuke; SEINO, Hidetake; MIZOBE, Yasushi

#### Tuesday, March 29, PM

#### Group 4

Chair: SEINO, Hidetake (13:30~14:30)

- \* 13:20-13:30: interval for laptop PC connection.(4A7-28, 4A7-29, 4A7-30, 4A7-31, 4A7-33)
- 4A7-28 Synthesis of Imido-bridged Binuclear Titanium Complexes and Their Redox Reactivity (Graduate School of Engineering Science, Osaka Univ.) NAGAE, Haruki; TSURUGI, Hayato; MASHIMA, Kazushi
- 4A7-29\* Reaction of Titanacyclopentadienes with Amides (Catalysis Research Center, Hokkaido Univ.) LI, Haijun; SONG, Zhiyi; NAKAJIMA, Kiyohiko; TAKAHASHI, Tamotsu
- 4A7-30<sup>#</sup> Synthesis and Reactivity of Half-Sandwich Group 4 MetalPolyhydride Clusters (RIKEN) HU, Shaowei; SHIMA, Takanori; HOU, Zhaomin
- 4A7-31\* Olefin Polymerizations Catalyzed by Group 4 Metal Complexes with an [OSSO]-type Bis(phenolato) Ligand Bearing a Cyclooctane Ring (Saitama Univ.; RIKEN ASI) TODA, Tomoyuki; NAKATA, Norio; ISHII, Akihiko; MATSUO, Tsukasa; TAMAO, Kohei
- 4A7-33 Synthesis and 1-Hexene Polymerization of Zirconium(IV) Complexes with an [OSSO]-Type bis(phenolato) Ligand Bearing a trans-Cycloheptane Ring (Saitama Univ.) IKUMA, Keita; TODA, Tomoyuki; NAKATA, Norio: ISHII. Akihiko

#### Group 4, 3

Chair: NAKATA, Norio (14:40~15:40)

- \* 14:30-14:40: interval for laptop PC connection.(4A7-35, 4A7-36, 4A7-38, 4A7-39, 4A7-40)
- 4A7-35<sup>#</sup> Synthesis of Oligothiophene Derivatives via Zirconacyclopentadienes (Catalysis Research Center, Hokkaido Univ.) PAYRA, Debabrata; SONG, Zhiyi; KANNO, Ken-ichiro; TAKAHASHI, Tamotsu
- **4A7–36\*** Cross-Coupling Reaction of Heteroaromatic Compounds withUnsaturated Hydrocarbons Catalyzed by Group 4 Metal AlkylComplexes and its Reaction Mechanism (Graduate School of Engineering Science, Osaka Univ.) VAMAMOTO Koji: TSURLIGI Haveto: MASHIMA Kezushi
- Univ.) YAMAMOTO, Koji; TSURUGI, Hayato; MASHIMA, Kazushi 4A7-38# Reaction of titanacyclopentadienes with urea derivatives (Catalysis Research Center, Hokkaido Univ.; Aichi Univ. of Education.) SONG, Zhiyi; HSIEH, Yi-fang; NAKAJIMA, Kiyohiko; KANNO, Ken-ichiro; TAKAHASHI, Tamotsu
- **4A7-39**\* Boryl-Ligated Rare Earth Metal Dialkyl Complexes: Synthesis, Structure and Reactivity (RIKEN) LI, Shihui; CHENG, Jianhua; NISHIURA, Masayoshi; HOU, Zhaomin
- 4A7-40 Ligand Influences on the Structure and Property of Yttrium/ Molybdenum Polyhydride Clusters (RIKEN) SHIMA, Takanori; HOU, Zhaomin

#### Group 3

Chair: ISHIDA, Yutaka (15:50∼16:50)

- \* 15:40-15:50: interval for laptop PC connection.(4A7-42, 4A7-44, 4A7-46, 4A7-47)
- 4A7-42\*\* Synthesis and Structure of Rare Earth Polyhydride Complexes Bearing Amidinate Ligands (RIKEN) CHENG, Jianhua; WANG, Haiyu; NISHIURA, Masayoshi; HOU, Zhaomin
- 4A7-44\* C-H Bond Activation Assisted by Alkyl Complexes of Rare Earth Metal with Dianionic Diamido Ligands (Department of Chemistry, Graduate School of Engineering Science, Osaka Univ.) KANEKO, Hiroshi; TSURUGI, Havato: MASHIMA, Kazushi
- **4A7-46** Butadiene polymerization and copolymerization by half-sandwich rare earth metal catalysts. (RIKEN; Nihon Univ.) YAMAMOTO, Atsushi; NISHIURA, Masayoshi; WAKATSUKI, Yasuo; HOU, Zhaomin
- 4A7-47 Synthesis and reactivity of rare-earth/group 6 transition metal heteromultinuclear polyhydride complexes. (Riken) YANAGI, Takako; SHIMA, Takanori; HOU, Zhaomin

## Room B1

Bldg. 7 7-41

## Catalysts and Catalysis Saturday, March 26, AM Surface/Adsorption

Chair: TERAMURA, Kentaro (9:20  $\sim$ 10:10)

- \* 9:10-9:20: interval for laptop PC connection.(1B1-03, 1B1-04, 1B1-05, 1B1-06)
- 1B1-03 Influences of Crystal Faces on Charge Transfer from Photo Excited Dye to Anatase Titanium Oxide Nano Particles (Tokyo Ins. Tech; Dep. of Apply.Chem) TANAKA, Keita; MAITANI, Masato; MOCHIZUKI, Dai; WADA, Yuji
- 1B1-04 Effect of Adsorbates on Dye-sensitized Oxide Semiconductor Nanoparticles for Photocatalytic H2 Evolution (Tokyo Inst. Tech.; Grad. School of Sci. and Eng.) MAITANI, Masato; ZHAN, Conghong; HUANG, Chingchun; HU, Chi-chang; MOCHIZUKI, Dai; WADA, Yuji
- 1B1-05 Reactive Gold Species on Au/CeO2(111) Catalyst for Water-Gas Shift Reaction by Reflection - Absorption Infrared Spectroscopy (Osaka Univ., Tokyo Tech.) SAMATA, Mitsuhiko; NAYA, Kasumi; FUKUI, Ken-ichi

#### Structure/Physical Properties/Calculation

1B1-06\* Precursor Dependence on the Local structure of Rh/Al<sub>2</sub>O<sub>3</sub> catalysts by STM and XAFS (Osaka Univ.; ICU) CHEN, Zhiwen; MATSUOKA, Fumitake; CHUN, Wangjae; FUKUI, Ken-ichi

Chair: FUKUI, Kenichi (10:20~11:10)

- \* 10:10-10:20: interval for laptop PC connection.(1B1-09, 1B1-10, 1B1-12)
- 1B1-09 DFT study of the selective reaction mechanism for phenol synthesis catalyzed by a Re-Pt catalyst (Univ. of Tokyo; Institute of Molecular Science; Univ. of Electro-Communications) SASAKI, Takehiko; TADA, Mizuki; NAGAMATSU, Shinichi; WANG, Linsheng; SACHIN, Malwadkar; IWASAWA, Yasuhiro
- 1B1-10\* Synthesis of gamma-Ga<sub>2</sub>O<sub>3</sub>-Al<sub>2</sub>O<sub>3</sub> by Spray Pyrolysis Method (Kyoto Universiy, The Kansai Electric Power Company) WATANABE, Tsunenori; MIKI, Yoshihisa; KANAI, Hiroyoshi; INOUE, Masashi
- 1B1-12\* A theoretical study on behaviors of silver clusters inside a ZSM-5 cavity (Kyoto Institute of Technology and Okayama Univ.) YUMURA, Takashi; NANBA, Tomohiro; TORIGOE, Hiroe; KURODA, Yasushige; KOBAYASHI, Hisayoshi

Chair: SASAKI, Takehiko (11:20 $\sim$ 12:20)

- \* 11:10-11:20: interval for laptop PC connection.(1B1-15, 1B1-16, 1B1-17, 1B1-18, 1B1-19, 1B1-20)
- 1B1-15 Selective Bisphenol A Synthesis on a Layered Silicate Modified with Propyl Sulfonic Acid (Hiroshima Univ.) KAGAWA, Noriko; IDE, Yusuke; SADAKANE, Masahiro; SANO, Tsuneji
- 1B1-16 Study of support effect on formation process of metal nanoparticles (Graduate School of Engineering, Kyoto Univ.) NASU, Hiroaki; SHISHIDO, Tetsuya; TERAMURA, Kentaro; TANAKA, Tsunehiro
- 1B1-17 Preparation of mesoporous silica supported molybdenum carbide fine particle and their hydrogenation activity (Chiba Univ.) ISHIZAWA, Hideki; ICHIKUNI, Nobuyuki; HARA, Takayoshi; SHIMAZU, Shogo
- 1B1-18 In situ XAFS study on MEA Fuel cells: Structural aspect of Pt-Au/C in a CV process (The Univ. of Electro-Communications) NAGAMATSU, Shin-ichi; ARAI, Takashi; YAMAMOTO, Masakuni; OYANAGI, Hiroyuki; DAIMARU, Akimasa; ISHIZAKA, Takayuki; KAWANAMI, Hajime; URUGA, Tomoya; TADA, Mizuki; IWASAWA, Yasuhiro
- **1B1–19**\* In-situ XAFS and electrochemical studies on Pt/C, Pt<sub>3</sub>Co/C, Pt/C-SO<sub>3</sub>H, and Pt/graphene based cathode catalysts in PEM fuel cells during the ORR process (The Univ. of Electro-Communication; Institute for Molecular Science; Tokushima Univ; JASRI) SAMJESKE, Gabor; NAGAMATSU, Shin-ichi; ISHIGURO, Nozomu; SAIDA, Takahiro; MURATSUGU, Satoshi; YAMAMOTO, Sadaaki; YAMAMOTO, Takashi; URUGA, Tomoya; TADA, Mizuki; IWASAWA, Yashuhiro
- 1B1-20\* Dynamical LEED Analysis of Ni2P(0001)-1x1: A Model Structure for the Highly Active Ni2P Catalyst (Hokkaido Univ.; CRC) HERNANDEZ, Alvin; ARIGA, Hiroko; KINOSHITA, Kumiko; TAKAKUSAGI, Satoru; OTANI, Shigeki; OYAMA, Ted; ASAKURA, Kiyotaka

## Saturday, March 26, PM

#### Hydrogenation/Dehydrogenation

Chair: NAGAOKA, Katsutoshi (13:30∼14:30)

\* 13:20-13:30: interval for laptop PC connection.(1B1-28, 1B1-30, 1B1-32, 1B1-33)

- 1B1-28\* Propane Metathesis by Tandem Catalytic System (Kyoto Univ.; KUPRU) FURUKAWA, Shinya; SHISHIDO, Tetsuya; TERAMURA, Kentarou; TANAKA, Tsunehiro
- 1B1-30\* Highly Selective Deoxygenation of Amides Catalyzed by Hydroxya-patite-supported Au Nanoparticles (Osaka Univ.) MIKAMI, Yusuke; MATOBA, Kazushi; NOUJIMA, Akifumi; MITSUDOME, Takato; MIZUGAKI, Tomoo; JITSUKAWA, Koichiro; KANEDA, Kiyotomi
- 1B1-32 Selective Hydrogenolysis of Glycerol to 1,2-Propanediol Using Copper-Aluminium Catalyst (Osaka Univ.) MINAMI, Shigekazu; MITSUDOME, Takato; MIZUGAKI, Tomoo; JITSUKAWA, Koichiro; KANEDA, Kiyotomi
- 1B1-33 Development of Highly Selective Semihydrogenation Catalyst System Using Pd/SiO<sub>2</sub> with DMSO (Osaka Univ.) TAKAHASI, Yuusuke; HASIMOTO, Norifumi; MITSUDOME, Takato; MIZUGAKI, Tomoo; JITSUKAWA, Kouchirou; KANEDA, Kiyotomi

Chair: MOCHIZUKI, Dai (14:40~15:40)

- \* 14:30-14:40: interval for laptop PC connection.(1B1-35, 1B1-36, 1B1-37, 1B1-38, 1B1-39, 1B1-40)
- 1B1-35 Size Effect of Dendrimer-Encapsulated Subnano Pd Clusters on Catalytic Hydrogenation of Olefin (Osaka Univ.) MAENO, Zen; KIBATA, Takayuki; MITSUDOME, Takato; MIZUGAKI, Tomoo; JITSUKAWA, Koichiro; KANEDA, Kiyotomi
- 1B1-36 Hydrogen Production from Ammonia Borane in Methanol Using Pt Catalysts. (Osaka Prefecture Univ.) KITAMURA, Takuya; CHIKU, Masanobu; HIGUCHI, Eiji; INOUE, Hiroshi
- 1B1-37 Hydrogen Production from Ammonia Borane Using a Pd Black Catalyst (Osaka Prefecture Univ.) KAJIKAWA, Takeshi; CHIKU, Masanobu; HIGUCHI, Eiji; INOUE, Hiroshi
- 1B1-38 Hydrogenation of alkenes over gallium oxide (Graduate School of Engineering, Kyoto Univ.) KUNO, Hirotaka; SHISHIDO, Tetsuya; TERAMURA, Kentaro; TANAKA, Tsunehiro
- 1B1-39 Effect of carbon dioxide addition on propane dehydrogenation over supported Pt-Sn catalysts (Graduate School of Engineering, Kyoto Univ.) HINO, Yusuke; SHIMAMURA, Kenichi; SHISHIDO, Tetsuya; TERAMURA, Kentaro; TANAKA, Tsunehiro
- 1B1-40 Selective methanation of CO over nickel nanoparticles encapsulated in a hollow silica (Research Center for Solar Energy Chemistry, Osaka Univ.) MISAKA, Takuji; HARADA, Takashi; SUGITA, Tomohiko; IKEDA, Shigeru; MATSUMURA, Michio

Chair: MIZUGAKI, Tomoo (15:50 $\sim$ 16:50)

- \* 15:40-15:50: interval for laptop PC connection.(1B1-42, 1B1-43, 1B1-44, 1B1-45, 1B1-46, 1B1-47)
- 1B1-42 Methanol transformation reaction on fixed bed solid catalyst under microwave irradiation (Graduate School of Science and Engineering, Tokyo Institute of Technology) KUJIRAI, Hiroki; MOCHIZUKI, Dai; MAITANI, Masato; SUZUKI, Eiichi; WADA, Yuji; MAYAMA, Nobuo; TAJIMA, Kenji; FUJII, Satoshi
- 1B1-43 Catalytic Conversion of Methane to Benzene under Microwave Irradiation (Graduate School of Science and Engineering, Tokyo Institute of Technology) KIMISHIMA, Takuro; MOCHIZUKI, Dai; MAITANI, Masato; SUZUKI, Eiichi; WADA, Yuji; MAYAMA, Nobuo; TAJIMA, Kenji; FUJII, Satoshi; NOMOTO, Hiderou; HIGUCHI, Masakazu; INOUE, Shuji; TAKEGOSHI, Tetsuhito; KONO, Takumi
- 1B1-44 Hydrogenation of acetophenone over activated carbon-supported palladium catalysts in water (National Institute of Advanced Industrial Science and Technology (AIST)) HIYOSHI, Norihito; YAMAGUCHI, Aritomo; SATO, Osamu; SHIRAI, Masayuki
- 1B1-45 Total hydrogenation of furan derivatives over silica-supported Ni-Pd alloy catalyst (Tohoku Univ.) NAKAZAWA, Hiroya; NAKAGAWA, Yoshinao; TOMISHIGE, Keiichi
- 1B1-46 Silver-based Nanoparticles-Catalyzed Hydrolyic Dehydrogenation of Ammonia Borane for Chemical Hydrogen Storage (Toyama N.C.T.) TSUMORI, Nobuko; KAKUMA, Keiko; YAMASHITA, Naho; XU, Qiang
- 1B1-47 Influence of CeO<sub>2</sub> support on catalytic behavior of Ru catalysts for ammonia decomposition (Oita Univ. Faculty of engineering) HONDA, Kyoko; KAWAGOE, Takafumi; KAWANO, Manami; SATO, Katsutoshi; NISHIGUCHI, Hirovasu: TAKITA, Yusaku: NAGAOKA, Katsutoshi

Chair: HIYOSHI, Norihito (17:00~17:50)

- \* 16:50-17:00: interval for laptop PC connection.(1B1-49, 1B1-50, 1B1-51, 1B1-52, 1B1-53)
- 1B1-49 Effect of Re addition upon the hydrogen production reaction from aqueous alcohol solution by titania supported Ir, Rh, Pt catalysts (Kanagawa Univ.) ITO, Tetsu; NOZAWA, Toshiaki; YOSHIDA, Akihiro; NAITO, Shuichi
- 1B1-50 Role of Re in the titania supported Ir and Rh catalysts for the aqueousphase reforming reaction of ethanol (Kanagawa Univ.) NOZAWA, Toshiaki; ITO, Tetsu; YOSHIDA, Akihiro; NAITO, Shuichi
- 1B1-51 Preparation of amorphous silica-alumina with large pore size using gel skeletal reinforcement and its property for catalytic cracking (Mie Univ.) ISHIHARA, Atsushi; NAKAJIMA, Kohei; HASHIMOTO, Tadanori; NASU, Hiroyuki
- 1B1-52 Influence of ZrO<sub>2</sub> or SiO<sub>2</sub> addition to Ni/CeO<sub>2</sub> for triggering oxidative

- reforming of n-C<sub>4</sub>H<sub>10</sub> at room temperature. (Oita Univ. Faculty of engineering) KAWANO, Kousuke; ADACHI, Kohei; SATO, Katsutoshi; MIYAZAKI, Tatsuro; MICHIAKE, Yoshiyuki; NISIGUTI, Hiroyasu; TAKITA, Yusaku; NAGAOKA, Katsutoshi
- 1B1-53 Steam reforming of tar from pyrolysis of biomass over Ni/Mg/Al catalysts prepared from hydrotalcite-like precursors (Tohoku Univ.) ISHIKAWA, Chiaki; LI, Dalin; NAKAGAWA, Yoshinao; TOMISHIGE, Kejichi

## Sunday, March 27, AM

#### Oxidation

Chair: ICHIKUNI, Nobuyuki  $(9:30\sim10:00)$ 

- \* 9:20-9:30: interval for laptop PC connection.(2B1-04, 2B1-05, 2B1-06)
- 2B1-04 Oxidation of amines and alkylarenes with molecular oxygen over various supported Ir catalysts (Kanagawa Univ.) AZEMOTO, Kazuki; IKEDA, Tsuyoshi; YOSHIDA, Akihiro; NAITO, Shuichi
- 2B1-05 The promotion effect of SMSI on Ir/TiO<sub>2</sub> catalyst to the aerobic oxidation of alcohol (Kanagawa Univ.) IKEDA, Tsuyoshi; AZEMOTO, Kazuki; YOSHIDA, Akihiro; NAITO, Shuichi
- **2B1-06** Development of PdCl<sub>2</sub>-N,N-Dimethylacetamide(DMA) Catalyst System for Highly Regioselective Oxidation of Internal Olefins. (Osaka Univ.) YOSHIDA, Syuhei; MITSUDOME, Takato; MIZUGAKI, Tomoo; JITSUKAWA, Koichiro; KANEDA, Kiyotomi

Chair: NAKAGAWA, Yoshinao (10:10~11:10)

- \* 10:00-10:10: interval for laptop PC connection.(2B1-08, 2B1-10, 2B1-12)
- 2B1-08\*† Theoretical Study on the Production of Hydrogen Peroxide in the Anthraquinone Process (IMCE Kyushu Univ.) NISHIMI, Tomonori; KAMACHI, Takashi; KATO, Kenji; KATO, Tomio; YOSHIZAWA, Kazunari
- 2B1-10\*\* Oxidative cleavage of isoeugenol into vanillin catalyzed by metalloporphyrins immobilized on lithium taeniolite clay using molecular oxygen or hydrogen peroxide (Chiba Univ.) ADILINA, Indri Badria; HARA, Takayoshi; ICHIKUNI, Nobuyuki; SHIMAZU, Shogo
- 2B1-12\* Size-selective Oxidation by Flexible Heterogeneous Polyoxometalate Catalyst (School of Engineering, The Univ. of Tokyo; CREST; Advanced Materials Research Center, Nippon Shokubai Co., Ltd.) MIZUNO, Noritaka; UCHIDA, Sayaka; KAMATA, Keigo; ISHOMOTO, Ryo; NOJIMA, Susumu; YONEHARA, Koji; SUMIDA, Yasutaka

Chair: UCHIDA, Sayaka (11:20 $\sim$ 12:20)

- \* 11:10-11:20: interval for laptop PC connection.(2B1-15, 2B1-16, 2B1-17, 2B1-18, 2B1-20)
- 2B1-15 Highly Selective Oxidation of Primary Alcohols to Aldehydes Using Well-crystallized Hydrotalcite-supported Ru Catalyst (Osaka Univ.) SEKI, Takahiro; MITSUDOME, Takato; MIZUGAKI, Tomoo; JITSUKAWA, Koichiro; KANEDA, Kiyotomi
- 2B1-16 Effect of supports on the performance of heterogeneous Pd catalyst for direct synthesis of H<sub>2</sub>O<sub>2</sub> from H<sub>2</sub> and O<sub>2</sub> (Chemical Resources Laboratory, Tokyo Institute of Technology) YAMANO, Hitoshi; DEGUCHI, Takashi; IWAMOTO, Masakazu
- 2B1-17 Characterization of Co-modified Rh/MgO for the catalytic partial oxidation of methane using DRIFT (School of Engineering, Tohoku Univ.) HISADA, Yuji; KAINOU, Rie; SAKAI, Sigemasa; NAKAGAWA, Yoshinao; TOMISHIGE, Keiichi
- 2B1-18\*\* Sulfided metal nanoparticles for direct synthesis of phenol by hydroxylation of benzene with hydrogen and oxygen (The Univ. of Electro-Communications, Institute for Molecular Science) MALWADKAR, Sachin; TADA, Mizuki; NAGAMATSU, Shinichi; YAMAMOTO, Sadaaki; IWASAWA, Yasuhiro
- 2B1-20 Study on phenol synthesis from benzene with molecular oxygen on zeolite-supported Re-M cluster catalysts (M: Pt, Pd, etc.) (Univ. of Electro-Communications, Institute for Molecular Science, Univ. of Tokyo) WANG, Linsheng; TADA, Mizuki; SASAKI, Takehiko; NAGAMATSU, Shin-ichi; IWASAWA, Yasuhiro

## Sunday, March 27, PM

#### Catalyst Preperation

Chair: SADAKANE, Masahiro (13:30 $\sim$ 14:30)

- \* 13:20-13:30: interval for laptop PC connection.(2B1-28, 2B1-29, 2B1-30, 2B1-31, 2B1-32)
- 2B1-28 In situ generation of Pd nanoparticles using ion-exchange resins and application to the direct synthesis of hydrogen peroxide (Osaka Univ.) MORI, Kohsuke; HANAFUSA, Akihiro; YAMASHITA, Hiromi
- 2B1-29 Selective one-pot oxidation reaction using core-shell type Pd supported Ti-containing mesoporous silica catalyst. (Graduate School of Engineering, Osaka Univ.) OKADA, Shusuke; KAMEGAWA, Takashi; MORI, Kohsuke; YAMASHITA, Hiromi
- **2B1-30** The impregnation of Platinum/alumina using RotoSYNTH made by Milestone (School of Engineering, Tokyo Institute of Technology) CHONAN, Satoshi; MIZUSHIMA, Ryuji; NAKAMURA, Katsunori;

MOCHIZUKI, Dai; MAITANI, Masato; WADA, Yuji

- 2B1-31\* Selective Sulfide Oxidation Using O<sub>2</sub>/aldehyde System on Silica Supported Ru Complex (Institute for Molecular Science) MAITY, Niladri; WATTANAKIT, Chularat; YANG, Yong; MURATSUGU, Satoshi; TADA, Mizuki
- 2B1-32\* Radiochemical synthesis of bimetallic nanoparticle catalysts and their applications to fuel cells (Graduate School of Engineering, Osaka Univ.) SEINO, Satoshi; KAGEYAMA, Satoru; OHKUBO, Yuji; NAKAGAWA, Takashi; YAMAMOTO, Takao A.

#### Monday, March 28, AM

#### Acid/Base

Chair: YAMAGUCHI, Kazuya (9:40  $\sim$ 10:20)

- \* 9:30-9:40: interval for laptop PC connection.(3B1-05, 3B1-06, 3B1-08)
- 3B1-05 Synthesis of Isosorbide by Dehydration Reaction of Sorbitol in High-Temperature Liquid Water (National Institute of Advanced Industrial Science and Technology (AIST)) YAMAGUCHI, Aritomo; HIYOSHI, Norihito; SATO, Osamu; SHIRAI, Masayuki
- 3B1-06\*† Structure and acid property of the monolayer of niobium oxide over alumina (Graduate School of Engineering, Kyoto Univ.) KITANO, Tomoyuki; SHISHIDO, Tetsuya; TERAMURA, Kentaro; TANAKA, Tsunehiro
- 3B1-08 Structure and acid property of the monolayer of tantalum oxide over alumina (Graduate School of Engineering, Kyoto Univ.) OKAZAKI, Shota; KITANO, Tomoyuki; SHISHIDO, Tetsuya; TERAMURA, Kentaro; TANAKA, Tsunchiro

Chair: YAMAGUCHI, Aritomo (10:30∼11:10)

- \* 10:20-10:30: interval for laptop PC connection.(3B1-10, 3B1-11, 3B1-12, 3B1-13)
- **3B1-10** Sythesis and Catalytic Characterization of Free Acid of Polyoxometalates (Kochi Univ.) YAMASHITA, Keisuke; UEDA, Tadaharu
- 3B1-11 Catalytic property of Cs-Fe salts of dodecatungstophosphoric acid for acid-catalyzed reactions (Graduate School of Environmental Science, Hokkaido Univ.; Research faculty of Environmental Earth Science, Hokkaido Univ.) ANDO, Taku: SANO, Shogo: KAMIYA, Yuichi
- **3B1-12** Heterogeneously Catalyzed Efficient Hydration of Alkynes by Tin-Tungsten Mixed Oxides (School of Engineering, The Univ. of Tokyo) JIN, Xiongjie; OISHI, Takamichi; YAMAGUCHI, Kazuya; MIZUNO, Noritaka
- 3B1-13 Hydrothermal preparations of Sn-MCM-41 catalysts and their catalytic activities for Mukaiyama aldol reactions (Univ. of Japan Chemical; Japan Chemical Co.Ltd) IKEDA, Hikaru; SAITO, Masakazu; MATSUOKA, Masaya; ANPO, Masakazu

Chair: SHISHIDO, Tetsuya (11:20 $\sim$ 12:20)

- \* 11:10-11:20: interval for laptop PC connection.(3B1-15, 3B1-16, 3B1-17, 3B1-18, 3B1-19)
- 3B1-15 Doping Effect of Molybdenum Oxide on Pt/H-BEA Catalysts for n-Heptane Isomerization (Saitama Institute of Technology, Hokkaido Univ. of Education) KURAMOCHI, Kenta; KUMEDA, Hirotaka; NAIJO, Nobuaki; ARITANI, Hirofumi; MATSUHASHI, Hiromi
- 3B1-16 Highly Efficien Synthesis of Unsymmetrical Ethers from AlcoholsCatalyzed by Ti<sup>4+</sup>-Exchanged Montmorillonite (Osaka Univ.) MATSUNO, Tsuyoshi; MITSUDOME, Takato; MIZUGAKI, Tomoo; JITSUKAWA, Koichiro; KANEDA, Kiyotomi
- 3B1-17 Effect on Solid Acid Catalytic Properties by Electron Beam Irradiation (Hamamatsu Photonics K.K. Central Research Laboratory) YANAGISAWA, Yutaro; FUJITA, Katsuyoshi
- 3B1-18 Design of Ni-Zn mixed basic salt catalyst for chemical fixation of carbon dioxide into epoxide (Chiba Univ.) NAKAMURA, Yoshio; HARA, Takayoshi; ICHIKUNI, Nobuyuki; SHIMAZU, Shogo
- 3B1-19\* Tandem carboxylation-hydration reaction system from methanol, CO2 and benzonitrile to dimethyl carbonate and benzamide catalyzed by CeO2 (Graduate School of Engineering, Tohoku Univ.) HONDA, Masayoshi; KUNO, Shintaro; SONEHARA, Satoru; SUZUKI, Kimihito; HUJIMOTO, Ken-ichiro; NAKAGAWA, Yoshinao; TOMISHIGE, Keiichi

## Monday, March 28, PM

## Complexes/Organic Synthesis

Chair: YAMAGUCHI, Kazuya (13:30~14:40)

- \* 13:20-13:30: interval for laptop PC connection.(3B1-28, 3B1-29, 3B1-30, 3B1-31, 3B1-32, 3B1-33)
- 3B1-28 Improvements on the Insufficient Enantioselectivity in the Hydrogenation of Unsaturated Carboxyli acid on Cinchonine (CN)-Modified Pd/C (Univ. of Hyogo) NAKATSUJI, Makoto; SUGIMURA, Takashi
- **3B1-29** Mechanistic Study on the Difference between Aromatic and Aliphatic Substrates in Asymmetric Hydrogenation Catalyzed with Cinchonidine-Modified Pd/C (Univ. of Hyogo) TOMATSURI, Satoshi; SUGIMURA, Takashi
- **3B1-30** The nanoporous Pd-catalyzed Heck reaction (Graduate School of Sciencee, Tohoku Univ.; WPI-Advanced Institute for Materials Research,

- Tohoku Univ.; Institute for Materials Research, Tohoku Univ.) KANEKO, Tetsuro; ASAO, Naoki; YAMAMOTO, Yoshinori; CHEN, Mingwei; ZHANG, Wei: INOUE, Akihisa
- 3B1-31 Preparation of Biogenous Iron Oxide-Immobilized Pd Catalyst and Its Application to the Solvent-free Suzuki-Miyaura Coupling Reaction (Okayama Univ.) MANDAI, Kyoko; KORENAGA, Toshinobu; EMA, Tadashi; SAKAI, Takashi; FURUTANI, Mitsuaki; HASHIMOTO, Hideki; TAKADA Inn
- **3B1-32** Recovery and reuse of Pd nanoparticles generated in-situ (Osaka Institute of Technology) OHTAKA, Atsushi; KUROKI, Ryozo; TERATANI, Takuto; SHIMOMURA, Osamu; NOMURA, Ryoki
- 3B1-33\* Polyamine Dendrimer Encapsulating Subnano Pd Clusters as Nanor-eactors for Allylic Substitution Reaction (Osaka Univ.) KIBATA, Takayuki; MAENO, Zen; MITSUDOME, Takato; MIZUGAKI, Tomoo; JITSUKAWA, Koichiro; KANEDA, Kiyotomi

#### Chair: IMAOKA, Takane (14:50~15:50)

- \* 14:40-14:50: interval for laptop PC connection.(3B1-36, 3B1-37, 3B1-38, 3B1-39, 3B1-41)
- 3B1-36 1,3-Dipolar Cycloaddition of Azomethine Imines to Terminal Alkynes by a Supported Copper Hydroxide Catalyst (School of Engineering, The Univ. of Tokyo) YOSHIMURA, Kazuaki; OISHI, Takamichi; YAMAGUCHI, Kazuya; MIZUNO, Noritaka
- 3B1-37 N-Alkylation of Primary Amines and Ammonia with Alcohols by a Supported Copper Hydroxide Catalyst (School of Engineering, The Univ. of Tokyo) HE, Jinling; YAMAGUCHI, Kazuya; MIZUNO, Noritaka
- 3B1-38 1,3-Dipolar Cycloaddition of Azomethine Imines to Terminal Alkynes by a Dinuclear Copper Complex (School of Engineering, The Univ. of Tokyo) OISHI, Takamichi; YOSHIMURA, Kazuaki; YAMAGUCHI, Kazuya; MIZUNO, Noritaka
- 3B1-39\* Synthesis of Benzimidazole Derivatives Catalyzed by Cobalt Oxides and Hydroxides (Univ. of Tokyo) MURUGULLA, Adharvana Chari; D., Shobha; SASAKI, Takehiko
- 3B1-41 1,3-Isomerization of Allylic Alcohols by a Supported Vanadium Catalyst (Osaka Univ.) SUEOKA, Shoichiro; MATSUNO, Tsuyoshi; MITSUDOME, Takato; MIZUGAKI, Tomoo; JITSUKAWA, Koichiro; KANEDA, Kiyotomi

#### Chair: MIZUGAKI, Tomoo (16:00 $\sim$ 17:00)

- \* 15:50-16:00: interval for laptop PC connection.(3B1-43, 3B1-44, 3B1-46, 3B1-47, 3B1-48)
- 3B1-43 [Rh(OH)(cod)]<sub>2</sub> as a Catalyst Precursor for Olefin Isomerization (Tokyo Institute of Technology) NAKAYAMA, Kohei; MOTOKURA, Ken; MIYAJI, Akimitsu: BABA, Toshihide
- 3B1-44\* Ethylene hydroformylation with methanol over layered assembly of platinum and ceria nanoparticles (Osaka Univ.) YAMADA, Yusuke; SOMORJAI, Gabor; YANG, Peidong; FUKUZUMI, Shunichi
- 3B1-46 Transformation reactions of alkynes and alkenes through silyl group addition to multiple bond catalyzed by proton-exchanged montmorillonite. (Tokyo Institute of Technology) MATSUNAGA, Shigekazu; MOTOKURA, Ken; MIYAJI, Akimitsu; BABA, Toshihide
- **3B1-47** Characterizations and Catalytic reactions of Organo-Ruthenium Complexes Incorporated Within Various Supports (Department of Engineering, Osaka Prefecture Univ.) SAITO, Masakazu; WATANABE, Tetsuji; HOSOKAWA, Takuya; KAMEGAWA, Takashi; MATSUOKA, Masaya
- 3B1-48 Aerobic alcohol oxidation catalyzed by reusable nanoporous gold (Graduate School of Science, Tohoku Univ.; WPI-Advanced Institute for Materials Research, Tohoku Univ.; Institute for Materials Research, Tohoku Univ.) HATAKEYAMA, Naoya; MENGGEN, Bateer; ASAO, Naoki; YAMAMOTO, Yoshinori; CHEN, Mingwei; ZHANG, Wei; INOUE, Akihisa

#### Chair: MIYAJI, Akimitsu (17:10 $\sim$ 18:00)

- \* 17:00-17:10: interval for laptop PC connection.(3B1-50, 3B1-51, 3B1-52, 3B1-53, 3B1-54)
- 3B1-50 Oxygen reduction ability of dendrimer-templated platinum clusters (Chemical resources laboratory, Tokyo institute of technology.) OMURA, Saori; IMAOKA, Takane; CHUN, W.J.; YAMAMOTO, Kimihisa
- 3B1-51 Structure sensitive catalysis of copper oxide nanoparticles for ammonia borane hydrolysis (Osaka Univ.) YANO, Kentaro; YAMADA, Yusuke; FUKUZUMI, Shunichi
- 3B1-52 Photoluminescence Property of Platinum(II) Complex Anchored to Mesoporous Silicas and Application to the Photocatalytic Hydrogen Evolution. (Osaka Univ.) WATANABE, Kentaro; MORI, Kohsuke; YAMASHITA Hiromi
- 3B1-53 Electrochemical Reduction of Hydrogen Peroxide with Iron Complexes and Application to a Fuel Cell of Hydrogen Peroxide (Osaka Univ.) YOSHIDA, Sho; YAMADA, Yusuke; FUKUZUMI, Shunichi
- 3B1-54 Effect of Molecular Sieves on Esterification Under Microwave Irradiation (Osaka Prefecture Univ.) KUME, Hiroyuki; SATO, Masaaki

## Room B2

Bldg. 7 7-43

## Biofunctional Chemistry ; Biotechnology Saturday, March 26, PM

### Biocatalyst

Chair: NAKAMURA, Kazuhiko (13:00 $\sim$ 14:00)

- \* 12:50-13:00: interval for laptop PC connection. (1B2-25, 1B2-26, 1B2-27, 1B2-28, 1B2-29, 1B2-30)
- 1B2-25 Synergistic Activation of Lipase by the Coating of Lipase Protein with the combination of Amino Acid and AlkylPEG Sulfate Ionic Liquid (Tottori Univ.) YAGI, Yusuke; YOSHIYAMA, Kazuhide; ABE, Yoshikazu; HAYASE, Shuichi; KAWATSURA, Motoi; ITOH, Toshiyuki
- 1B2-26 Lipase-mediated optical resolution of 2-methyl-2-nitorobut-3-en-1-ol (Tottori Univ., Yamaguchi Univ.) YAGI, Yusuke; MIYAHARA, Mizuki; NAKANO, Toshiki; HAYASE, Shuichi; KAWATSURA, Motoi; KAMIMURA, Akio; ITOH, Toshiyuki
- 1B2-27 Studies on the DKR reaction based on the use of solid acid and lipase-catalyzed reaction (Tottori Univ.) YAGI, Yusuke; SHIMOMURA, Kenichi; HAYASE, Shuichi; KAWATSURA, Motoi; KATADA, Naonobu; ITOH, Toshiyuki
- 1B2-28 Lipase-catalyzed Regioselective Acylation of Polyphenols (Konan Univ.) MIYAZAWA, Toshifumi; NISHIKAWA, Jun; DANJO, Hiroshi
- 182-29 The acetylation of terpens using Lipase-immobilized Nanofiber (Fac. Sci., Okayama Univ. of Sci.) HIRANO, Hirotaka; NAKANE, Koji; NAKAJIMA, Nobuyoshi; HAMADA, Hiroki
- 182-30 Synthetic Application of Double Mutant of Lipase (Okayama Univ.) EMA, Tadashi; NAKANO, Yasuko; YOSHIDA, Daiki; KORENAGA, Toshinobu; SAKAI, Takashi

#### Chair: ITOH, Toshiyuki (14:10~15:10)

- \* 14:00-14:10: interval for laptop PC connection.(1B2-32, 1B2-33, 1B2-34, 1B2-35, 1B2-36, 1B2-37)
- 1B2-32 Engineering the Promiscuous Racemase Activity of anArylmalonate Decarboxylase (Keio Univ., Department of Biosciences and Informatics) KOURIST, Robert; UEMURA, Daisuke; MIYAMOTO, Kenji
- **1B2-33** Improvement of the activity of Arylmalonate Decarboxylase by Structure-Guided directed evolution. (Keio Univ., Department of Biosciences and Informatics) MIYAUCHI, Yusuke; KOURIST, Robert; UEMURA, Daisuke; MIYAMOTO, Kenji
- 1B2-34 Photoinduced hydrogen evolution by hydrogenase and axial ligand mutated cytochrome c<sub>3</sub> (Department of Bioengineering, Tokyo Institute of Technology) HIROSE, Yo; KOBAYASHI, Eisuke; KAMACHI, Toshiaki; OKURA, Ichiro; ASAKURA, Noriyuki
- 1B2-35 Asymmetric Domino Reaction by an Esterase from Sulfolobus tokodaii Strain 7 (Dept. of Biosciences and informatics, Keio Univ.) KUMON, Takashi; WADA, Reina; KOURIST, Robert; UEMURA, Daisuke; MIYAMOTO, Kenji
- 182-36 Microbial asymmetric reduction of α-haloacetophenones: new screening methods and tandem incubation (Faculty of Pharmacy, Keio Univ.) TAKETOMI, Shohei; ASANO, Masayoshi; HIGASHI, Toshinori; SHOJI, Mitsuru; SUGAI, Takeshi
- 182-37 Glycosylation of Artepillin C from Brazilian Propolis (Fac. Sci., Okayama Univ. of Sci.) HAMADA, Hiroki; IMAI, Hiroya; SHIMODA, Kei

Chair: MIYAMOTO, Kenji (15:20~16:20)

- \* 15:10-15:20: interval for laptop PC connection.(1B2-39, 1B2-40, 1B2-41, 1B2-42, 1B2-43, 1B2-44)
- 182-39 Study on the catalytic activity of human antibody light chain to digest a DNA (I) (Applied chemistry, Oita Univ., Research Promotion Project, Oita Univ.) MORIGUCHI, Chihiro; HIROTA, Katsuki; TAKAMOTO, Mai; HONJO, Eijiro; HIFUMI, Emi; UDA, Taizo
- 182-40 Enzyme-Mediated Hydrolysis of 1,2-Diol Monotosylate Derivatives Bearing an Olefinic Group at the Terminus (Meisei Univ.) USUDA, Kazumasa; SUZUKI, Tsuguru; OKABE, Hirokazu; MATSUMOTO, Kazutsugu
- 1B2-41 Enzyme-Mediated Hydrolysis of 1,3- and 1,4-Diol Monotosylate Derivatives (Meisei Univ.) OKABE, Hirokazu; HASHIMOTO, Manabu; MATSUMOTO, Kazutsugu
- 1B2-42 The Use of Soluble Polymer for Scavenging Chiral Secondary Alcohols Derived from Enzymatic Reactions with Stereo-Inversion (Meisei Univ.) KATAOKA, Noriyuki; OKUDOMI, Masayuki; MATSUMOTO, Kazutsugu
- **1B2–43** Enzyme Immobilization by Using Polymer Containing Cationic Side Chains (Bioscience and Biotechnology, Tokyo Institute of Technology) INOUE, Mai; HASEGAWA, Chinatu; KAMACHI, Toshiaki; YASHIMA, Fiii
- 1B2-44 Simple Preparation of Optically Pure allylalcohol Using Ionic liquid

through Lipase Catalyzed Reaction. (Kagawa Univ.) TAKAGI, Yumiko; IRIE, Akiko; ITOH, Toshiyuki

#### Information

Chair: KAMACHI, Toshiaki (16:30~17:30)

- \* 16:20-16:30: interval for laptop PC connection.(1B2-46, 1B2-48, 1B2-50)
- 1B2-46\* Construction of a molecular logic gate based on DNA amplification coupled with cell-free translation (CLAS, Kitasato Univ.; IIS, The Univ. of Tokyo) NOJIMA, Takahiko; YAMAMOTO, Takatoki; KIMURA, Hiroshi; FUJII, Teruo
- **1B2–48\*** Antisense-induced guanine quadruplex formation (ISIR, Osaka Univ.) HAGIHARA, Masaki; NAKATANI, Kazuhiko
- 1B2-50\* Development of gene expression controllable ES cell lines (Department of Biotechnology and Life science, Tokyo Univ. of Agriculture and Technology) MATSUOKA, Hideaki; NOSHIRO, Yuuki; FUNABASHI, Hisakage; SAITO, Mikako

Chair: NOJIMA, Takahiko (17:40 $\sim$ 18:30)

- \* 17:30-17:40: interval for laptop PC connection.(1B2-53, 1B2-54, 1B2-55, 1B2-56, 1B2-57)
- 1B2-53 Global gene expression analysis in biological responses of the implantation of porous polymer scaffolds (Nat. Cer. Cardiovasc. Cent. Res. Inst.; Nat. Inst. Mat. Sci.) KAKINOKI, Sachiro; TAKEMURA, Taro; HANAGATA, Nobutaka; YAMAOKA, Tetsuji

#### Others

- 1B2-54 Development of the time-resolved CD system for detection of biomolecular dynamics (V) - Optimization of the Measurement Conditions and Combination with stopped-flow Technique (IMRAM Tohoku Univ.) MURAKAMI, Makoto; ARAKI, Yasuyuki; SAKAMOTO, Seiji; WADA, Takehiko
- 1B2-55 Inactivation of feline calicivirus using nanoparticles of copper compound (Tokyo Univ. Agri. Tech.) SHIONOIRI, Nozomi; SATOU, Tetsuya; FUJIMORI, Yoshie; NAKAYAMA, Tsuruo; SUNAGA, Yoshihiko; TANAKA, Tsuyoshi; MATSUNAGA, Tadashi
- 1B2-56 Development of luminescent lanthanide probesby a solid-phase combinatorial mothod (Graduate school of engineering, Osaka Univ..) NAKAMURA, Tatsuva: MIZUKAMI, Shin: KIKUCHI, Kazuva
- 1B2-57 Screening genes involved in biosynthesis of natural products at metagenomic library derived from marine sponge, Halichondria okadai (Univ.of Keio; Faculty of Science and technology) ABE, Takahiro; UEMURA, Masashi; OHNO, Osamu; AKIYAMA, Kiyotaka; NAITOH, Takayuki; UEMURA, Daisuke

### Sunday, March 27, AM

#### Sugar

Chair: TOTANI, Kiichiro (9:00  $\sim$ 10:00)

- \* 8:50-9:00: interval for laptop PC connection.(2B2-01, 2B2-02, 2B2-03, 2B2-04, 2B2-05, 2B2-06)
- 2B2-01 Construction and Structural Analysis of Neoglycolipid Library (Graduate school of life science, Hokkaido Univ.) ISHIDA, Junya; HINOU, Hiroshi; NISHIMURA, Shin-ichirou
- 2B2-02 Strategy for acceleration of the Amadori rearrangement to synthesize glycoprotein (Graduate School of Engineering, Tohoku Univ.) KOBAYASHI, Atsushi; KUMAGAI, Yushi; SHODA, Shin-ichiro
- **2B2-03** Synthesis of Oligosaccharide with Antibiotic Activity toward H. pylori by Enzymatic α-glucosaminidation Using DMT Derivative (Graduate School of Engineering, Tohoku Univ.) NOGUCHI, Masato; NAKAMURA, Miwa; TANAKA, Tomonari; KOBAYASHI, Atsushi; FUJITA, Masaya; TSUCHIDA, Akiko; MIZUNO, Mamoru; SHODA, Shin-ichiro
- 2B2-04 Synthetic study on dermatan sulfate disaccharide partial structure (Graduate School of Science and Engineering, Kagoshima Univ.) KAKITSUBATA, Yuhei; WAKAO, Masahiro; SUDA, Yasuo
- 2B2-05 Synthetic study on mucin-type sugar-chain core structures (Graduate School of Science and Engineering, Kagoshima Univ.) MIYAHARA, Tsukasa; WAKAO, Masahiro; SUDA, Yasuo
- 2B2-06 Synthesis of Interleukin 8 having N-glycan (JST, ERATO, Ito glycotrilogy PJ; Osaka Univ.) IZUMI, Masayuki; MAKIMURA, Yutaka; DEDOLA, Simone; ITO, Yukishige; KAJIHARA, Yasuhiro

Chair: EBARA, Yasuhito (10:10 $\sim$ 11:10)

- \* 10:00-10:10: interval for laptop PC connection.(2B2-08, 2B2-09, 2B2-10, 2B2-11, 2B2-12, 2B2-13)
- 2B2-08 Substrate specificity analysis of malectin and its influence on glucose trimming by ER glucosidase II (RIKEN ASI; ERATO JST) TAKEDA, Yoichi; TOTANI, Kiichiro; MATSUO, Ichiro; ITO, Yukishige
- 2B2-09 Synthetic Study of heparin sulfate partial disaccharide structure containing glucuronic acid (Graduate School of Science and Engineering, Kagoshima Univ.) MATSUYAMA, Nao; SAITO, Akihiro; WAKAO, Masahiro; SUDA, Yasuo

- 2B2-10 Syntheis of heparan sulfate partial disaccharide structures containing iduronic acid and their application to Sugar Chips (Graduate School of Science and Engineering, Kagoshima Univ.) HARUYAMA, Mami; SAITO, Akihiro; YOKOYAMA, Risa; WAKAO, Masahiro; SUDA, Yasuo
- 2B2-11 Evaluation of Aging-related Diseases by N-linked Glycan Profiles (Department of Materials and Life Science, SEIKEI Univ.) TADA, Miho; ITO, Yukishige; TOTANI, Kiichiro
- **2B2–12** Reconstruction and its application of glycan processing in the endoplasmic reticulum under type II diabetes. (Department of Materials and Life Science. Seikei Univ.) IWAMOTO, Shogo; ITO, Yukishige; TOTANI, Kiichiro
- 2B2-13 Analysis of glycans related to metastasis of tumor cells by saccharide primer method. (Keio Univ.) KONNO, Yusuke; FURUICHI, Yu; SATO, Toshinori

Chair: SUDA, Yasuo (11:20~12:20)

- \* 11:10-11:20: interval for laptop PC connection.(2B2-15, 2B2-16, 2B2-17, 2B2-19)
- 2B2-15 Analyses of glycans related to infection mechanism of hepatitis C virus using saccharide primer method (Keio Univ.) KATANO, Naoya; SUZUKI, Tetsuro; SATO, Toshinori
- 2B2-16 Comparative analysis of glycosphingolipids in human induced pluripotent stem (iPS) cells (Keio Univ.; Natl. Res. Inst. for Child Health and Dev.) OJIMA, Takuma; TOYODA, Masashi; NAKAJIMA, Hideki; INOUE, Mayu; KIYOKAWA, Nobutaka; FUJIMOTO, Junichiro; UMEZAWA, Akihiro; SATO, Toshinori
- 2B2-17\* Sialyllactose modified DNA as a Inhibitor of Influenza Hemagglutinin (Kobe Univ. Human Dev.) EBARA, Yasuhito; KAIHATSU, Kunihiro; KATO, Nobuo
- 2B2-19\*† Development of novel cyclic suicide substrate against sialidase (Graduate School of Life Science, Hokkaido Univ.) KAI, Hirokazu; HINOU, Hiroshi; NISHIMURA, Shin-ichiro

### Sunday, March 27, PM

## Sugar

Chair: SATO, Toshinori (13:30~14:30)

- \* 13:20-13:30: interval for laptop PC connection.(2B2-28, 2B2-29, 2B2-30, 2B2-31, 2B2-32, 2B2-33)
- **2B2–28** Property of Glycan-processing Enzymes under Extracellular Matrix Condition (Department of Materials and Life Science, SEIKEI Univ.) NAKAMURA, Mayumi; USHIDA, Kiminori; TOTANI, Kiichiro
- 2B2-29 ER Glycan Processing under Molecular Crowding Conditions (Department of Materials and Life Science, SEIKEI Univ.; RIKEN Advanced Science Institute) MATSUSHIMA, Hikaru; ITO, Yukishige; TOTANI, Kiichiro
- 2B2-30 Paper mache glycomimetics made of 4-glycosyloxy-2-oxa-butyl module (Tokyo Institute of Technology, School of Bioscience and Biotechnology) KAWADA, Yuki; YANG, Li-ying; KUBOTA, Daijirou; YUASA, Hideya
- 2B2-31 Synthesis of sugar-lanthanide nanoparticles emitting upconversion luminescence by NIR excitation (Tokyo Institute of Technology, Graduate School of Bioscience and Biotechnology) WATASE, Hiroya; KOBAYASHI, Takuya; LIU, Yu; YUASA, Hideya
- 2B2-32 Hinge-Sugar-Based Motional Lectin Sensor (Graduate School of Bioscience and Biotechnology, Tokyo Institute of Technology) NAKAJIMA, Shinnosuke; OKUMA, Shintaro; YUASA, Hideya
- 2B2-33 Application of fluorescence quenching detection of lectin based on photoluminescent silole-core carbosilane dendrimer (Saitama Univ.) SUZUKI, Yudai; SAEKI, Hitoshi; MUTO, Katsuya; OTSUKA, Shinji; KOYAMA, Tetsuo; MATSUOKA, Koji; HATANO, Ken

Chair: MATSUOKA, Koji (14:40 $\sim$ 15:40)

- \* 14:30-14:40: interval for laptop PC connection.(2B2-35, 2B2-36, 2B2-37, 2B2-38, 2B2-39, 2B2-40)
- 2B2-35 Analyses on Carbohydrate Recognition Using Biotinyl Sugar-Peptide Conjugates (Keio Univ.) OKUMURA, Eriko; SATO, Toshinori
- 2B2-36 Control of the biological function by the Glyco-Dendrimer (Kyushu Univ.) SUGIMOTO, Masashi; FUKUDA, Tomohiro; MATSUMOTO, Erino: HOSHINO, Yu; MIURA, Yoshiko
- 2B2-37 Interaction Analysis of Calreticulin, a Lectin-likeMolecular Chaperone, Based on Thermal Shift Assay (Department of Materials and Life Science, Seikei Univ.) ADACHI, Yuka; ITO, Yukishige; TOTANI, Kiichiro
- 2B2-38 Analysis of adhesion function of marine bacteria V.harveyi to ganglioside GM3 having different fatty acids (Keio Univ.) FUKUDA, Ryoto; MATSUNAGA, Naoyuki; ITO, Makoto; MATSUBARA, Teruhiko; SATO, Toshinori
- 2B2-39 Analysis of Mechanism on Amyloid Beta Assembly Using GM1-containing LipidMembranes (Keio Univ.) KOJIMA, Takahiro; IIJIMA, Kazutoshi; MATSUBARA, Teruhiko; YAMAMOTO, Naoki; YANAGISAWA, Katsuhiko; SATO, Toshinori
- 2B2-40 Application of glycopolymer modified gold nanoparticles for biosensing device (Japan Advanced Institute of Science and Technology) ISHII, Jin; TOYOSHIMA, Masayuki; MIURA, Yoshiko; CHIKAE, Miyuki;

Chair: YUASA, Hideya (15:50~17:10)

- \* 15:40-15:50: interval for laptop PC connection.(2B2-42, 2B2-43, 2B2-44, 2B2-45, 2B2-46, 2B2-47, 2B2-48, 2B2-49)
- 2B2-42 Magnetic beads assisted mild enrichment procedure for weak binding lectins (Department of Materials and Life Science, Seikei Univ.) MIYAZAWA, Haruka; ITO, Yukishige; TOTANI, Kiichiro
- 2B2-43 Preparation and application of sugar-chain immobilized fluorescent nanoparticles containing ZnS-AgInS<sub>2</sub>/ZnS core/shell structure (Graduate School of Science and Engineering, Kagoshima Univ.) SHINCHI, Hiroyuki; NAKAGAWA, Sho; WAKAO, Masahiro; MOCHIZUKI, Eiko; UEMATSU, Taro; KUWABATA, Susumu; SUDA, Yasuo
- 2B2-44 Preparation of sugar-chain immobilized magnetic gold nano-particles containing iron oxide as a magnetic component (Graduate School of Science and Engineering, Kagoshima Univ.) TANAKA, Sayori; ZHANG, Xu; NAGATOMO, Mami; WAKAO, Masahiro; SUDA, Yasuo
- 2B2-45 Withdrawn
- 2B2-46 The influence of hydrophobic substituent in micelle formation of carbosilane dendrimer peripherally functionalized with lactose and application to DDS (Saitama Univ. Graduate School of Science and Engineering) SHIMAZAKI, Tomoyuki; OTOMO, Kentaro; AIZAWA, Hiroaki; HONSYO, Nobuaki; KOYAMA, Tetsuo; MATSUOKA, Koji; TERUNUMA, Daiyo; HATANO, Ken
- 2B2-47 Glycosylated ferrocenes as an artificial model system to investigate carbohydrate-carbohydrate interactions (Toyo Univ.) SAKURAI, Kunihiro; TOGASHI, Yosuke; KINONE, Tatsuya; HASEGAWA, Teruaki
- **2B2–48** Development and properties of amphoteric  $\beta$ -1,3-glucans (Sojo Univ.) TOKUNAGA, Daisuke; MAKO, Hiroyuki; TAMARU, Shun-ichi; SHINKAI, Seiji
- 2B2-49 Synthesis of D-allose phenylacetate and the inhibitory activity on plant growth (Faculty of Agriculture, Kagawa Univ.) EGAWA, Yoshiho; KAWANAMI, Yasuhiro

### Monday, March 28, AM

#### Medical

Chair: NIWA, Haruki  $(9:00\sim10:00)$ 

- \* 8:50-9:00: interval for laptop PC connection.(3B2-01, 3B2-02, 3B2-03, 3B2-04, 3B2-05, 3B2-06)
- 3B2-01 Oral malodor reduction by chlorophylls. (Institute of Materials Science, Univ. of Tsukuba) ABE, Yasuhiro; SAITO, Akiyoshi; SAITO, Junpei; OKUDA, Masaaki; NAKAZATO, Masataka; KOBAYASHI, Masami
- 3B2-02 Physical properties of fish scale collagen derived from Cololabis saira (Grad. Sch. Sci., Osaka Prefecture Univ.) HARA, Masayuki; MORI, Hideki; TONE, Yurie; SHIMIZU, Kousuke; IHARA, Hideshi
- 3B2-03 Surface Properties of Water-Insoluble Composite Films Made of Water-Soluble Polysaccharides (Tokyo Univ. of Sci.) OHASHI, Masafumi; HASHIZUME, Mineo
- **3B2-04** Interaction of Composite Films Made of Water-Soluble Polysaccharides with Cells (Tokyo Univ. of Sci.) KAKIMOTO, Atsushi; TAKADA, Muneaki; FUKAI, Fumio; HASHIZUME, Mineo
- 3B2-05 Preparation and Characterization of Water-Insoluble Fibers Made of Water-Soluble Polysaccharides (Tokyo Univ. of Sci.) YUYAMA, Kazuya; HASHIZUME, Mineo
- 3B2-06 Development of pDNA/Hyaluronic acid/Chitosan Ternary Complexes for Suicide Gene Therapy (Keio Univ.) NAKATA, Mitsuhiro; KOYAMA, Yoshinori; KISHIMOTO, Satoko; ISHIHARA, Masayuki; SATO, Toshinori

Chair: HARA, Masayuki (10:10 $\sim$ 11:10)

- \* 10:00-10:10: interval for laptop PC connection.(3B2-08, 3B2-09, 3B2-10, 3B2-11, 3B2-12, 3B2-13)
- 3B2-08 Characterization of pDNA/chitosan/fragmin ternary complexes and analysis of intracellular delivery mechanism (Keio Univ.) RIANY, Anastasia: SATO, Toshinori
- **3B2-09** The development and practical application of red emission firefly luciferin analogs (Univ. of Electro-Communications) HAMA, Kazutoshi; OKUAKI, Go; MAKI, Shojiro; HIRANO, Takashi; NIWA, Haruki
- 3B2-10 Influence of luciferase given to firefly bioluminescence color (The Univ. of Electro-Communications) IWANO, Satoshi; YGIUTI, Satoru; KOJIMA, Satoshi; HIRANO, Takashi; MAKI, Shojiro; NIWA, Haruki
- 3B2-11 Dependence on virus-vaccine immunization ability of size and shape of gold nanoparticles (Fac. Sci., Hokkaido Univ. ,RIES, Hokkaido Univ.) MATSUNAGA, Tatsuya; NAGAKAWA, Keita; NIIKURA, Kenichi; IJIRO, Kuniharu; SUZUKI, Tadaki; KOBAYASHI, Shintaro; SAWA, Hirofumi
- 3B2-12 Mechanism of the antiviral effect by copper ions (Research Center for Advanced Science and Technology(RCAST)) LU, Yue; MINOSHIMA, Masafumi; SUNADA, Kayano; HASHIMOTO, Kazuhito
- 3B2-13 Immunological and catalytic features a monoclonal antibody (InfA-15) against hemagglutinin molecule of Influenza virus A type (Applied chemistry:Oita Univ., Medicine:Oita Univ., Research Promotion Project:Oita Univ.) FUJIMOTO, Naoko; YAHIRO, Takaaki; HIFUMI, Emi; UDA, Taizou

Chair: MAKI, Shojiro (11:20~12:20)

- \* 11:10-11:20: interval for laptop PC connection.(3B2-15, 3B2-16, 3B2-17, 3B2-19)
- **3B2-15** Development of high sensitivity immunochromatography combined with nonelectrolyte copper plating. (Numazu National college of technology; Hasumi Lab.) SANO, Teruomi; NAMBA, Yasuharu; WATABE, Satoshi; NAKAISHI, Kazunari; NONAKA, Urao; TAKEGUCHI, Masayuki; HASUMI, Fumihiko
- **3B2–16** Development of a cell chip system for diagnosis of protozoan infection (Health Research Institute, AIST) YAMAMURA, Shohei; YATSUSHIRO, Shouki; YAMAGUCHI, Yuka; KATAOKA, Masatoshi
- 3B2-17\*† development of triplex formating peptid nucleic acid aimed a sensitive detection of virus genome. (ISIR, Osaka Univ.) SAWADA, Shinjiro; KAIHATSU, Kunihiro; KATO, Nobuo
- 3B2-19\* Design and evaluation of cell-rolling column for stem cell purification (Natl Cerebral and Cardiovascular Center Res Inst) YAMAOKA, Tetsuji; AGUDELO, Carlos; MAHARA, Atsushi

#### Monday, March 28, PM

#### Medical

Chair: MAEDA, Mizuo (13:30 $\sim$ 14:30)

- \* 13:20-13:30: interval for laptop PC connection.(3B2-28, 3B2-31, 3B2-32, 3B2-33)
- 3B2-28 CSJ Award for Young Chemists Development of Three-Dimensional Tissue Models Based on Cell Manipulation Using Nano-Structured Polymeric Materials (Grad. Sch. Eng., Osaka Univ.; PRESTO, JST) MATSUSAKI, Michiya
- 3B2-31 Imaging analysis of beating dynamics for cardiomyocyte-specific toxicity (Graduate School of Engineering, Osaka Univ.; Photonics Advanced Research Center, Osaka Univ.) SHIMIZU, Eiichi; SAITO, Masato; YAMAGUCHI, Yoshinori; TAMIYA, Eiichi
- 3B2-32 Development of <sup>19</sup>F MRI Probes to Image gene expression in cell (Engineering, Osaka Univ) MATSUSHITA, Hisashi; MIZUKAMI, Shin; SUGIHARA, Fuminori; SHIRAKAWA, Masahiro; KIKUCHI, Kazuya
- **3B2-33** Development of nanoparticle containing perfluorcarbon for <sup>19</sup>F MRI (Graduate school of engineering, Osaka Univ.) NAKANISHI, Yousuke; MIZUKAMI, Shin; KIKUCHI, Kazuya

Chair: YAMAGUCHI, Yoshinori (14:40~15:40)

- \* 14:30-14:40: interval for laptop PC connection.(3B2-35, 3B2-36, 3B2-37, 3B2-38, 3B2-39, 3B2-40)
- 3B2-35 Development of a novel MRI probe based on a pH-responsive coreshell nanoparticle (Graduate school of engineering, Osaka Univ.) OKADA, Satoshi; MIZUKAMI, Shin; KIKUCHI, Kazuya
- **3B2-36** The effect of aminolevulinic acid on mouse cytochrome c oxidase activity (Tokyo Tech) SUGIYAMA, Yuta; HAGIYA, Yu-ichiro; HAYASHI, Tetsuya; TSUCHIYA, Kyoko; ISHIZUKA, Masahiro; TANAKA, Tohru; OKURA, Ichiro; OGURA, Shun-ichiro
- **3B2-37** Cytotoxicity evaluation of heavy metals on mouse neural stem/progenitor cells *in vitro* (Grad. Sch. Sci., Osaka Prefecture Univ.) MORI, Hideki; HARA, Masayuki; SASAKI, Go
- 3B2-38 Inhibition of noncanonical NF-kappa B by (-)-DHMEQ with a novel mechanism (Keio Univ. Fac. Sci. Tech. Dept. Applied Chem.) TAKEIRI, Masatoshi; HORIE, Kana; ITO, Ayumi; UMEZAWA, Kazuo
- **3B2-39** Screening of transporters involved in porphyrin accumulation after administration of 5-aminolevulinic acid (Tokyo Tech) MATSUMOTO, Kentaro; HAGIYA, Yuichiro; OKURA, Ichiro; OGURA, Shun-ichiro

3B2-40 Withdrawn

Chair: OGURA, Shun-Ichiro (15:50~16:50)

- \* 15:40-15:50: interval for laptop PC connection.(3B2-42, 3B2-44, 3B2-46)
- 3B2-42\* Trastuzumab Conjugated Immunoliposome Loading Glycosylated Paclitaxel (Fac. Sci., Okayama Univ. of Sci.) HAMADA, Hiroki; SENO, Masaharu; EGASHIRA, Naoyoshi
- 3B2-44\* Selection of DNA aptamers recognizing small cell lung cancer using living cell-SELEX. (Tokyo Tech.) KUNII, Takao; MIE, Masayasu; KOBATAKE, Eiry
- **3B2-46\*** Timmunosensor Using Power-Free Microchip for Clinical Diagnosis (Bioengineering Laboratory, RIKEN) OKADA, Hiroki; HOSOKAWA, Kazuo; MAEDA, Mizuo

Chair: SHINOZUKA, Kazuo (17:00∼17:40)

- \* 16:50-17:00: interval for laptop PC connection.(3B2-49, 3B2-50, 3B2-51, 3B2-52)
- 3B2-49 Development of the nanoimprint technology-based Plasmon biosensor chip (Graduate school of Osaka Univ.) KITAMURA, Akito; SAITO, Masato; TAMIYA, Eiichi; MURAHASHI, Mizuho
- 3B2-50 Effect of developing solution containing surfactant on immunochromatographic assay (Okayama Univ. of Sci.) NAGATANI, Naoki; ENDO, Satoshi; USHIJIMA, Hiromi; YUHI, Teruko; MIYAHARA, Toshiro

#### **Biocatalyst**

- **3B2-51** Production of *cis,cis*-Muconic Acid from Catechol by Recombinant *Escherichia coli* Cells Overexpressing a GeneEncoding Catechol 1,2-Dioxygenase as a Biocatalyst (Dept. Appl. Chem., Fac. Sci. Eng., Waseda Univ.) KANEKO, Aya; ISHII, Yoshitaka; KIRIMURA, Kohtaro
- **3B2-52** Cloning and Functional Analysis of the Type III Polyketide Synthase Homolog Gene from *Aspergillus niger* (Dept. Appl. Chem., Fac. Sci. Eng., Waseda Univ.) MIYAI, Nozomi; KOBAYASHI, Keiichi; HONDA, Yuki; HATTORI, Takasumi; KIRIMURA, Kohtaro

#### Tuesday, March 29, AM

#### Lipid

Chair: KIKUCHI, Jun-Ichi (9:00  $\sim$ 10:00)

- \* 8:50-9:00: interval for laptop PC connection.(4B2-01, 4B2-02, 4B2-03, 4B2-04, 4B2-06)
- 4B2-01 Reconstitution and energy transfer of photosynthetic anntena protein assembly in lipid bilayers. (Grad. School Eng., Nagoya Instit. of Tech.) WATANABE, Natsuko; SUMINO, Ayumi; SASAKI, Nobuaki; DEWA, Takehisa; MORII, Takashi; HASHIMOTO, Hideki; NANGO, Mamoru
- 4B2-02<sup>†</sup> Withdrawn
- 4B2-03 The formability and stability of discoidal complexes from stable membrane-forming synthetic phospholipids and apolipoprotein A-1 (Res. Center Stem Cell Eng., Natl. Inst. Adv. Sci. & Technol. (AIST); Fac. Pharm. Sci., Univ. of Tokushima) BABA, Teruhiko; TAKAGI, Toshiyuki; KANAMORI, Toshiyuki; OKA, Tatsuya; SAITO, Hiroyuki
- **4B2-04\***<sup>†</sup> Curvature effect on lipid dynamics in bilayer membrane: Solution-state NMR-NOE and MD simulation study (Inst. Chem. Res., Kyoto Univ.; Univ. of Tokushima) SHINTANI, Megumi; YOSHIDA, Ken; SAKURABA, Shun; NAKAHARA, Masaru; MATUBAYASI, Nobuyuki
- 4B2-06 Solution NMR study on location and dynamics of drug molecules into phospholipid bilayer (Inst. Chem. Res., Kyoto Univ.) MATSUO, Yushi; SHINTANI, Megumi; MATUBAYASI, Nobuyuki

Chair: MATUBAYASI, Nobuyuki (10:10~11:10)

- \* 10:00-10:10: interval for laptop PC connection.(4B2-08, 4B2-09, 4B2-11, 4B2-13)
- 4B2-08 The Microdomain Formation of Synthetic Glycolipid Bilayer and Kinetic Analyses of Lectin (Grad. School of Science and Technology, Shizuoka Univ.) MURAKAWA, Akiko; KANEMATSU, Ayumi; USUI, Taichi: PARK. Enoch Y.
- 4B2-09\*\*\*Novel Fluorescent Sphingomyelin derivatives: Synthesis and Applications (Graduate School of Science, Osaka Univ.) GORETTA, Sarah; MATSUMORI, Nobuaki; MURATA, Michio
- 4B2-11\* Specific Modification of Inner or Outer Surface of Glycolipid Vesicle by Click Chemistry (Graduate School of Bioscience and Biotechnology, Tokyo Institute of Technology) ITO, Hidehiro; KAMACHI, Toshiaki; YASHIMA, Eiji
- 4B2-13 Relationship between raft domain dynamics and intracellular signaling (Sch. Mat. Sci., JAIST) UEDA, Kotomi; ENDO, Satoshi; YAMAGUCHI, Kentaro; BAEK, Keangok; HAMADA, Tsutomu; TAKAGI, Masahiro

Chair: KAMACHI, Toshiaki (11:20∼12:20)

- \* 11:10-11:20: interval for laptop PC connection.(4B2-15, 4B2-16, 4B2-18, 4B2-19, 4B2-20)
- 4B2-15 Budding and Release of Small Vesicles from Giant Vesicles Induced by Membrane Active Molecule (Grad. Sch. Mater. Sci., Nara Inst. of Sci. and Technol.) NORIYASU, Hiroyuki; YASUHARA, Kazuma; KIKUCHI, Junichi; HIYAMA, Satoshi; MORITANI, Yuki
- **4B2-16\*** Development of an Artificial Vesicular Traffic System Using Giant Vesicles for the Transport of Molecular Information (Grad. Sch. Mater. Sci., Nara Inst. Sci. and Technol.) YASUHARA, Kazuma; OKUDA, Shizuyo; KIKUCHI, Jun-ichi; HIYAMA, Satoshi; MORITANI, Yuki
- 4B2-18 Analysis of liposome property on substrates with a combination methodology of the optical interferemetry and the quartz crystal microbalance (Dept. Biomol. Engineering, Tokyo Inst. of Tech.) KOJIMA, Taisuke; KAWASAKI, Takayoshi; OKAHATA, Yoshio
- 4B2-19 Determination of location of fullerenes in lipid bilayer membrane incorporated fullerenes (Graduate School of Materials Science, Nara Institute of Science and Technology) KIGUCHI, Kazuya; IKEDA, Atsushi; AKIYAMA, Motofusa; KIKUCHI, Jun-ichi
- **4B2-20** Fullerene-exchange reaction controlled by π molecule in liposome (Grad. Sch. Mat. Sci. Nara Inst. Sci. and Tech.) KAWAI, Yoshihiko; IKEDA, Atsushi; AKIYAMA, Motofusa; KIKUCHI, Jun-ichi; NAKATA, Eiji; UTO, Yoshihiro; HORI, Hitoshi

## Tuesday, March 29, PM

#### Lipid

Chair: DEWA, Takehisa (13:30 $\sim$ 14:30)

\* 13:20-13:30: interval for laptop PC connection.(4B2-28, 4B2-30, 4B2-31,

4B2-32, 4B2-33)

- 4B2-28\* Thermo-responsive dynamics of giant liposomes containing oxidized cholesterols (School of Materials Science Japan Advanced Institute of Science and Technology Health Research Institute National Institute of Advanced Industrial Science and Technology (AIST)) YODA, Tsuyoshi; VESTERGAARD, Mundelanji C; HAMADA, Tsutomu; AKAZAWA-OGAWA, Yoko; YOSHUDA, Yasukazu; TAKAGI, Masahiro
- 4B2-30 Observation of Amyloid Beta peptide Localization and Dynamics in Biomimetics Membrane (School of Materials science; Japan advanced institute of science and technology) TENDO, Yuiko; HAMADA, Tutomu; MORITA, Masamune; KISHAMOTO, Yuko; KOMATU, Yuki; VESTERGARRD, Mun'delanji; TAKAGI, Masahiro
- 4B2-31 Interaction between nanoparticles and cell-sized lipid vesicles. (Japan Advanced Institute Of Science And Technology) MIYAKAWA, Makiyo; MORITA, Masamune; SUGIMOTO, Ryoko; HAMADA, Tsutomu; TAKAGI, Masahiro
- 4B2-32 Withdrawn
- 4B2-33 Evalutation of amino acid-based cationic liposomes for neuronal transfection. (School of Adv. Sci & Eng. Waseda Univ.) AOSHIMA, Yumiko; SARKER, SATYA RANJAN; HIRAKAWA, Takaaki; INOUE, Takafumi; TAKEOKA, Shinji

Chair: TAKAGI, Masahiro (14:40∼15:40)

- \* 14:30-14:40: interval for laptop PC connection.(4B2-35, 4B2-36, 4B2-37, 4B2-39)
- **4B2-35** Water-soluble Inclusion Complexes of C<sub>60</sub>Fullerene Derivatives using γ-Cyclodextrin (Grad. Sch. Mat. Sci. Nara Inst. Sci. and Tech.; Faculity of Engineering, Tokyo Univ. of Science; Grad. Sch. Biol. Sci. Nara Inst. Sci. and Tech.) MAEKUBO, Naotake; AKIYAMA, Motofusa; IKEDA, Atsushi; KIKUCHI, Jun-ichi; KONISHI, Toshifumi
- 4B2-36 Improvement of Photodynamic Activity using Lipid Membrane Incorporated Fullerene derivatives (Grad. Sch. Mat. Sci. Nara Inst. Sci. and Tech.; Faculity of Engineering, Tokyo Univ. of Science; Grad. Sch. Biol. Sci. Nara Inst. Sci. and Tech.) MAEKUBO, Naotake; IKEDA, Atsushi; AKIYAMA, Motofusa; KIKUCHI, Jun-ichi; KONISHI, Toshifumi; OGAWA, Takuya; TAKEYA, Tatsuo
- 4B2-37\* Biomembrane Interference: Evaluation of Liposome-RNA Intaraction "LIPOzyme(X)" (Osaka Univ.) SUGA, Keishi; TANABE, Tomoyuki; TOMITA, Hibiki: UMAKOSHI, Hiroshi
- 4B2-39\* Liposome Can Control Activity of Glycolytic Enzyme `LIPOzyme (XI) (Osaka Univ.) UAKOSHI, Hiroshi; NISHIDA, Atsushi; SHIMANOUCHI, Toshinori

Chair: TAKEDA, Naoya (15:50 $\sim$ 16:50)

- \* 15:40-15:50: interval for laptop PC connection.(4B2-42, 4B2-44, 4B2-45, 4B2-46, 4B2-47)
- 4B2-42\* Determination on a single molecule orientation from the light emission observation using total internal reflection microscopy (Hokkaido Univ.) MOTEGI, Toshinori; NABIKA, Hideki; MURAKOSHI, Kei
- 482-44 Development of Novel Nanocarriers for Photodynamic Therapy (Grad. School Eng., Nagoya Inst. of Tech.) FUTAI, Tomonori; LI, Hongmei; DEWA, Takehisa; NANGO, Mamoru
- 4B2-45 Super-stable bicelle based on the molecular design of novel surfactants (RIKEN) MATSUI, Ryoichi; OHTANI, Masataka; ISHIDA, Yasuhiro; AIDA, Takuzo
- 4B2-46 Molecular weight-selective permeation across the membrane of organic-inorganic hybrid vesicle 'Cerasome' (Grad. Sch. Mater. Sci., Nara Inst. Sci. and Technol.) KAWATAKI, Takahiro; YASUHARA, Kazuma; KIKUCHI, Jyun-ichi
- 4B2-47 Synthesis of water-soluble cholesterol for the elucidation of the mechanism of lipid raft formation (Osaka Univ.) YANO, Shinya; TANADA, Norio; NOZU, Kohei; TSUCHIKAWA, Hiroshi; MATSUMORI, Nobuaki; OISHI, Tohru; MURATA, Michio

# Room B3

Bldg. 7 7-44

## Biofunctional Chemistry ; Biotechnology Saturday, March 26, PM

Chair: SODE, Koji (13:00∼14:00)

- \* 12:50-13:00: interval for laptop PC connection.(1B3-25, 1B3-28)
- 1B3-25 CSJ Award for Young Chemists in Technical Development Developement of efficient D-lactate continuous fermentation by membrane-integrated fermentation process (Toray Industries, Inc. New Frontiers Research Laboratories; Global Environment Research Laboratories) MIMITSUKA, Takashi; SAWAI, Kenji; NA, Kyungsu; SAWAI, Hideki; MINEGISHI Shinichi; YAMADA Katsushige; YONEHARA Tetsu
- 1B3-28 CSJ Award for Young Chemists in Technical Develop-

ment Development of D-Serine Production by a Single-step Process (Mitsui Chemicals, Inc.) HIDESAKI, Tomonori

Chair: OTSUKA, Hidenori (14:10~15:00)

- \* 14:00-14:10: interval for laptop PC connection.(1B3-32, 1B3-33, 1B3-35, 1B3-36)
- 1B3-32 Guiding long-range directional cell migration using newly developed micropatterned substrates (Department of Life Science and Medical Bioscience, School of Advanced Science and Engineering, Waseda Univ.) TAMURA, Kenichi; YOSHINO, Nobuhiro; TAKEDA, Naoya
- 1B3-33\* Development of a controlling method for the balance of transcriptional factors in targeted-single ES cells (Tokyo Univ. of Agriculture and Technology) FUNABASHI, Hisakage; SUGIMOTO, Yuki; KOIKE, Hideki; OURA, Seitaro; SAITO, Mikako; MATSUOKA, Hideaki
- 1B3-35 Binding analysis of intracellular mRNA to molecular beacon immobilized on Au-coated nanoneedle. (BioMedical Research Institute, AIST, Dept. Biotechnol. & Life Sci. Tokyo Univ. of Agric. & Technol.) KANESHIRO, Yurie; AMEMIYA, Yousuke; KIHARA, Takanori; MIYAKE, Jun; NAKAMURA, Noriyuki; NAKAMURA, Chikashi
- 1B3-36 Effect of nanofilms formed on cell surfaces on insertionefficiency of needle-shaped materials into cells (BioMedical Research Institute, AIST and Dept. Biotechnol. & Life Sci., Tokyo Univ. of Agric. & Technol. Department of Applied Chemistry, Graduate School of Engineering, Osaka Univ., Department of Mechanical Science and Bioengineering, Graduate School of Engineering Science, Osaka Univ., Health Research Institute, AIST) KAWANO, Keiko; AMEMIYA, Yosuke; MATSUSAKI, Michiya; AKASHI, Mitsuru; KIHARA, Takanori; MIYAKE, Jun; NAKAMURA, Noriyuki; NAKAMURA, Chikashi

Chair: TAKEDA, Naoya (15:10~16:00)

- \* 15:00-15:10: interval for laptop PC connection.(1B3-38, 1B3-39, 1B3-40, 1B3-41)
- 1B3-38 Observation of stem cell behavior on nanostructures (Graduate School of Engineering, Nagoya Univ.; FIRST Research Center for Innovative Nanobiodevice, Nagoya Univ.) KUBO, Kazutoshi; OKAMOTO, Yukihiro; YAMAMOTO, Masaya; KAJI, Noritada; TOKESHI, Manabu; TABATA, Yasuhiko; BABA, Yoshinobu
- 1B3-39 Control of the expression of diabetes-related genes using a Rosa-Tet system (Tokyo Univ. of Agriculture and Technology) OKAMURA, Ren; FUNABASHI, Hisakage; MATSUOKA, Hideaki; SAITO, Mikako
- 1B3-40 Quantitative evaluation of knockdown effect of diabetes-related genes in a polyethyleneimine-mediated method (Department of Biotechnology and Life science, Tokyo Univ. of Agriculture and Technology) HANATA, Nobuaki; FUNABASHI, Hisakage; SAITO, Mikako; MATSUOKA, Hideaki
- 1B3-41\* Activity Assay of Myotubes by Electrodes Printed on Hydrogel (Tohoku Univ.; JST/CREST) NAGAMINE, Kuniaki; NISHIZAWA, Matsuhiko

Chair: NISHIZAWA, Matsuhiko (16:10 $\sim$ 17:00)

- \* 16:00-16:10: interval for laptop PC connection.(1B3-44, 1B3-45, 1B3-47, 1B3-48)
- 1B3-44 Application of optical responive carbon nanotubes cell cultured substrate (Nakashima laboratory, Kyushu Univ.) SADA, Takao; FUJIGAYA, Tsuyohiko; NAKASHIMA, Naotoshi
- 1B3-45\* Recent aspects of specific genes involved in the generation of spermine-induced multilayer muscle fiber sheet (Department of Biotechnology and Life Science, Tokyo Univ. of Agriculture and Technology) SAITO, Mikako; MORITA, Kiyoe; SEKI, Motohiro; FUNABASHI, Hisakage; MATSUOKA, Hideaki
- 1B3-47 Studies on the cytotoxicity of human catalytic antibody (Applied chemistry:Oita Univ., Medicine:Oita Univ., Research Promotion Project:Oita Univ.) IIKURA, Ryo; SONODA, Sari; HONJO, Eijirou; HIFUMI, Emi; UDA, Taizo
- 1B3-48 Specific Delivery of Nanoparticles into Cancer Cells Facilitated by Cellular Membrane-Retaining Cationic Polymers (Hokkaido Univ.) NIIKURA, Kenichi; NAMBARA, Katsuyuki; OKAJIMA, Takaharu; MATSUO, Yasutaka; IJIRO, Kuniharu

Chair: HIFUMI, Emi (17:10 $\sim$ 18:00)

- \* 17:00-17:10: interval for laptop PC connection.(1B3-50, 1B3-51, 1B3-53, 1B3-54)
- 1B3-50 Imaging of Intracellular ATP using FRET-based chemosensor (Kyoto Univ.) KURISHITA, Yasutaka; OJIDA, Akio; HAMACHI, Itaru
- 1B3-51\* Development of microdevice for leukocyte analysis from small amount of whole blood (Tokyo Univ. Agri. Tech.) HOSOKAWA, Masahito; ASAMI, Marie; YOSHINO, Tomoko; TSUJIMURA, Noriyuki; TAKAHASHI, Masayuki; NAKASONO, Satoshi; MATSUNAGA, Tadashi
- 1B3-53 Development and application of labeling method for cell-surface protein with functional nanoparticles (Graduate school of engineering, Osaka Univ.) YOSHIMURA, Akimasa; MIZUKAMI, Shin; KIKUCHI, Kazuya
- 1B3-54 Development of Intracellular Protein Labeling System Based On Mutant beta-lactamase (Graduate school of engineering, Osaka Univ.) AKIMOTO, Yuri; WATANABE, Shuji; MIZUKAMI, Shin; KIKUCHI, Kazuwa

Chair: MIZUKAMI, Shin (18:10~18:30)

- \* 18:00-18:10: interval for laptop PC connection.(1B3-56, 1B3-57)
- 1B3-56 Modification of the substrate by lactose glycopolymer and the primary hepatocyte recognition (Tokyo.Univ.of Sci) SASAKI, Kouhei; YAMAMOTO, Sayuri; NAKASONE, Yuuichi; UENO, Kouji; OTSUKA, Hidenori
- 1B3-57 Transcriptional regulation systems based on chimeric EnvZ/OmpR two-component system (Tokyo Univ. Agric. and Technol.) IKEBUKURO, Kazunori; SAKAI, Yuta; FERRI, Stefano; MURAKAMI, Yoshiyuki; SODE, Koji

## Organic Chemistry -Reaction and Synthesis-Heterocyclic Compounds

## Sunday, March 27, PM

Chair: HOSHINO, Yujiro (13:00~14:00)

- \* 12:50-13:00: interval for laptop PC connection.(2B3-25, 2B3-26, 2B3-27, 2B3-28, 2B3-29, 2B3-30)
- 2B3-25<sup>†</sup> Ring Opening of N-Sulfonyl Aziridineswith Chloramine Salts (Osaka Univ.) MURAKAMI, Yuta; IKEDA, Yuki; MINAKATA, Satoshi
- 2B3-26 Nucleophilic 5-endo-trig Cyclizations of 2-Trifluoromethyl-1-alkenes via Metalloenamides (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) HATTORI, Masahiro; KOMATSUZAKI, Shingo; IKEDA, Masahiro; ICHIKAWA, Junji
- 2B3-27 Synthesis and photophysical properties of organic luminophores bearing 1,2,3-triazole rings (Department of Chemistry, Faculty of Science and Engineering, Kinki Univ.) MATSUMOTO, Kazuhiko; YAMAGUCHI, Yoshihiro; MATSUBARA, Yoshio; YOSHIDA, Zen-ichi
- **2B3-28** Synthesis of α-diketones and α-ketocarboxilic acids with diphenyl-parabanate as a α-dicarbonyl synthon (Kanagawa Univ. Dept. of Chemistry) HAMANO, Mitsutaka; TODAKA, Shota; WATANABE, Nobuko; IJUIN, Hisako; MATSUMOTO, Masakatsu
- 2B3-29 Synthesis of 1,2-Benzisothizolin-3-ones from N-Sulfenylpyrroles (National Inst. Adv. Ind. Sci & Tech; Tokyo Univ. of Science) SHIMIZU, Masao; KATO, Daisuke; ANDO, Wataru; KONAKAHARA, Takeo
- 2B3-30 Nucleophilic Substitution Reaction of N-Sulfenyl-2,5-dimethylpyrroles on the Sulfur Atoms (National Inst. Adv. Ind. Sci. & Tech.; Tokyo Univ. of Science) SHIMIZU, Masao; KATO, Daisuke; ANDO, Wataru; KONAKAHARA, Takeo

Chair: SAKAI, Norio (14:10∼15:10)

- \* 14:00-14:10: interval for laptop PC connection.(2B3-32, 2B3-33, 2B3-34, 2B3-35, 2B3-36, 2B3-37)
- 2B3-32 Intramolecular Radical Cyclization of 1,1-Difluoroalkenes: Synthesis of Heterocyclic Compounds bearing a CHF2 group (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) SANADA, Shohei; CHIBA, Yousuke; SHINJO, Masahiko; TANABE, Hiroyuki; ICHIKAWA, Junji
- 283-33 Design and Synthesis of Fluorescent 1,2,3-Triazolium Ylides. (Hokkaido Univ.) OSAWA, Ayumi; NAMBA, Kosuke; TANINO, Keiji
- **2B3-34** Optional C-2 and C-5 Selective Electrophilic Substitution of *N*-Benzenesulfonyl-4-bromo-2-lithiopyrrole (Graduate School of Science and Technology, Nagasaki Univ.; Faculty of Engineering, Nagasaki Univ.) FUKUDA, Tsutomu; IWAO, Masatomo
- **2B3-35** Synthesis of Isoxazoline Derivatives from Olefins and Aldoximes Using *tert*-Butyl Hypoiodite (Osaka Univ.) MINAKATA, Satoshi; OKUMURA, Sota; NAGAMACHI, Toshiki
- 2B3-36 Effect of Cyano Substituents on Vicosities of Azole type Ionic Liquids (Oita Univ.) YOSHIIWA, Naoki; KITAOKA, Satoshi; NOBUOKA, Kaoru; ISHIKAWA, Yuichi
- 2B3-37 Solvent-Solute Interaction in Charge Delocalized Ionic Liquid (Oita Univ.) MAKI, Yusuke; NOBUOKA, Kaoru; KITAOKA, Satoshi; ISHIKAWA, Yuichi

Chair: FUKUDA, Tsutomu (15:20 $\sim$ 16:20)

- \* 15:10-15:20: interval for laptop PC connection.(2B3-39, 2B3-40, 2B3-41, 2B3-42, 2B3-43, 2B3-44)
- 2B3-39 CO<sub>2</sub> Fixation to Aziridinofullerenes Leading to Oxazolidinone-Fused Fullerenes (Osaka Univ.) MINAKATA, Satoshi; KAWAI, Hajime; NAGAMACHI, Toshiki
- 2B3-40 Novel synthesis of isoindole derivatives in super critical carbondioxide (Fac. Eng., Utsunomiya Univ.) IWABE, Yuki; ITO, Satoshi; OBA, Toru; HIRATANI, Kazuhisa; SATO, Takafumi; ITO, Naotsugu
- 2B3-41 Catalytic Asymmetric 1,3-Dipolar Cycloaddition of Azomethine IminesUtilizing Tartaric Acid Ester as a Chiral Auxiliary (Kanazawa Univ., Graduate School of Natural Science and Technology) TANAKA, Katsuyoshi; KATO, Tomomitsu; FUJINAMI, Shuuhei; UKAJI, Yutaka; INOMATA, Katsuhiko
- 2B3-42 Selective Transformation of N-(Propargylic)hydroxylamines into 4-Isoxazolines and Acylaziridines Promoted by Metal Salts (Kanazawa Univ., Graduate School of Natural Science and Technology) WADA, Norihiro; KANEKO, Kentarou; UKAJI, Yutaka; INOMATA, Katsuhiko
- 2B3-43 Synthesis and polymerization of bispyrroles tethered between 3-positions. (Kyusyu Institute of Technology) KOSHO, Masao; SHUTO,

- Keisuke; OKAUCHI, Tatuo; ENDO, Takeshi; KITAMURA, Mitsuru
- 2B3-44 Regioselective Synthesis of 3-Fluoropyrazoles via Sequential Substitutions of 2-Trifluoromethyl-1-alkenes (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) TAKAHASHI, Masaki; HATTORI, Masahiro; FUCHIBE, Kohei; ICHIKAWA, Junji

Chair: FUIITA, Takeshi (16:30~17:30)

- \* 16:20-16:30: interval for laptop PC connection.(2B3-46, 2B3-47, 2B3-48, 2B3-49, 2B3-50, 2B3-51)
- 2B3-46 TiCl4-promoted Cyclization Reactions of Aminoacetals and Ethenetricarboxylates Leading to Nitrogen-containing Heterocycles (Nara Univ. of Education) YAMAZAKI, Shoko; TAKEBAYASHI, Masachika
- 2B3-47 Ring Expanded Bicyclization Accompanied by Insertion of Two Components and Three Components Ring Transformation (Kochi Univ. of Technology) NISHIWAKI, Nagatoshi; HIRAO, Shotaro; SAWAYAMA, Jun; SAIGO, Kazuhiko
- 2B3-48 Acyl nitroso Diels-Alder reactions with functionalized dienes (Yokohama National Univ.) SUZUKI, Kenzo; HONDA, Kiyoshi; INOUE, Seiichi; HOSHINO, Yujiro
- **2B3-49** Development of Yb-catalyzed Synthesis for Dihydropyridines and its Fluorescence Properties (Waseda Univ.) TAKEI, Ryo; ABE, Junya; SUEKI, Shunsuke; SHIMIZU, Isao; SETO, Keisuke; FURUKAWA, Yukio
- 2B3-50 Enantioresolution and Absolute Configration of Secondary Alcohols Having a Pyridine Ring. (Sch. Eng., The Univ. of Shiga Pref.; Institute of Multidisciplinary Research of Advanced Materials, Tohoku Univ.; Tohoku Pharmaceutial Univ.) NISHIDA, Junya; INOUE, Yoshinori; MATSUMOTO, Takatoshi; TAKESHITA, Mitsuhiro; WATANABE, Masataka; KUMAGAI, Tsutomu
- 2B3-51 Synthesis of 1,6-Diphenyl-1-azahexa-1,3,5-triene (The Univ. of Shiga Prefecture) TIAN, Anna; WATANABE, Masataka; INOUE, Yoshinori; KUMAGAI, Tsutomu

### Monday, March 28, AM

Chair: UKAJI, Yutaka  $(9:00\sim9:40)$ 

- \* 8:50-9:00: interval for laptop PC connection.(3B3-01, 3B3-02, 3B3-03, 3B3-04, 3B3-05, 3B3-06)
- 3B3-01 A convenient synthesis of chiral 2-benzazepines via intramolecular-Friedel-Crafts reaction (Yamaguchi Univ.) KOTAKE, Tomoko; SO, Masahiro; KAMIMURA, Akio
- 3B3-02\* Temperature Dependent Reaction of o-Alkylphenylnitrene in the Presence of Amine and Alcohol (Okayama Univ.) SITI MARIYAH, Ulfa; OKAMOTO, Hideki; SATAKE, Kyosuke
- 3B3-03 Synthesis of arylsulfides in one-pot and inducement 1,5-benzothize-pines (Meiji Univ.) ITABASHI, Saori; MIYAKOSHI, Tetsuo
- **3B3-04** Synthesis of Chlorophyll Derivatives Possessing a Carboxy Group and Their Physical Properties (Ritsumeikan Univ.) TAMIAKI, Hitoshi; HAGIO, Norihisa; MACHIDA, Shinnosuke
- 3B3-05<sup>†</sup> Modification of the C3-Substituent of Chlorophyll Derivatives and Their Degradation Pathway (Ritsumeikan Univ.) MACHIDA, Shinnosuke; MIZUTANI, Keisuke; TAMIAKI, Hitoshi
- 3B3-06 Synthesis and Physical Properties of Synthetic 20-Substituted Chlor-ophyll Derivatives (Ritsumeikan Univ.) TAMIAKI, Hitoshi; KURIOKA, Masatoshi

Chair: TAMIAKI, Hitoshi (10:10 $\sim$ 11:10)

- \* 10:00-10:10: interval for laptop PC connection.(3B3-08, 3B3-09, 3B3-11, 3B3-12, 3B3-13)
- **3B3-08** Oxidation of Pyrrole Compounds with *ο*-Chloranil (Kanazawa Univ., Graduate School of Natural Science and Technology) SAKATA, Ryo; IWAMOTO, Ryoji; UKAJI, Yutaka; INOMATA, Katsuhiko
- 3B3-09\*\* Total Synthesis of Doubly Locked Biliverdin Derivatives toward Investigation of the Stereochemistry and Function of Phytochrome Chromophores (Kanazawa Univ., Graduate School of Natural Science and Technology) CHEN, Liyi; KINOSHITA, Hideki; UKAJI, Yutaka; INOMATA, Katsuhiko
- 3B3-11 Preparation of Optically Active Phycocyanobilin Derivatives toward Investigation of the Relationship between Stereochemistry and Function of the Phytochrome Chromophore (Kanazawa Univ., Graduate School of Natural Science and Tecnology) NISHIDA, Chika; UKAJI, Yutaka; INOMATA, Katsuhiko
- 3B3-12 Regioselective direct modification of diarylethene (Department of Applied Chemistry, Graduate School of Engineering, Nagoya Univ.) KAMIYA, Hiroki; YANAGISAWA, Syuichi; HIROTO, Satoru; ITAMI, Kenichiro; SHINOKUBO, Hiroshi
- 3B3-13 Synthesis of new fluorescent phosphorus ylide-containing 6-membered hetero cycl: λ<sup>5</sup>-phosphinines. (Ehime Univ.) ITOH, Takashi; WATANABE, Yutaka; HAYASHI, Minoru; UMANO, Rika

Chair: NISHIWAKI, Nagatoshi (11:20∼12:20)

- \* 11:10-11:20: interval for laptop PC connection.(3B3-15, 3B3-16, 3B3-18, 3B3-19, 3B3-20)
- 3B3-15 Cycloaddition Reaction between Isoindoles and Various Dienophiles and Its Application to Several Nitrogen-containing Polycyclic Compounds (Graduate School of Environment and Information Sciences, Yokohama

- National Univ.) HONDA, Kiyoshi; MASUGI, Eri; FUJIMOTO, Shunya; HOSHINO, Yuuiirou: INOUE, Seiichi
- 3B3-16\*† Intramolecular 1,3-dipolar cycloaddition of nitrile N-oxide along with dearomatization (Tokyo Inst. of Technology) YONEKAWA, Morio; KOYAMA, Yasuhito: TAKATA, Toshikazu
- 3B3-18 Synthesis and Its Trifluoroacetylation Reaction of 7-Dimethylamino-4-trifluoromethylnaphtho[1,2-d][1,3]oxazines (Kobe Univ.) SAIKAWA, Shohei; ISHIKAWA, Hiroki; OKADA, Etsuji
- **3B3-19** Aromatic Nucleophilic Substitution of 7-Dimethylamino-8,10-bis(tri-fluoroacetyl)naphtho[1,2-d][1,3]oxazines with Amines Synthesis of Novel Fluorine-Containing Oxazinobenzacridines (Kobe Univ.) SAIKAWA, Shohei; NISHIGUCHI, Eisuke; OKADA, Etsuji
- 3B3-20 Synthesis of Novel Apoptosis Inducers, Benzothiadiazine S,S-Dioxide Derivatives. (Tokyo Univ. of Science, Faculty of Science) SUGIMURA, Takanori; KUTSUMURA, Noriki; MORITA, Akinori; IKEKITA, Masahiko; SAITO, Takao

#### Monday, March 28, PM

Chair: NISHINO, Hiroshi (13:30∼14:40)

- \* 13:20-13:30: interval for laptop PC connection.(3B3-28, 3B3-29, 3B3-30, 3B3-31, 3B3-32, 3B3-33, 3B3-34)
- 3B3-28 A Facile Synthetic Method for Fluorine-Containing Benzonaphthyridines Pyridine Ring Formation Reaction of 2-Methoxy-4-propargylamino-3-trifluoroacetylquinoline with Various Amines (Kobe Univ.) ADACHI, Satoru; HATAKENAKA, Mizuki; OKADA, Etsuji
- **3B3-29** Three Components Condensation Reaction of 4-Amino-2-methoxy-3-trifluoroacetylquinoline with Aldehydes and Aqueous Ammonia: Synthesis of Novel Fluorine-Containing Pyrimidoquinolines (Kobe Univ.) HATAKENAKA, Mizuki; OKADA, Etsuji
- 3B3-30 Facile Synthesis of Novel Fluorine-containing Benzindazoles and Naphthoisoxazoles - Reaction of 1,5-Bis(dimethylamino)-2-trifluoroacetylnaphthalene with Hydrazines and Hydroxylamines (Kobe Univ.) ITOI, Yuichi; ADACHI, Satoru; SAIKAWA, Shohei; OKADA, Etsuji
- 3B3-31 Facile Synthesis of Diazabicyclic Compounds via Pseudo-Intramolecular Imination (Kochi Univ. of Technology) HIRAO, Shotaro; KOBIRO, Kazuya; SAWAYAMA, Jun; SAIGO, Kazuhiko; NISHIWAKI, Nagatoshi
- 3B3-32 Synthesis of 1,3-dialkynylimidazo[1,5-a]pyridines by means of Sonogashira coupling and the related reaction (Gifu Univ.) DOHKE, Yoshimasa; SHIBAHARA, Fumitoshi; MURAI, Toshiaki
- 3B3-33 A Short-step Construction of 2-Quinolinone Alkaloid Skeleton via Generation and Ring Closure of Propadienethione Intermediates (Fac. Eng., Iwate Univ.) SHIMADA, Kazuaki; IZUMI, Hironori; OGAWA, Satoshi
- 3B3-34 Stereoselective synthesis of flavone derivatives using Diels-Alder reaction via ortho-quinonemethide species (Graduate School of Environment and Information Sciences, School of Engineering, Graduate School of Engineering, Yokohama National Univ.) HONDA, Kiyoshi; OSHIO, Manami; HOSHINO, Yujiro; INOUE, Seiichi

Chair: KAMIMURA, Akio (17:00∼18:10)

- \* 16:50-17:00: interval for laptop PC connection.(3B3-49, 3B3-50, 3B3-51, 3B3-53, 3B3-54)
- 3B3-49 Reaction of Cyclic 1,3-Dicarbonyl Compounds with Acetyl-enedione Building Block in the Presence of BF3 (Department of Chemistry, Kumamoto Univ.) OISHI, Akihiro; NISHINO, Hiroshi
- 3B3-50 Mn(III)-Based Oxidative Radical Macrocyclization via Formation of Dihydrofuran Ring (Graduate School of Sci. & Tec., Kumamoto Univ.) YASUTAKE, Kenji; NISHINO, Hiroshi
- 3B3-51\*\* Mn(III)-Catalyzed Aerobic Peroxidation of Tetramic Acid and Tetronic Acid Derivatives and the related reaction (Graduate School of Sci. & Tec., Kumamoto Univ.) HAQUE, Aminul; NISHINO, Hiroshi
- 3B3-53 Synthesis of oraganic fluorophores having condensed coumarin rings (Department of Chemistry, Faculty of Science and Engineering, Kinki Univ.) TSUJII, Atsushi; YAMAGUCHI, Yoshihiro; MATSUBARA, Yoshio; YOSHIDA, Zen-ichi
- **3B3-54\***<sup>†</sup> Synthesis of Fluorinated Optical Active Hydrocoumarins using  $\beta$ -Trifluoromethyl-Substituted  $\alpha$ ,  $\beta$ -Unsaturated Carbonyl Compounds as Building Block (Shimane univ.) NAITO, Yuya; SHIMIZU, Yurika; TSURUGI, Eriko; WADA, Eiji

#### Tuesday, March 29, AM

Chair: KANOMATA, Nobuhiro (9:00  $\sim$ 10:00)

- \* 8:50-9:00: interval for laptop PC connection.(4B3-01, 4B3-02, 4B3-03, 4B3-04, 4B3-05)
- 4B3-01 Aldol Type Condensation Reaction of 1,1,1-Trifluoro-4-methoxy-3-penten-2-one with Benzenedicarboaldehydes (Kobe Univ.) TANAKA, Kazumi; KAMIYA, Naoki; ADACHI, Satoru; OKADA, Etsuji
- 4B3-02\* Facile synthesis of 3,4-dihalogen-substituted furans via electrophilic iodocyclization (Graduate School of Science, Tohoku Univ.) YANG, Fan; JIN, Tienan; YAMAMOTO, Yoshinori
- 4B3-03 Inverse Electron Demand Intramolecular Iminium Ene Reaction with Cu(I) Catalysts: Facile Formation of 4-Amino-3-methylenechromanes (Faculty of Eng., Hokkaido Univ.) ARAI, Noriyoshi; OHKUMA, Takeshi
- **4B3-04** Interesting Ring-opening Reactions of Fluorine-containing 3,4-Dihy-

- dro-2*H*-pyrans with Amines and Thiols A Molecular Orbital Calculation Study (Kobe Univ.) KAKU, Hou; TAMAI, Yusuke; SHIRAI, Ryusuke; OTA, Norio: KAMITORI, Yasuhiro: OKADA, Etsuii
- 4B3-05\* Triazole-Linked DNA Analogue of DNA: Synthesis and Function (Tohoku Univ.) FUJINO, Tomoko; YAMAZAKI, Naomi; YASUMOTO, Ken-ichi; SOGAWA, Kazuhiro; ISOBE, Hiroyuki

Chair: OKADA, Etsuji (10:10~11:10)

- \* 10:00-10:10: interval for laptop PC connection.(4B3-08, 4B3-09, 4B3-10, 4B3-11, 4B3-12, 4B3-13)
- 4B3-08 Synthesis of 3-Acyltetramic Acids via O- to C-Acyl Rearrangement (Faculty of Engineering, Shizuoka Univ.) SENGOKU, Tetsuya; NAGAE, Yuta; TAKAHASHI, Masaki; YODA, Hidemi
- 4B3-09 Synthetic Studies of Epicoccarine A, a Novel Antibacterial Tetramic Acid (Faculty of Engineering, Shizuoka Univ.) SENGOKU, Tetsuya; ASHIZAWA, Kazuya; NAKAYAMA, Ken; TAKAHASHI, Masaki; YODA, Hidemi
- 4B3-10<sup>#</sup> Determination of the Absolute Stereochemistry of Batzellaside B Based on Chemical Synthesis (Faculty of Engineering, Shizuoka Univ.; Life Science Research Center, Gifu Univ.) WIERZEJSKA, Jolanta; OHSHIMA, Manami; INUZUKA, Toshiyasu; SENGOKU, Tetsuya; TAKAHASHI, Masaki; YODA, Hidemi
- 4B3-11 Application of planar-chiral terpyridine to cis-selective asymmetric cyclopropanation reaction (Waseda Univ.) AKUTSU, Norihiko; KANOMATA, Nobuhiro
- 4B3-12 Catalytic asymmetric cyclopropanation with planar-chiral pyridine as an organocatalyst (Waseda Univ.) KANOMATA, Nobuhiro; FUJIYASU, Yosuke; TANAKA, Hiroko
- 4B3-13 Enantioselective One-pot Aziridination Mediated by Chiral Sulfide (Tokyo Univ. of Science) YAMAGUCHI, Hitoshi; SHIBUYA, Kota; KUTSUMURA, Noriki; SAITO, Takao

Chair: TAKAHASHI, Masaki (11:20 $\sim$ 12:00)

- \* 11:10-11:20: interval for laptop PC connection.(4B3-15, 4B3-16, 4B3-17, 4B3-18)
- 4B3-15 Chiral Lewis Acid Catalyzed Asymmetric Cycloaddition Reactions between Indole derivatives and Cyclic Carbonyl Ylides Generated from Diazocarbonyl Compounds (Shinshu Univ.) SUGA, Hiroyuki; MISAWA, Shunta; ITOH, Kennosuke; KAKEHI, Akikazu
- 4B3-16 Lewis acid catalyzed diastereoselective 1,3-dipolar cycloaddition reactions between acyclic carbonyl ylides and 3-(2-alkenoyl)-2-oxazolidinones having a chiral auxiliary (Shinshu Univ.) SUGA, Hiroyuki; HASHIMOTO, Yuta; ITOH, Kennosuke; KAKEHI, Akikazu
- 4B3-17 Asymmetric 1,3-dipolar cycloaddition reactions between α-substituted-α-diazoesters and alkenoic acid derivatives using binaphthyldiimine-Ni (II) catalysts (Shinshu Univ.) SUGA, Hiroyuki; SAKAMOTO, Atsushi; KENNOSUKE, Itoh; KAKEHI, Akikazu
- **4B3-18** Studies on Asymmetric Synthesis of Chiral Heterohelicenes by Dynamic Kinetic Resolution (Kumamoto Univ.; Kyushu Univ.) TANOUE, Akihiro; URAKAWA, Suguru; MUKAEDA, Yuri; IMAHORI, Tatsushi; IGAWA, Kazunobu; TOMOOKA, Katsuhiko; IRIE, Ryo

Chair: SUGA, Hiroyuki (12:10~12:50)

- \* 12:00-12:10: interval for laptop PC connection.(4B3-20, 4B3-21, 4B3-22, 4B3-23)
- **4B3-20** Development of new method for an efficient synthesis of spiro bis (triazole) derivatives and their applications to asymmetric catalysis. (ISIR, Osaka Univ.) YOSHIDA, Yasushi; TAKIZAWA, Shinobu; SASAI, Hiroaki
- 4B3-21\* Development and application of enantioselective intramolecular cross-Michael reaction using organocatalysts (ISIR, Osaka Univ.) NGUYEN, Tue; Zhao, Donglin; TAKIZAWA, Shinobu; SASAI, Hiroaki
- **4B3–22** Noncatalytic 1,3-Dipolar Cyclization of Azomethine Imines with ( $\alpha$ -Trifluoromethyl)acrylates (Nagoya Institute of Technology) NISHIMINE, Takayuki; OGAWA, Shinichi; TOKUNAGA, Etsuko; SHIBATA, Norio
- 4B3-23 Diastereoselective Synthesis of Compounds With Trifluoromethyl Group Using 1,3-Dipolar Cycloadditional Reaction. (Nagoya Institute of Technology) IKAI, Hidenori; OGAWA, Shinichi; TOKUNAGA, Etsuko; SHIBATA, Norio

# Room B4

Bldg. 7 7-51

# Catalysts and Catalysis Saturday, March 26, AM

#### Environmental catalysis

Chair: ITOH, Masahiro (9:00 $\sim$ 10:00)

\* 8:50-9:00: interval for laptop PC connection.(1B4-01, 1B4-02, 1B4-03, 1B4-04, 1B4-05, 1B4-06)

- 1B4-01\* NO<sub>x</sub> Storage and Reduction over Potassium Titanate Nanobelt Based Catalyst with High Storage Capacity (Kanagawa Univ.) SHEN, Weihua; NITTA, Atsue; CHEN, Zhi; EDA, Tomonori; YOSHIDA, Akihiro; NAITO, Shuichi
- 1B4-02 Effect of various alkali metal cation addition on the NO<sub>x</sub> storage and reduction over Pt/K-Titanate based catalysts (Kanagawa Univ.) EDA, Tomonori; SHEN, Weihua; YOSHIDA, Akihiro; NAITO, Shuichi
- 1B4-03 Reduction of nitrate in water over Ni nanoparticle catalyst (Grad. School of Environ. Sci., Hokkaido Univ.; Res. Faculty of Environ. Earth Sci., Hokkaido Univ.) SETO, Takeshi; SAKAMOTO, Yoshinori; KAMIYA, Yuichi
- 1B4-04 Structure of Supported Cu-Pd Cluster Catalyst with High performance for Hydrogenation of Nitrate in Water (Univ. of Hokkaido) SAKAMOTO, Yoshinori; KANNO, Mitsuru; KAMIYA, Yuichi
- 1B4-05 PM oxidation performance of Ag supported on perovskite oxides. (Kyushu Univ.) TAKAHARA, Ryousaku; KUSABA, Hajime; EINAGA, Hisahiro; TERAOKA, Yasutake
- 1B4-06 Catalytic activity of Ag/CeO<sub>2</sub>-ZrO<sub>2</sub> for PM oxidation (National Institute of Advanced Industrial Science and Technology (AIST); Mitsui Kinzoku) NANBA, Tetsuya; MASUKAWA, Shouichi; UCHISAWA, Junko; OBUCHI, Akira; SHINODA, Kiyoshi; ABE, Akira

Chair: EINAGA, Hisahiro (10:10 $\sim$ 11:00)

- \* 10:00-10:10: interval for laptop PC connection.(1B4-08, 1B4-10, 1B4-11, 1B4-12)
- 1B4-08\* In situ XAFS study on the deactivation mechanism of Cu catalyst under the daily start-up and shut-down operations (Japan Adv. Inst. of Sci. Tech.; Sch. of Mater. Sci.) NISHIMURA, Shun; EBITANI, Kohki; SHISHIDO, Tetsuya; TANAKA, Tsunahiro
- 1B4-10 Synthesis of Dimethyl Carbonate under Mild Conditions from Methanol and Carbon Dioxide using Copper-supported Cerium Oxide Catalysts (Graduate School of Science, Chiba Univ.) WADA, Seiki; IZUMI, Yasuo
- 1B4-11 Selective Heating and Reaction Acceleration with Separated Microwave into Electric and Magnetic Field (Tokyo Institute of Technology; Graduate School of Science and Engineering) SHITARA, Masashi; MOCHIZUKI, Dai; MAITANI, Masato; WADA, Yuji
- 1B4-12 Microwave effect of acid-catalyzed reactions using sulfonic acid-functionalized metal oxides (Tokyo Institute of Technology; Wada.Lab) MATSUI, Hiroki; MOCHIZUKI, Dai; MAITANI, Masato; WADA, Yuji

Chair: NANBA, Tetsuya (11:10~12:10)

- \* 11:00-11:10: interval for laptop PC connection.(1B4-14, 1B4-15, 1B4-16, 1B4-17, 1B4-18, 1B4-19)
- 1B4-14 Effect of Pd addition on NO oxidation activity of Pt catalyst (AIST; Nagoya Institute of Technology) SUZUKI, Kunio; SASAKI, Motoi; HANEDA, Masaaki; HAMADA, Hideaki
- 1B4-15 Development of catalysts based on rare earth oxides effective for direct NO decomposition (Kyoto Univ.) UEDA, Mao; HONG, Won-jong; HOSOKAWA, Saburo; WADA, Kenji; INOUE, Masashi
- 1B4-16 NO direct decomposition on Y<sub>2</sub>O<sub>3</sub> based mixed oxide catalyst (Kyushu Univ.) IDE, Tomoaki; HAGIWARA, Hidehisa; IDA, Shintaro; ISHIHARA, Tatsumi
- 1B4-17 Enhancement of catalytic activity of Pt/MCM-41 for selective catalytic reduction of NO by Nb- or Ce-addition (Chemical Resources Laboratory. Tokyo Institute of Technology) KOMATSUBARA, Masaru; KOGA, Akiko; TANAKA, Masashi; IWAMOTO, Masakazu
- 1B4-18 DeNOx activity on Pt/AlPO<sub>4</sub>-zeolite combined catalysts using a hydrogen reducer (CASI, Osaka Univ.) ITOH, Masahiro; ISHIGURO, Katsuaki; MACHIDA, Ken-ichi
- 1B4-19# In-situ FTIR study of reduction of NO by H<sub>2</sub> on nanoporous nickel phosphate VSB-5 (Kanagawa Univ.) CHEN, Zhi; KANAI, Yukiyo; SHEN, Weihua; YOSHIDA, Akihiro; NAITO, Shuichi

## Saturday, March 26, PM

### Mesoporous Materials

Chair: KIMURA, Tatsuo (13:30 $\sim$ 14:30)

- \* 13:20-13:30: interval for laptop PC connection.(1B4-28, 1B4-29, 1B4-30, 1B4-31, 1B4-32, 1B4-33)
- 1B4-28 Synthesis of polypeptide modified mesoporous silica through the living polymerization reaction of amino acid N-carboxylic anhydrides. (Kanagawa Univ.) SATO, Ryusuke; SAKAI, Kota; YOSHIDA, Akihiro; NAITO, Shuichi
- 1B4-29 Synthesis and characterization of Perovskite-type oxide in mesopore of SBA-15 (Hiroshima Univ.) KAWAMOTO, Yoshimi; SADAKANE, Masahiro; IDE, Yusuke; SANO, Tsuneji
- 1B4-30 Preparation of hydrophobic Ti-containing mesoporous silica nanospheres by silylation and their catalytic performance (Chemical Resources Laboratory, Tokyo Institute of Technology) LIU, Tingting; YOKOI, Toshiyuki; IMAI, Hiroyuki; NOMURA, Junko; TATSUMI, Takashi
- 1B4-31 Influences of amount of Al and porous structure of mesoporous silica materials on catalytic activity for hetero Diels-Alder reaction (Chemical Resources Laboratory, Tokyo Institute of Technology) SUGIUCHI, Takumi;

- ISHITANI, Haruro; IWAMOTO, Masakazu
- 1B4-32 Effects of aluminum introduced in the preparation on the state of copper ions of Cu-MCM-41 (Chemical Resources Laboratory, Tokyo Institute of Technology) MOCHIGASE, Hidenobu; TAKENAKA, Kumi; TANAKA, Masashi; ISHITANI, Haruro; IWAMOTO, Masakazu
- 1B4-33 State analysis of active sites for asymmetric cyclopropanation on copper ion-planted mesoporous silica (Chemical Resources Laboratory, Tokyo Institute of Technology) TANAKA, Masashi; TAKENAKA, Kumi; ISHITANI, Haruro; IWAMOTO, Masakazu

Chair: TAKEUCHI, Masato (14:40 $\sim$ 15:40)

- \* 14:30-14:40: interval for laptop PC connection.(1B4-35, 1B4-36, 1B4-37, 1B4-38, 1B4-39, 1B4-40)
- 1B4-35 Synthesis of mesoporous Ta oxide through ligand-assisted templating route and its adsorption ability (TIT;Chemical Resources Laboratory) IGUCHI, Ai; IMAI, Hiroyuki; YOKOI, Toshiyuki; TATSUMI, Takashi; NOMURA. Junko
- 1B4-36 Preparation of porous W-Zr mixed oxide and its catalytic property (Chemical Resources Laboratory, Tokyo Institute of Technology) KABEYA, Kohei; HORI, Shunsuke; TANAKA, Masashi; ISHITANI, Harurou; IWAMOTO, Masakazu
- 1B4-37 Synthesis and Catalytic Activity of Acid and Bace Dendrimer (Teikyo Univ. of Science & Tedchnolgy) KUGITA, Tsuyoshi; IMAZU, Masato
- 1B4-38 Preparation of macroporous films of aluminum phosphonate (AIST) KIMURA, Tatsuo

#### Zeolites

- 1B4-39 Structure analysis of Cs-ZSM-5 and Ag-ZSM-5 by Xray diffraction method using single crystals having homogeneous Al distribution (Dept. Appl. Chem., Nat. Def. Acad.) YOKOMORI, Yoshinobu; TAKATA, Nozomi; ONIZUKA, Takumi; KAMIYA, Natsumi; NISHI, Koji
- 1B4-40 FAU-LEV conversion in the absence of organic structure-directing agent (Hiroshima Univ.) FUJIMOTO, Ayumi; SHIBATA, Shohei; HONDA, Koutarou; YASHIKI, Ayako; IDE, Yusuke; SADAKANE, Masahiro; SANO, Tsuneji

Chair: SADAKANE, Masahiro (15:50~16:50)

- \* 15:40-15:50: interval for laptop PC connection.(1B4-42, 1B4-43, 1B4-44, 1B4-45, 1B4-46, 1B4-47)
- **1B4-42** Structure of carbon dioxide-silicalite-1 by single crystal X-ray diffraction method (Nat. Def. Acad.) FUJIYAMA, Shinjiro; KAMIYA, Natsumi; NISHI, Koji; YOKOMORI, Yoshinobu
- 1B4-43 Adsorption and Activation of H<sub>2</sub> at 300 K by the use of ZnMFI (Okayama Univ.) ODA, Akira; ITADANI, Atsushi; TORIGOE, Hiroe; OHKUBO, Takahiro; YUMURA, Takashi; KOBAYASHI, Hisayoshi; KURODA, Yasushige
- 1B4-44 Adsorption property of cesium salt of tungstophosphoric acid substituted with phenyl tin compound (Graduate School of Environmental Science, Hokkaido Univ.; Research Faculty of Environmental Earth Science, Hokkaido Univ.) KIKUCHI, Hiroki; MIURA, Yuki; KAMIYA, Yuichi
- 1B4-45 Catalytic cracking of hexane over dealuminated beta zeolites (Chemical Resources Laboratory, Tokyo Institute of Technology) YOSHIDA, Yutaro; MOCHIZUKI, Hiroshi; IMAI, Hiroyuki; YOKOI, Toshiyuki; NAMBA, Seitaro; NOMURA, Junko; TATSUMI, Takashi
- 1B4-46 Decomposition of acetaldehyde over the Pt/TiO<sub>2</sub> prepared by photo-deposition method physically mixed with various zeolites (Osaka Prefecture Univ., Graduate School of Engineering) INOUE, Masashi; TAKEUCHI, Masato; MATSUOKA, Masaya; ANPO, Masakazu
- 1B4-47 Selective oxidation of polyalcohol over various titanosilicate catalysts. (Chemical Resources Laboratory, Tokyo Institute of Technology) TAMURA, Naoya; OTOMO, Ryoichi; YOKOI, Toshiyuki; IMAI, Hiroyuki; NOMURA, Junko; TSTSUMI, Takashi

Chair: KAMIYA, Yuichi (17:00∼17:30)

- \* 16:50-17:00: interval for laptop PC connection.(1B4-49, 1B4-50, 1B4-51)
- 1B4-49<sup>†</sup> Controlling basicity of zeolite Y supporting Ni metal and the catalytic activities for ethanol steam reforming (Okayama Univ.) INOKAWA, Hitoshi; NISHIMOTO, Shunsuke; KAMESHIMA, Yoshikazu; MIYAKE, Michihiro
- **1B4-50** Selective production of propylene over zeolite by the conversion of C₄H<sub>8</sub> or C₃H<sub>10</sub> (Tokyo Institute of Technology) MUNAKATA, Hajime; IWASE, Yasuyoshi; KOYAMA, To-ru; MIYAJI, Akimitsu; MOTOKURA, Ken: BABA. Toshihide
- 1B4-51 Synthsisi of zeolites using 1,1-dimethylpiperidinium as SDA and MTO catalytic property (Tokyo Institute of Technology) YOHIOKA, Masato; IMAI, Horoyuki; YOKOI, Toshiyuki; NOMURA, Junko; TATSUMI, Takashi

## Sunday, March 27, AM

#### Photocatalysis

Chair: MATSUOKA, Masaya (9:00  $\sim$ 10:00)

\* 8:50-9:00: interval for laptop PC connection.(2B4-01, 2B4-02, 2B4-03,

2B4-04, 2B4-05, 2B4-06)

- **2B4-01** Investigation of mechanism of metal nanoparticles photodeposition using a TiO<sub>2</sub> photocatalyst (Graduate School of Engineering, Kyoto Univ.) YAMAMOTO, Akira; OHYAMA, Junya; TERAMURA, Kentaro; SHISHIDO, Tetsuya; TANAKA, Tsunehiro
- 2B4-02 Characterizaion of highly disperised vanadium oxide for photoepoxidation of proplene (Graduate School of Engineering, Kyoto Univ.) TAKAYAMA, Yoshihisa; KUDO, Kotaro; TERAMURA, Kentaro; SHISHIDO, Tetsuya; TANAKA, Tsunehiro
- 2B4-03 Analysis of photocatalytic reactions utilizing a TiO<sub>2</sub> immobilized microreactor(3) (Chuo Univ.) TSUCHIYA, Naomi; HIDAKA, Asuna; KUWABARA, Kenta; ODA, Kazuyo; KATAYAMA, Kenji
- 2B4-04 Analysis of photocatalytic reactions utilizing TiO2 immobilized micro reactor (4) (Chuo Univ.) KUWABARA, Kenta; TSUCHIYA, Naomi; HIDAKA, Asuna; ODA, Kazuyo; KATAYAMA, Kenji
- 2B4-05 Influence of preparation methods of Ni/Ga-TiO<sub>2</sub> catalyst on photo-catalytic hydrogen evolution from water (Tokyo Gakugei Univ.) HOSAKA, Satoki; IKUO, Akira; OGAWA, Haruo; YOSHINAGA, Yusuke
- 2B4-06 Kinetic analysis for photocatalytic hydrogenation of aromatic carbonyl compounds on titanium dioxide (Hyogo Univ. of Health Sciences; Tokyo Univ. of Sciences) KOHTANI, Shigeru; YOSHIOKA, Eito; SAITOH, Kenji; KUDO, Akihiko; MIYABE, Hideto

Chair: KAKO, Tetsuya (10:10∼11:10)

- \* 10:00-10:10: interval for laptop PC connection.(2B4-08, 2B4-09, 2B4-10, 2B4-11, 2B4-12, 2B4-13)
- **2B4-08** Study Of Photocatalysts Painted On Flat Glass Plate (The Univ. of Tokyo) XIONG, Anke; MAEDA, Kazuhiko; KUBOTA, Jun; DOMEN, Kazunari
- 2B4-09<sup>†#</sup>Effects of surface modifications using ZnS on Cu deficient copper gallium selenide photoelectrodes for water splitting (Department of Chemical System Engineering, The Univ. of Tokyo) KIM, Jaehong; MINEGISHI, Tsutomu; KUBOTA, Jun; DOMEN, Kazunari
- 2B4-10\* Visible light driven stannic oxide and its photoelectrochemical water splitting properties (School of Eng.; The Univ. of Tokyo.) TIAN, Mengkui; TAKATA, Tsuyoshi; DOMEN, Kazunari
- 2B4-11 Niobated photocatalysts doped with transition metals with visible light response (Faculty of science, Tokyo Univ. of Science) SOMA, Kota; IWASHINA, Katsuya: SAITO, Kenji; KUDO, Akihiko
- 2B4-12 Photocatalytic and photoelectrochemical properties of metal ionsubstituted PbTiO<sub>3</sub> (Faculty of Science, Tokyo Univ. of Science) AKIBA, Hiroki; IWASHINA, Katsuya; SAITO, Kenji; KUDO, Akihiko
- 2B4-13 Effect of A-site substitution on photocatalytic properties of Na<sub>0.5</sub>Y<sub>0.5</sub>-TiO<sub>3</sub>:Rh under visible light irradiation (Faculty of Science, Tokyo Univ. of Science) ISHIHARA, Shogo; SAITO, Kenji; KUDO, Akihiko

Chair: KAMEGAWA, Takashi (11:20∼12:20)

- \* 11:10-11:20: interval for laptop PC connection.(2B4-15, 2B4-17, 2B4-18, 2B4-19, 2B4-20)
- 2B4-15\* Reduction of CO<sub>2</sub> Utilizing a Semiconductor and the Complex Catalysts (Toyota Central R&D Labs.,Inc) MORIKAWA, Takeshi; SATO, Shunsuke; SAEKI, Shu; SUZUKI, Tomiko; KAJINO, Tsutomu; MOTOHIRO, Tomoyoshi
- 2B4-17 Reduction of CO<sub>2</sub> in Aqueous Medium Utilizing a Semiconductor and the Complex Catalysts (Toyota Central R&D Labs.,Inc) SATO, Shunsuke; ARAI, Takeo; MORIKAWA, Takeshi; UEMURA, Keiko; KAJINO, Tsutomu
- 2B4-18 A direct photoconversion of CO<sub>2</sub> and H<sub>2</sub>O to formate using the semiconductor/complex hybrid photocatalyst (Toyota Central R&D Labs., Inc) ARAI, Takeo; SATO, Shunsuke; MORIKAWA, Takeshi; UEMURA, Keiko; SUZUKI, Tomiko; KAJINO, Tsutomu
- 2B4-19<sup>†#</sup>Photoexcited carrier transfer mechanism in the photocatalysis for water splitting studied by infrared spectroscopy (Graduate School of Engineering, the Univ. of Tokyo) LU, Xuwang; BANDARA, Athula; KATAYAMA, Masao; KUBOTA, Jun; DOMEN, Kazunari
- 2B4-20 Improvement of photocatalytic water-splitting reaction byfine modification of SrTiO<sub>3</sub> powders preparedby flux method (Faculty of Eng.,The Univ. of Tokyo) MORI, Hirotaka; ISHIHARA, Takahiro; KATAYAMA, Masao; TAKATA, Tsuyoshi; KUBOTA, Jun; DOMEN, Kazunari

#### Sunday, March 27, PM

#### **Photocatalysis**

Chair: SHISHIDO, Tetsuya (13:30∼14:30)

- \* 13:20-13:30: interval for laptop PC connection.(2B4-28, 2B4-30, 2B4-32, 2B4-33)
- 2B4-28\*†\*Optimization of Interlayer Reaction Space of Zn-Cu-Ga Double Hydroxides for Photo-conversion Starting from Carbon Dioxide to Methanol (Chiba Univ., Graduate School of Science, Department of Chemistry) AHMED, Naveed; IZUMI, Yasuo
- 2B4-30\* Development of tantalum-based oxynitrides as photocatalysts for efficient water splitting under visible light (The Univ. of Tokyo) MAEDA, Kazuhiko; DOMEN, Kazunari
- 2B4-32 Photocatalytic reaction over modified indium oxide under irradiation

- of UV-vis light (Kinki Univ.) SASAKI, Yasutomo; HASHIMOTO, Keiji; KOMINAMI. Hiroshi
- 2B4-33 Solvothermal synthesis of doped titanium(IV) oxide nano crystals and their photocatalytic performance under visible light irradiation. (Kinki Univ.) YAMAMOTO, Atsushi; HASHIMOTO, Keiji; KOMINAMI, Hiroshi

### Monday, March 28, AM

### Photocatalysis

Chair: KOMINAMI, Hiroshi  $(9:00 \sim 10:00)$ 

- \* 8:50-9:00: interval for laptop PC connection.(3B4-01, 3B4-02, 3B4-03, 3B4-04, 3B4-05, 3B4-06)
- 3B4-01 Photoinduced electron transfer from nitrogen-doped Ta<sub>2</sub>O<sub>5</sub> to adsorbed Ru complex (Toyota Central R&D Labs.,Inc.) YAMANAKA, Ken-ichi; SATO, Shunsuke; SAEKI, Shu; MORIKAWA, Takeshi; KAJINO, Tsutomu
- **3B4-02** Water splitting reaction over visible-light responsive SrTiO<sub>3</sub>:Rh,Sb photocatalyst (Faculty of Science, Tokyo Univ. of Science) ASAI, Rikako; NEMOTO, Hiroaki; JIA, Qingxin; SAITO, Kenji; KUDO, Akihiko
- 3B4-03 Photocatalytic overall water splitting over Z-scheme photocatalyst composed of BiVO<sub>4</sub>/SrTiO<sub>3</sub>:Rh under visible light irradiation (Faculty of science, Tokyo Univ. of Science) JIA, Qingxin; SAITO, Kenji; KUDO, Akihiko
- **3B4-04** Overall water splitting driven by interparticle electron transfer over Z-scheme photocatalyst composed of TiO<sub>2</sub>:A/Sb(A=Rh, Cr) as O<sub>2</sub> evolving photocatalysts under visible light irradiation. (Faculty of Science, Tokyo Univ. of Science) YAMAGUCHI, Masaharu; ISHIGURO, Yoshimi; SAITO, Kenji; KUDO, Akihiko
- **3B4-05**\* Photocatalytic reduction of CO2 with H2O over lamellar niobic acid (Hokkaido Univ.) YUE, Bing; KAKO, Tetsuya; YE, Jinhua
- 3B4-06<sup>#</sup> Room Temperature Synthesis of Micro/Mesoporous Zn<sub>2</sub>GeO<sub>4</sub> Photo-catalyst and its Enhanced Photoreduction of CO<sub>2</sub> (Hokkaido Univ.) ZHANG, Ning; OUYANG, Shuxin; KAKO, Tetsuya; YE, Jinhua

Chair: IZUMI, Yasuo (10:10~11:10)

- \* 10:00-10:10: interval for laptop PC connection.(3B4-08, 3B4-09, 3B4-10, 3B4-11, 3B4-12, 3B4-13)
- 3B4-08 Enhancement of activity of cocatalyst-tungsten(VI) oxide photocatalyst responding to visible-light. (Kinki Univ.) SAKAGUCHI, Satoshi; HASHIMOTO, Keiji; KOMINAMI, Hiroshi
- 3B4-09 Photocatalytic isomerization of butenes over TiO2 loaded with metals. (Kinki Univ.) MASUDA, Yusuke; HASHIMOTO, Keiji; KOMINAMI, Hiroshi
- 3B4-10<sup>†</sup> Photoreduction of organic compounds by using Iridium(III) complexes-zeolite nanohybrids (Tokyo Institute of Technology; Graduate School of Science and Engineering) XU, Chen; MOCHIZUKI, Dai; MAITANI, Masato; WADA, Yuji
- 3B4-11 Effect of pH for photocatalytic oxidation of aqueous ammonia over platinum loaded TiO2 (Tokai Univ.) SHIBUYA, Satoshi; ISHIHARA, Yoshimi; MIKAMI, Ikko
- 3B4-12 Selective Photooxidation of Amine over Nb2O5 (Kyoto Univ., KUPRU) OHNO, Yasuhiro; FURUKAWA, Shinya; SHISHIDO, Tetsuya; TERAMURA, Kentaro; TANAKA, Tsunehiro
- **3B4-13** Study on selective photooxidation of cyclohexene in the liquid phase under visible light irradiation using an orthovanadate-like (V=O)O3 species with a porphyrin sensitizer. (Kyoto Univ.) SATO, Takashi; TERAMURA, Kentaro; SHISHIDO, Tetsuya; TANAKA, Tsunehiro

Chair: KATAYAMA, Masao (11:20~12:20)

- \* 11:10-11:20: interval for laptop PC connection.(3B4-15, 3B4-16, 3B4-17, 3B4-18, 3B4-20)
- **3B4-15** Overall water splitting over ANb<sub>3-x</sub>Ta<sub>x</sub>O<sub>8</sub>(A=Na, K, Rb, Cs) photocatalyst (Faculty of Science, Tokyo Univ. of Science) TAKAI, Toru; KAWASAKI, Seiji; ISHIHARA, Shogo; JIA, Qingxin; SAITO, Kenji; KUDO, Akihiko
- **3B4-16** Photocatalytic properties of non-substituted and Cu, Ga-cosubstituted Zn<sub>2</sub>GeS<sub>4</sub> (Faculty of Science, Tokyo Univ. of Science) AOYAMA, Tetsuji; SAITO, Kenji; KUDO, Akihiko
- 3B4-17 Novel sulfide photocatalysts (CuGa)<sub>x</sub>Zn<sub>2(1-x)</sub>S<sub>2</sub> For H<sub>2</sub> evolution under visible light irradiation (Faculty of Science, Tokyo Univ. of Science) HAKARI, Yuichiro; AOYAMA, Tetsuji; SAITO, Kenji; KUDO, Akihiko
- **3B4-18\*** Theory of photocatalytic activity of silver phosphate (National Institute for Materials Science) UMEZAWA, Naoto; OUYANG, Shuxin; BI, Yingpu; YE, Jinhua
- 3B4-20 Photocatalytic and photphysical properties of titanium oxide (National Institute for Materials Science) KAKO, Tetsuya; LI, Qiuye; YE, Jinhua

## Monday, March 28, PM

## Photocatalysis

Chair: SATO, Syunsuke (13:30~14:30)

\* 13:20-13:30: interval for laptop PC connection.(3B4-28, 3B4-29, 3B4-30,

- 3B4-31, 3B4-32, 3B4-33)
- 3B4-28# AgAl<sub>1-x</sub>GaxO<sub>2</sub> solid-solution photocatalysts: continuous modulation of electronic structure to enhance visible-light photoactivity for iso-propanol degradation (National Institute for Materials Science) OUYANG, Shuxin; YE. Jinhua
- 3B4-29 Direct imine synthesis from alcohols and amines with TiO<sub>2</sub> photocatalyst loading Pt nanoparticles (Osaka Univ.) IKEDA, Makoto; TSUKAMOTO, Daijiro: SHIRAISHI, Yasuhiro: HIRAI, Takayuki
- 3B4-30 Photocatalytic dehalogenation with TiO<sub>2</sub> loading Pd-Pt alloy nanoparticles (Osaka Univ.) TAKEDA, Yoshinori; SUGANO, Yoshitsune; SHIRAISHI, Yasuhiro; HIRAI, Takayuki
- 3B4-31<sup>†</sup> Synthesis of micro-crystalline LaTiO<sub>2</sub>N and their photoelectrochemical water splitting (School of Engineering The Univ. of Tokyo) NISHIMURA, Naoyuki; YAMAGUCHI, Akiko; SUZUKI, Sayaka; TAKATA, Tsuyoshi; TESHIMA, Katsuya; KUBOTA, Jun; DOMEN, Kazunari
- 3B4-32<sup>#</sup> Investigation on oxygen evolution property of carbon nitride photocatalyst (Faculty of Eng.,The Univ. of Tokyo) HAM, Yeilin; MAEDA, Kazuhiko; DOMEN, Kazunari
- 3B4-33 Effects of cobalt complexes as a cocatalyst for photosensitized hydrogen production from water using titanium dioxide (CST, Nihon Univ.) SUZUKI, Akira; YAMADA, Tomoko; HIRUMA, Tamami; OTSUKI, Joe

Chair: MINEGISHI, Tsutomu (14:40~15:40)

- \* 14:30-14:40: interval for laptop PC connection.(3B4-35, 3B4-36, 3B4-37, 3B4-38, 3B4-39, 3B4-40)
- 3B4-35 Decomposition of ammonia over SrTiO<sub>3</sub> photocatalysts doped with various transition metals under visible light irradiation (Faculty of Science, Tokyo Univ. of Science) SHISHIDO, Wataru; SANEFUJI, Sayaka; SAITO, Kenii: KUDO. Akihiko
- 3B4-36 The photocatalytic reduction of CO<sub>2</sub> over AgGa<sub>3</sub>In<sub>2</sub>S<sub>8</sub> photocatalyst (Faculty of Science, Tokyo Univ. of Science) NAKAMURA, Aki; WATO, Tomoaki: SAITO, Kenii: KUDO, Akihiko
- 3B4-37 CO<sub>2</sub> reduction over valence band-controlled oxide photocatalysts with tungsten bronze2dtype structures using water as a reductant (Faculty of Science, Tokyo Univ. of Science) WATO, Tomoaki; SAITO, Kenji; KUDO, Akihiko
- 3B4-38 Visible light hydrogen production of KCa2Nb3O10 intercalated with dye sensitizer (Graduate School of Environmental Science, Okayama Univ.) OKADA, Masagorou; NISHIMOTO, Shunsuke; KAMESHIMA, Yoshikazu; MIYAKE. Michihiro
- 3B4-39\* Photoelectrochemical property of Fe-based photoelectrode prepared by pulsed laser deposition (Hokkaido Univ.) CAO, Junyu; KAKO, Tetsuya; YE, Jinhua
- 3B4-40<sup>#</sup> Enhanced Incident Photon-to-current Conversion Efficiency of WO<sub>3</sub> Photonic Crystals with Inverse Opal Structure (Hokkaido Univ.) CHEN, Xiaoqing; KAKO, Tetsuya; YE, Jinhua

Chair: HIRAI, Takayuki (15:50~16:50)

- \* 15:40-15:50: interval for laptop PC connection.(3B4-42, 3B4-43, 3B4-44, 3B4-45, 3B4-46, 3B4-47)
- 3B4-42 Preparations of Pt deposited MOFs(Metal-organic frameworks)by photoassisted deposition method and their photocatalytic activities (Department of Engineerring, Osaka Prefecture Univ.) TOYAO, Takashi; UEDA, Kozo; SAITO, Masakazu; KAMEGAWA, Takashi; MATSUOKA, Masaya
- 3B4-43 Preparation of highly-hydrophobic FAU zeolite by acid and calcination treatments and its application for TiO<sub>2</sub> phtocatalyst support (Univ. of Osaka; Engineering, Division of Materials and Manufacturing Science, Yamashita lab.) AOYAMA, Junya; KUWAHARA, Yasutaka; KAMEGAWA, Takashi; MORI, Kohsuke; YAMASHITA, Hiromi
- 3B4-44 Effect of the carbon coating on the photocatalytic activityies of mesoporous silica supported TiO<sub>2</sub> for the decomposition of organic compounds (Graduate School of Engineering, Osaka Univ...) YAMAHANA, Daiki; KAMEGAWA, Takashi; YAMASHITA, Hiromi
- 3B4-45 Optimization of synergetic effects on the CO photo-PROX reaction by nanoparticles and nanotubes of Ti oxide and the reaction mechanism (Graduate School of Science, Chiba Univ.) MITANI, Yu; YOSHIDA, Yusuke: IZUMI. Yasuo
- 3B4-46 Preferntial oxidation of carbon monoxide in hydrogenonhomogeneous nanoparticle zinc oxide promoted by adsorbed Cu ions (Univ. of Chiba) YOSHIDA, Yusuke: IZUMI, Yasuo: MITANI, Yu
- 3B4-47 Preparation of nanosized metal particles-loaded photocatalyst by microwave heating and efficient hydrogen production reaction (Osaka Univ.) FUKU, Kojirou; KAMEGAWA, Takashi; MORI, Kohsuke; YAMASHITA, Hiromi

Chair: SAITO, Kenji (17:00∼18:10)

- \* 16:50-17:00: interval for laptop PC connection.(3B4-49, 3B4-51, 3B4-53, 3B4-54, 3B4-55)
- **3B4-49\***<sup>†</sup> Estimation of Defects on Semiconductor Surface using Emission Quenching Phenomena of Ruthenium(II) Complexes (Tokyo Tech.) SEKIZAWA, Keita; MAEDA, Kazuhiko; NISHIMURA, Naoyuki; KOIKE, Kazuhide; YUI, Tatsuto; DOMEN, Kazunari; ISHITANI, Osamu

- **3B4-51\*** Oxygen evolution photocatalysis using acridone-bridged periodic mesoporous organosilica as a light harvesting support (Toyota Central R&D Labs., Inc., JST-CREST) TAKEDA, Hiroyuki; GOTO, Yasutomo; TANI, Takao; INAGAKI, Shinji
- 3B4-53 Investigation of Photocatalytic Water Splitting on Zn-added Ga<sub>2</sub>O<sub>3</sub> Loaded with Transition Metal and Cr<sub>2</sub>O<sub>3</sub> as Cocatalyst (School of Engineering, The Univ. of Tokyo) MIZUKI, Kazuhiro; MAEDA, Kazuhiko: KUBOTA, Jun: SAKATA, Yoshihisa: DOMEN, Kazunari
- 3B4-54 A Study of Zinc Germanium Oxynitride as a Photocatalyst for Overall Water Splitting under Visible Light (Faculty of Eng., The Univ. of Tokyo) ASAI, Tomohiro; MAEDA, Kazuhiko; DOMEN, Kazunari
- 3B4-55 Examination of an influence of oxide precursor synthetic methods on the photocatalytic water splitting performance of perovskite oxynitride LaTiO<sub>2</sub>N (Univ. of Tokyo; Shinshu Univ.) MORIYA, Yosuke; ZHANG, Fuxiang; MA, Guijun; YAMAGUCHI, Akiko; SUZUKI, Sayaka; TESHIMA, Katsuya; TAKATA, Tsuyoshi; DOMEN, Kazunari

## Biofunctional Chemistry; Biotechnology Tuesday, March 29, AM

#### Proteins(Structure and Function)

Chair: MIZUNO, Toshihisa  $(9:00\sim10:00)$ 

- \* 8:50-9:00: interval for laptop PC connection.(4B4-01, 4B4-02, 4B4-04, 4B4-06)
- **4B4-01** Encapsulation of Alkylcobalt(III)porphyrin Complex by Permethylated .bata.-Cyclodextrin (Doshisha Univ.) KUWANO, Hiroyuki; KITAGISHI, Hiroaki; KANO, Koji
- 4B4-02\* Solid-state NMR study of a seven-helical transmembrane photoreceptor protein (Yokohama Natl. Univ.; Univ. Guelph) KAWAMURA, Izuru; SHI, Lichi; BROWN, Leonid S.; LADIZHANSKY, Vladimir
- **4B4-04\*** Mechanistic analysis of pre-folding processes of oxidative protein folding by using a water-soluble selenoxide (Tokai Univ.) ARAI, Kenta; DEDACHI, Kenichi; KUMAKURA, Humio; IWAOKA, Michio
- 4B4-06 Observation of key intermediates on the oxidative foldingpathways of hen egg white lysozyme and the temperature effect (Tokai Univ.) SHIBAGAKI, Wataru: ARAI, Kenta: IWAOKA, Michio

Chair: IWAOKA, Michio (10:10~11:10)

- \* 10:00-10:10: interval for laptop PC connection.(4B4-08, 4B4-10, 4B4-11, 4B4-13)
- 4B4-08\* Study on the structure of chloride ion binding site of Salinibacter sensory rhodopsin I by ATR-FTIR spectroscopy (Nagoya Institute of Technology) INOUE, Keiichi; REISSI, Louisa; SUDO, Yuki; HOMMA, Michio; KANDORI, Hideki
- 4B4-10 Re-association of 3,4-Dihydroanhydrorhodovibrin and a LH1 subunit from purple photosynthetic bacteria Rs.rubrum and evaluation of the reassociated LH1 complex (Graduate School of Science, Osaka City Univ., CREST/JST, OCARINA/OCU) YAMAMOTO, Mai; SUZUKI, Shuichi; KOZAKI, Masatoshi; OKADA, Keiji; HORIBE, Tomoko; NISHISAKA, Yoshiaki; FUJII, Ritsuko; NANGO, Mamoru; HASHIMOTO, Hideki
- 4B4-11\* Single-Molecule Measurement of Mid-Infrared Absorption Spectrum of Photosynthetic Antenna Complexes. (Graduate Univ. for Advanced Studies; Nagoya Institute of Technology; Tokyo Institute of Technology) OTOMO, Kohei; DEWA, Takehisa; NANGO, Mamoru; WATANABE, Masakatsu; MATSUSHITA, Michio; FUJIYOSHI, Satoru
- 4B4-13 Construction of the method to identify the stable folding domain of the target protein by the use of GFP-fusion protein and its application to telomere binding proteins (Tokyo Univ. of Sci.) MATSUMOTO, Minami; NAKAMURA, Yo; TORIGOE, Hidetaka

Chair: KANO, Koji (11:20 $\sim$ 12:20)

- \* 11:10-11:20: interval for laptop PC connection.(4B4-15, 4B4-17, 4B4-19)
- 4B4-15\* High-resolution atomic force microscopy observation of reconstituted photosynthetic membrane incorporated peripheral and core antenna complexes (Graduate School of Science, Osaka City Univ.) SUGAI, Yuko; SUMINO, Ayumi; URAGAMI, Chiasa; FUJII, Ritsuko; NISHIOKA, Takanori; DEWA, Takehisa: KINOSHITA, Isamu: NANGO, Mamoru: HASHIMOTO, Hideki
- 4B4-17\* Gaseous alkane hydroxylation by wild-type cytochrome P450BM3 modified with perfluoro carboxylic acid (Grad. School of Sci. Nagoya Univ.) KAWAKAMI. Norifumi: SHOJI. Osami: WATANABE, Yoshihito
- **4B4-19\*** Reaction mechanism of non-enzymatic process on the brominating activity of perhydrolase (Ritsumeikan Univ.; Department of Applied Chemistry) CHINA, Hideyasu; OKADA, Utaka; OGINO, Hiroyasu

## Tuesday, March 29, PM

### Proteins(Structure and Function)

Chair: TSUMOTO, Kouhei (13:30~14:30)

- \* 13:20-13:30: interval for laptop PC connection.(4B4-28, 4B4-29, 4B4-30, 4B4-31, 4B4-32, 4B4-33)
- 4B4-28 Immobilization of reconstituted LH1-type complexes using recombinant LH1 proteins on a substrate (Nagoya Inst. of Tech.) SAKAI,

- Shunnsuke; NAKAGAWA, Katsunori; NAKASHIMA, Ayano; IIDA, Kouji; HASHIMOTO, Hideki; MIZUNO, Toshihisa; TANAKA, Toshiki; DEWA, Takehisa; NANGO, Mamoru
- 4B4-29 Assembly of light-harvesting antenna core complex from photosynthetic bacteria onto ITO substrate and its photocurrent activity (Nagoya Institute of Technology) KONDO, Masaharu; HARADA, Kaori; NAGASHIMA, Sakiko; NAGASHIMA, Kenji; HASHIMOTO, Hideki; DEWA, Takehisa; NANGO, Mamoru
- 4B4-30 Assembly of photosynthetic antenna complex on electrodes and its photocurrent activity. (Grad. School Eng., Nagoya Inst. of Tech.) AMANO, Mizuki; KUZUYA, Koutarou; NAGATA, Morio; KONDO, Masaharu; HASHIMOTO, Hideki; DEWA, Takehisa; NANGO, Mamoru
- **4B4-31** ESR study on di- and tri-sulfide neutral radicals observed for α-keratin of human exposed to near-UV irratiation (Kyoto Institute of Technology) SUGIE, Takahiro; YANAGI, Naoki; SAKURAI, Yasuhiro; NAKAJIMA, Akira; KANAORI, Kenji; TAJIMA, Kunihiko
- 4B4-32 Construction of mms7 gene deletion mutant and its protein profile analysis of particle surface in magnetotactic bacteria (Tokyo Univ. Agri. Tech.) YAMAGISHI, Ayana; FUKUYO, Ayumi; ARAKAKI, Atsushi; MATSUNAGA, Tadashi
- 4B4-33 Enhanced expression level of target proteins onto bacterial magnetic particles by construction of the host cell (Tokyo Univ. Agri. Tech.) KANETSUKI, Yuka; YOSHINO, Tomoko; MATSUNAGA, Tadashi

Chair: YOSHINO, Tomoko (14:40~15:40)

- \* 14:30-14:40: interval for laptop PC connection.(4B4-35, 4B4-36, 4B4-37, 4B4-38, 4B4-39, 4B4-40)
- 4B4-35 The Kinetic Analysis of Iron-Dependent Alcohol Dehydrogenase (Tokyo Univ. of Agriculture and Technology) KOBAYASHI, Yosuke; TAKEDA, Kota; MATSUMURA, Hirotoshi; NAKAMURA, Nobuhumi; OHNO, Hirovuki
- **4B4-36** Substrate preference studies of a post-translational modification enzyme, PatD, toward construction of azoline-containing chemical libraries (Grad. School of Engineering, Univ. of Tokyo; School of Science, Univ. of Tokyo; RCAST, Univ. of Tokyo) ITO, Yumi; GOTO, Yuki; HAYASHI, Yuuki; SUGA, Hiroaki
- **4B4-37** Effects of Mutations at Dimer-Interface on the Structure of 3 α-Hydroxysteroid Dehydrogenase from *Pseudomonas* sp. B-0831: a Molecular Dynamics Study (Kyoto Pref. Univ.; Natl. Instit. of Adv. Indust. Sci. and Technol.) SUGIMOTO, Noboru; ODA, Masayuki; HARA, Kotaro; FUKUNISHI. Yoshifumi: LINTULUOTO. Masami
- 4B4-38 Improvement of Salicylic Acid- Synthesis Activity of Reversible Salicylic Acid Decarboxylase by Site-directed Mutagenesis (Dept. Appl. Chem., Fac. Sci. Eng., Waseda Univ.) KOSAKA, Sachiyo; HONDA, Yuki; HATTORI, Takasumi; ISHII, Yositaka; KIRIMURA, Kohtaro
- 4B4-39 Characterization of the snake venom protein from the crude venom of Naja atra(Taiwan cobra) that inhibits binding of the tumor cell to collagen (Animal Cell Technology Laboratory, Kogakuin Univ.) TOOYAMA, Takeshi; SIN, Yongchol; WATANABE, Tomoko; SETO, Ryouko; IMAMURA, Yasutada
- **4B4-40** The artificial blood vessel that mimics *in vivo* environment Morphology and function of vascular endothelical cells cultured in long-term on the type IV collagen aggregates (Animal Cell Technology Laboratory, Kogakuin Univ.) MATSUSHITA, Yu; SHIN, Yontyoru; USHIKU, Nami; IMAMURA, Yasutada

Chair: KIRIMURA, Kohtaro (15:50~16:50)

- \* 15:40-15:50: interval for laptop PC connection.(4B4-42, 4B4-43, 4B4-44, 4B4-45, 4B4-46, 4B4-47)
- 4B4-42 Inhibition mode of phosphatase PPM1D inhibitor SPI-001 and its effect on nucleolus formation (Hokkaido Univ.; Fac. of Sci.; Dept. of Chem.) KOZAKAI, Yuuki; YAGI, Hiroaki; TEDUKA, Youhei; CHUMAN, Yoshiro; IMAGAWA, Toshiaki; TANINO, Keiji; SAKAGUCHI, Kazuyasu
- 4B4-43 Functional Analysis of ABC-transporter MsbA in Nanodisc (Univ. of Tokyo; Department of Medical Genome) KAWAI, Takeaki; Martinez Caaveiro, Jose Manuel; ABE, Ryota; KATAGIRI, Toyomasa; TSUMOTO, Kouhei
- 4B4-44 Preperaction and characterization of anti-Epiregulin scFv-Fc (Dep. of Med. Geno. Sci., Grad. Sch. of Fro. Sci., Univ. of Tokyo) TASHIRO, Shinnya; MIYAFUSA, Takamitsu; SANO, Emiko; YOSHIDA, Kenji; HIRATA, Yuuichi; HAMAKUBO, Takao; KODAMA, Tatsuhiko; TSUMOTO, Kouhei
- 4B4-45 Physicochemical analysis of P-Cadherin antibodies aiming for Radioimmunotherapy (Faculty of Engineering The Univ. of Tokyo) KUDO, Shota; MIYAHUSA, Takamitsu; MATSUURA, Tadashi; SUTO, Yukio; KODAMA, Tatsuhiko; HAMAKUBO, Takao; TSUMOTO, Kohei
- 4B4-46 Purification and characterization of human catalytic antibody light chains (Applied chemistry, Oita Univ., Research Promotion Project, Oita Univ.) TAKAMOTO, Mai; HIROTA, Katsuki; HONJO, Eijiro; HIFUMI, Emi; UDA, Taizo
- 4B4-47 Construction of core-streptavidin fushion antibody for pretargeting drug delivery (Med. Genome Sci., Frontier Sci., Univ. of Tokyo) YUMURA, Kyohei; UI, Mihoko; DOI, Hirohumi; SUGIYAMA, Akira; HAMAKUBO, Takao; KODAMA, Tatsuhiko; TSUMOTO, Kouhei

## Room B5

Bldg. 7 7-52

# Biofunctional Chemistry ; Biotechnology Saturday, March 26, PM

#### Functional molecules

Chair: OBA, Toru (13:00∼14:00)

- \* 12:50-13:00: interval for laptop PC connection.(1B5-25, 1B5-27, 1B5-28, 1B5-29, 1B5-30)
- **1B5-25\***# Preparation and Spectroscopic Characterization of the Elusive Heme-Nitroxyl Complexes (Inst. for Materials Chem. and Eng.and Eng. and International Inst. for Carbon-Neutral Energy Res., Kyushu Univ.) LIU, Jin-gang; OHTA, Takehiro; NARUTA, Yoshinori
- **1B5-27** Effects of Macrocyclic Structures on Demetalation of Zinc Cyclic Tetrapyrrole Complexes (Kinki Univ.) SAGA, Yoshitaka; MIURA, Ryosuke; HOJO, Sayaka; HIRAI, Yuki
- **1B5-28** Self-Aggregation of Synthetic Zinc Chlorophyll Derivatives on Various Substrates (Ritsumeikan Univ.) SHOJI, Sunao; HASHISHIN, Takeshi; TAMIAKI, Hitoshi
- 185-29 Synthesis of Protochlorophyll Derivatives Bearing a Chiral Side Chain and their Self-Aggregation (Ritsumeikan Univ.) TAMIAKI, Hitoshi; KOMADA, Jun
- **1B5-30** Excitation Energy Transfer from Chlorosomal Supramolecular Zinc Porphyrin Self-Aggregates to Near-Infrared Emitting Acceptor (Ritsumeikan Univ.) KATAOKA, Yumiko; SHIBATA, Yutaka; TAMIAKI, Hitoshi

Chair: YAMAMOTO, Yukio (14:10~15:10)

- \* 14:00-14:10: interval for laptop PC connection.(1B5-32, 1B5-33, 1B5-34, 1B5-35, 1B5-36, 1B5-37)
- 1B5-32 Mimicking the cytochrome-c maturation processes on CcmE with amine-adducts of chlorophyll derivatives (Grad. Sch. Eng., Utsunomiya Univ.) OBA, Toru; YANAGIDA, Shino; ITO, Satoshi; HIRATANI, Kazuhisa
- **1B5-33** Conversion of the peripheral substituent of chlorophyllderivatives with thiol (Grad. Sch. Eng., Utsunomiya Univ.) OBA, Toru; MATSUDA, Kohei; ITO, Satoshi; HIRATANI, Kazuhisa; TAMIAK, Hitoshi
- 1B5-34 Synthesis and properties of sulfur-containing chlorophyll derivatives (Fac. Eng., Utsunomiya Univ.) OBA, Toru; MORIOKA, Misaki; ITO, Satoshi; HIRATANI, Kazuhisa; YOSHIZATO, Mari; SASAKI, Shin-ichi; TAMIAKI, Hitoshi
- 1B5-35 Application of a novel formylation to the development of photosensitizing drugs (Grad. Sch. Eng., Utsunomiya Univ.) FUKUSUMI, Takanori; ITO, Satoshi; HIRATANI, Kazuhisa; TAMIAKI, Hitoshi; IKEDA, Tsukasa; OBA, Toru
- 185-36 Self-assemblies of Chlorophyll Derivatives Bonded to Polymers (Ryukoku Univ.) MIYATAKE, Tomohiro; OKADA, Kazuma
- 185-37 Function analysis of self-organized protein molecules membrane on a solid surface (Kyushu Institute of Technology; Department of Biological Functions and Engineering) TAKATSUJI, Yoshiyuki; IWANAGA, Atsushi; HARUYAMA, Tetsuya

Chair: MIYATAKE, Tomohiro (15:20 $\sim$ 16:20)

- \* 15:10-15:20: interval for laptop PC connection.(1B5-39, 1B5-40, 1B5-41, 1B5-42, 1B5-43)
- 185-39 Behavior of assembles of a naphthalene diimide derivative having two thiol moieties in aqueous medium (Kyutech) OGATA, Hiromitsu; YAMAMURA, Kosuke; SATO, Shinobu; TAKENAKA, Shigeori
- 1B5-40 Synthesis of Structured Oligoethylene Glycols (Graduate School of Science, Tohoku Univ.) ADACHI, Kouta; MURAOKA, Takahiro; KINBARA, Kazushi
- 1B5-41 Development of a Novel Ni-NTA Oligomer and Its Binding Behavior with Poly-histidine (Kyoto Univ.) AKAOKA, Kazushi; TAKI, Masyasu; YAMAMOTO, Yukio
- 1B5-42 Interaction of the ester group with the platform on which His and Ser are presentated (Dep. of Chemistry, Fac. of Science, Kanagawa Univ.) SHIRATORI, Ai; KIHARA, Nobuhiro
- 1B5-43\* Formation of supramolecular phosphtatase by self-assembly of three modules and cooperative hydrolysis of phosphate esters with natural enzyme (Fac. Pharm. Sci., Tokyo Univ. Sci. & Center Tech. Cancer, Tokyo Univ. Sci.) AOKI, Shin; ZULKEFELI, Mohd; SUZUKI, Asami; SHIRO, Motoo

Chair: TAMIAKI, Hitoshi (16:30 $\sim$ 17:30)

- \* 16:20-16:30: interval for laptop PC connection.(1B5-46, 1B5-47, 1B5-48, 1B5-49, 1B5-50, 1B5-51)
- 1B5-46 Design and Synthesis via Click Chemistry of Cyclophane Pentamer as An Artificial Host (Fukuoka Univ., Faculty of Science) NAKAMURA, Yuki; HAYASHIDA, Osamu
- 1B5-47 Preparation of Peptide-based Cyclophane Oligomers Having Multi-

- valently Enhanced Guest-binding Affinity (Fukuoka Univ., Graduate School of Science) NAKASHIMA, Tomomi; HAYASHIDA, Osamu
- 1B5-48 Synthesis, Guest-binding, Cellular Uptake and Molecular Delivery of Water-soluble Cyclophanes Having a Pyrene Moiety (Fukuoka Univ., Faculty of Science) KIMURA, Keiichiro; EGUCHI, Chika; ISAYAMA, Takuya; SHIOJI, Kosei; HAYASIDA, Osamu
- 185-49 Recognition of Polycyclic Aromatic Compounds by Cyclodextrin Derivatives in Nonpolar Solvents: Analysis of the Formation Behavior of the Inclusion Complex and the Crystal Structure (Osaka Univ.) IWAMOTO, Takuya; KIDA, Toshiyuki; TOHNAI, Norimitsu; MIYATA, Mikiji; AKASHI, Mitsuru
- **1B5-50** Molecular recognization of guanidino-modified α-cyclodextrins (Shimane Univ.) TAKEZAWA, Keita; YOSHIKIYO, Keisuke; MATSUI, Yoshihisa; YAMAMOTO, Tatsuyuki
- 1B5-51 Inhibition of quorum sensing in bacteria using modified cyclodextrins. (Fac. Eng., Utsunomiya Univ.) TOKITA, Kazuho; ITO, Satoshi; MOROHOSHI, Tomohiro; KATO, Norihiro; IKEDA, Tsukasa; OBA, Toru; HIRATANI, Kazuhisa

Chair: SHIOJI, Kosei (17:40~18:30)

- \* 17:30-17:40: interval for laptop PC connection.(1B5-53, 1B5-54, 1B5-55, 1B5-56, 1B5-57)
- 1B5-53 Regioselective photodimerization of trans-4-styrylpyridines with macrocyclic compounds (Graduate School of Engineering, Shibaura Inst. Tech.; Supramolecular Chemistry Lab.) IRIE, Hiromi; HARA, Shuuhei; LEE, Lin; ISHIMARU, Yoshihiro; YAMADA, Shinji; NAKAMURA, Asao
- 1B5-54 Spectroscopic detections of the reactions between dopamine and stable radicals (IIS, The Univ. of Tokyo) SAKURADA, Tomoya; ISHII, Kazuyuki
- 1B5-55 Study on the action mechanism of neuron toxin 6-OHDA by using 6-OHDA derivatives (Doshisha Univ.) IWASAKI, Yuki; HITOMI, Yutaka; SAITO, Yoshiro; NOGUCHI, Noriko; FUNABIKI, Takuzo; KODERA, Masahito
- 1B5-56 Antimicrobial Properties and Safety of Hybrid-type Quaternary Ammonium Salts (Department of Biological Science and Technology, Institute of Technology and Science, The Univ. of Tokushima) SHIRAI, Akihiro; SAKAGUCHI, Kanae; MASEDA, Hideaki; KOURAI, Hiroki; OMASA, Takeshi
- 185-57 Development of Artificial Tripeptides with High Affinity to Lipopolysaccharide (LPS) (Tokyo Univ. of Technol., Graduate School of Bionics) INOUE, Hiroki; OGAWA, Keiichi; HYUGA, Masumi; OKADA, Tomoko; MINOURA, Norihiko

## Sunday, March 27, AM

### Functional molecules

Chair: OTSUKI, Joe (9:00  $\sim$ 10:00)

- \* 8:50-9:00: interval for laptop PC connection.(2B5-01, 2B5-03, 2B5-05, 2B5-06)
- 2B5-01\*† Development of HIV-1 Protease-selective Photo-degrading Agents. (Faculty of Science and Technology, Keio Univ.) TANIMOTO, Shuho; TAKAHASHI, Daisuke; TOSHIMA, Kazunobu
- 2B5-03\* Evaluation of biological activities of alkylating PI polyamide conjugates (Graduate School of Science, Kyoto Univ.) KASHIWAZAKI, Gengo; BANDO, Toshikazu; SUGIYAMA, Hiroshi
- 2B5-05 Functional evaluation of chemical modified PI polyamide conjugates (Graduate School of Science, Kyoto Univ.) KITANO, Masaaki; BANDO, Toshikazu; SUGIYAMA, Hiroshi
- 2B5-06 Direct observation of DNA alkylation by biotinylated PI polyamide conjugate (Graduate School of Science, Kyoto Univ.) YOSHIDOME, Tomofumi; KASHIWAZAKI, Gengo; BANDO, Toshikazu; SUGIYAMA, Hiroshi

Chair: BANDO, Toshikazu (10:10 $\sim$ 11:10)

- \* 10:00-10:10: interval for laptop PC connection.(2B5-08, 2B5-09, 2B5-11, 2B5-12, 2B5-13)
- 2B5-08 A radiation-activated prodrug possessing two 5-fluorodeoxyuridine units (Kyoto Univ.) SUGIURA, Masaaki; TANABE, Kazuhito; NISHIMOTO, Sei-ichi
- 2B5-09\* Synthesis and photodynamic effect of glycosylated fluoroporphyrin derivatives (Nara Institute of Science and Technology; Univ. of Yamanashi) HIROHARA, Shiho; OBATA, Makoto; YUASA, Junpei; KAWAI, Tsuyoshi; TERADA, Kayo; ANDO, Tsuyoshi; TANIHARA, Masao
- 2B5-11 Photodynamic treatment of tumor-bearing mice by silyl porphyrin (Dept. Chemistry and Chemical Biology, Gunma Univ.; Institute for Molecular and Cellular Regulation, Gunma Univ.; Dept. Chem., Tohoku Univ.) HORIUCHI, Hiroaki; MASHIO, Hiroyuki; ISHIDA, Shintaro; KYUSHIN, Soichiro; HOSAKA, Masahiro; TAKEUCHI, Toshiyuki; HIRATSUKA, Hiroshi
- 2B5-12 Interaction of pyridinium porphyrin derivatives with DNA (CST, Nihon Univ.) TANAKA, Chisato; SHINOZAKI, Yoshinao; OTSUKI, Joe; ISHIBASHI, Naoya; WATANABE, Takayoshi; NAGASE, Hiroki; FUJIWARA, Kyoko
- 2B5-13 Development of Novel Iodinated Porphyrin Photosensitive Agents (CST, Nihon Univ.) SHINOZAKI, Yoshinao; TANAKA, Chisato;

OTSUKI, Joe; NAGASE, Hiroki; ISHIBASHI, Naoya; WATANABE, Takayoshi; FUJIWARA, Kyoko

Chair: TAKAHASHI, Daisuke (11:20 $\sim$ 12:20)

- \* 11:10-11:20: interval for laptop PC connection.(2B5-15, 2B5-16, 2B5-17, 2B5-18, 2B5-19, 2B5-20)
- 2B5-15 Introduce of a fullerene moiety into pyrrole-fused-porphyrin maclocycles (Saitama Univ., Graduate School of Science and Engineering) YOKOMIZO, Kunihiko: ISHIMARU, Yoshihiro
- 2B5-16 Synthesis of pyrrole-fused-porphyrin with dipyrromethane moiety (Saitama Univ., Graduate School of Science and Engineering) KOBAYASHI, Yuuta; ISHIMARU, Yoshihiro
- 2B5-17 Synthesis and functions of large macrocyclic compound with four pyrrole-fused-porphyrins (Saitama Univ., Graduate School of Science and Engineering) SHIMOYAMA, Naoyuki; ISHIMARU, Yoshihiro
- 2B5-18 Synthesis of porphyrin-conjugated <sup>124</sup>I-labeled glucose derivatives for PET (Nara Institute of Science and Technology; Univ. of Yamanashi; Osaka Univ.) UDA, Keigo; HIROHARA, Shiho; TANIHARA, Masao; OBATA, Makoto; TAKAHASHI, Naruhito; SHINOHARA, Atsushi; KANAI, Yasukazu; HATAZAWA, Jun; KAKIUCHI, Kiyomi
- 2B5-19 Dye-sensitized solar cells by using imidazole-substituted porphyrin metal complexes (Fac. Eng., Gifu Univ.) FUJIMOTO, Junko; YOSHIDA, Tsukasa; MIYAJI, Hidekazu
- 2B5-20 Iron(III) Tetraalkylchlorin Complexes with the Purest d<sub>xy</sub> Type Lowspin (School of Medicine, Toho Univ.) IKEZAKI, Akira; ONO, Jyunpei; NAKAMURA. Mikio

#### Sunday, March 27, PM

Chair: SUMAOKA, Jun (13:30~14:30)

- \* 13:20-13:30: interval for laptop PC connection.(2B5-28, 2B5-29, 2B5-30, 2B5-31, 2B5-32, 2B5-33)
- 2B5-28 Synthesis of 8-hyroxyquinoline- and benzoate-subctituted prophyrin and its metal complexes. (Fac. Eng., Gifu Univ.) OGAWA, Yuji; MIYAJI, Hidekazu
- **2B5-29** Interaction between a N-fused porphyrin and molecules (Graduate School of Engineering, Kyushu Univ.) TODEN, Satoshi; IKAWA, Yoshiya; FURUTA, Hiroyuki
- 2B5-30 NH tautomerism control of N-confused porphyrin by using hydrogen bonding (Graduate School of Engineering, Kyushu Univ.) SAKASHITA, Ryuichi; TOGANOH, Motoki; FURUTA, Hiroyuki
- **2B5-31** The construction of supramolecular structures based on the artificial DNA conjugated with the functional molecules such as ferrocene and porphyrin (Konan Univ.) WATARI, Masato; MURASHIMA, Takashi
- 2B5-32 The synthesis and properties of the porphyrin-DNA conjugates aiming to the development of an alternative method of the telomerase activity detection (Konan Univ.) KAWAMURA, Koji; MURASHIMA, Takashi
- 2B5-33 Analysis of iron and other metal porphyrins recognition mechanism among the iron-uptake proteins IsdH, IsdA, IsdC from Staphylococcus aureus (Dept. of Med. Gen. Sci., Grad. Sch. of Fro. Sci., Univ. of Tokyo) MORIWAKI, Yoshitaka; Martinez Caaveiro, Jose Manuel; TSUTSUMI, Hiroshi; HAMACHI, Itaru; TSUMOTO, Kouhei

Chair: ISHIMARU, Yoshihiro (14:40~15:40)

- \* 14:30-14:40: interval for laptop PC connection.(2B5-35, 2B5-36, 2B5-37, 2B5-38, 2B5-39, 2B5-40)
- 2B5-35 Photosensitized Protein Damage by Water-soluble P(V)porphyrin (Shizuoka Univ.) HIRAKAWA, Kazutaka; UMEMOTO, Hironobu; NISHIMURA, Yoshinobu; ARAI, Tatsuo; OKAZAKI, Shigetoshi; SEGAWA, Hiroshi
- **2B5-36** Effects of Photo-irradiation on the DNA Cleavage Activity of Dinuclear Copper Complexes Containing Azobenzene (Graduate School of Engineering, Kyoto Univ.) ITO, Takeo; SATANI, Manami; TAKEUCHI, Kouhei; NISHIMOTO, Sei-ichi
- 2B5-37 Design and synthesis of nucleotide caging agents having affinity tags (Toho Univ.) TERAOKA, Aoi; HOSHIDA, Tomoko; FURUTA, Toshiaki
- 2B5-38 Dependence of the interaction of dinuclear ruthenium complexes with DNA on the terminal ligands (CST, Nihon Univ.) KAWAKAMI, Hiromasa; OTSUKI, Joe
- 2B5-39 Self-assembling probe (3): Application to Fluorescent OFF/ON protein detection. (Graduate school of Engineering, Kyoto Univ.) MIZUSAWA, Keigo; TAKAOKA, Yousuke; TSUKIJI, Shinya; HAMACHI, Itaru
- 2B5-40 Self-assembling probes (4): Development of Ratiometric Fluorescent Probes for Protein Detection (Graduate School of Engineering, Kyoto Univ.) MASUI, Shun; MIZUSAWA, Keigo; ISHIDA, Yosiyuki; TAKAOKA, Yousuke; TSUKIJI, Shinya; HAMACHI, Itaru

Chair: IKAWA, Yoshiya (15:50~16:50)

- \* 15:40-15:50: interval for laptop PC connection.(2B5-42, 2B5-44, 2B5-46)
- 2B5-42\* Selective introduction of a fluorescent reporter molecule into proteinimprinted space (Graduate School of Engineering, Kobe Univ.) SUNAYAMA, Hirobumi; OOYA, Tooru; TAKEUCHI, Tshifumi
- 2B5-44\* Molecular interaction between polyglycerol dendrimers and a fluor-escent molecule (Graduate School of Engineering, Kobe Univ.) LEE,

Haejoo; OOYA, Tooru; TAKEUCHI, Tshifumi

2B5-46\* Effect of polyglycerol dendrimers with different generation on protein adsorption onto a substrate (Graduate School of Engineering, Kobe Univ.) MITACHI, Yoshiki; OOYA, Tooru; TAKEUCHI, Tshifumi

Chair: TSUKIJI, Shinya (17:00~17:30)

- \* 16:50-17:00: interval for laptop PC connection.(2B5-49, 2B5-50)
- 2B5-49# Development of Novel Fluorogenic Probe for Detecting Histone Deacetylase Activity (Graduate School of Engineering, Osaka Univ.) GULSEREN, Gulcihan; HORI, Yuichiro; KIKUCHI, Kazuya
- 2B5-50\* Tb(III) complexes for detection of Tyr phosphorylation (Research Center for Advanced Science and Technology, The Univ. of Tokyo) AKIBA, Hiroki; WATANABE, Yuki; SUMAOKA, Jun; KOMIYAMA, Makoto

## Monday, March 28, AM

#### Functional Molecules

Chair: KANAORI, Kenji (9:00  $\sim$ 10:00)

- \* 8:50-9:00: interval for laptop PC connection.(3B5-01, 3B5-02, 3B5-03, 3B5-04, 3B5-05, 3B5-06)
- 3B5-01 2-Fluoropyridine derivatives as a pH-responsive molecular probe for <sup>19</sup>F NMR (Graduate School of Engineering, Kyoto Univ.) TSUDA, Takuya; TANABE, Kazuhito; NISHIMOTO, Sei-ichi
- 3B5-02 Design of oxygen-sensitive molecular probes with reversible response to oxygen concentration (Kyoto Univ.) KOMATSU, Hirokazu; ITO, Takeo; TANABE, Kazuhito; NISHIMOTO, Sei-ichi
- **3B5-03** Zinc ion-specific fluorescent response of sugar-containing ethylenediamine derivatives with quinoline moieties (Fac.Sci.,Nara Women's Univ.,and KYOUSEI Science Center,Nara Women's Univ.) UGAI, Anna; MIKATA,
- 3B5-04 Development of Fluorescence Mg<sup>2+</sup> Sensor Probe Based on FlAsH for Localized Molecular Imaging in Cells (The Univ. of Tokyo, Keio Univ.) FUJII, Tomohiko; SHINDO, Yutaka; NISHIYAMA, Shigeru; SUZUKI, Kouji; OKA, Kotaro
- 3B5-05 Evaluation of antioxidant activity with peroxide sensitive fluorescence probe accumulated in mitochondria (Faculty of Science, Fukuoka Univ.) ISAYAMA, Takuya; NAKAGAWA, Hiroyuki; NAGAHORA, Noriyoshi; OKUMA, Kentaro: SHIOJI, Kosei
- 3B5-06 Development of New Fluorescent Sensor Molecules for Detecting Site-specific Changes in Zinc Ion Concentration at Outer Rim of the Plasma Membrane (Kyoto Univ.) IYOSHI, Shohei; TAKI, Masayasu; YAMAMOTO, Yukio

Chair: MIKATA, Yuji (10:10∼11:10)

\* 10:00-10:10: interval for laptop PC connection.(3B5-08, 3B5-10, 3B5-12)

3B5-08\* Novel strategy to control fluorescent property of SNARF for rationally designable fluorescent probe (Kyoto Univ., Univ. of Tokushima) NAKATA Fiji, VIJK MACHI, Vochibira, NACATIMI

Tokushima) NAKATA, Eiji; YUKIMACHI, Yoshihiro; NAZUMI, Yoshijiro; TOMOTSUKA, Ayumi; UTO, Yoshihiro; HORI, Hitoshi

3B5-10\* Reevaluation of the rate constant of reaction of 5,5-dimethyl-1-

pyrolline N-oxide and superoxide radical by Flow-Injection ESR technique (Kyoto Institute of Technology) SAKURAI, Yasuhiro; NAKAJIMA, Akira; KANAORI, Kenji; TAJIMA, Kunihiko

3B5-12\*† In Vivo Chemistry (5): Dual turn-on probe for detection of reactive oxygen species (Kyushu Univ.) DOURA, Tomohiro; NONAKA, Hiroshi; SANDO, Shinsuke

Chair: TANABE, Kazuhito (11:20 $\sim$ 12:10)

- \* 11:10-11:20: interval for laptop PC connection.(3B5-15, 3B5-16, 3B5-17, 3B5-18, 3B5-19)
- 3B5-15 Effects of a newly synthesized drug on singlet oxygen-induced cell injury (Kyoto Univ. Hospital) NISHINAKA, Yoko; ENDO, Nobuyuki; ARAI, Toshiyuki
- **3B5-16** Synthesis and Functional Evaluation of Novel Dendrimer-amine Coordinated Gd-MRI Contrast Agent with Amino-alcohol End Groups (Grad. Sch. of Eng., Kyoto Univ.) KIMURA, Yu; MIYAKE, Yuka; KIJITORI, Hiroki; ISHIKAWA, Syungo; YANO, Tetsuya; MATSUDA, Tetsuya; NARAZAKI, Michiko; TOSHIMITSU, Akio; KONDO, Teruyuki
- 3B5-17 Synthesis and Functional Evaluation of Novel Dendrimer-Based Gd-MRI Contrast Agents Conjugated with PEG (Kyoto Univ., Canon Inc.) KIJITORI, Hiroki; KIMURA, Yu; NARAZAKI, Michiko; MATSUDA, Tetsuya; YANO, Tetsuya; TOSHIMITSU, Akio; KONDO, Teruyuki
- 3B5-18 Self-assembled probes(1) Structure activity correlation of <sup>19</sup>F NMR/MRI OFF/ON probes targeted to enzymes (Graduate School of Engineering, Kyoto Univ.) MINATO, Daishiro; KIMINAMI, Keishi; TAKAOKA, Yousuke; TSUKIJI, Shinya; HAMACHI, Itaru
- 3B5-19 Self-assembled probes(2) Application of <sup>19</sup>F NMR/MRI OFF/ON probes targeted to enzymes (Graduate School of Engineering. Kyoto Univ.) MATSUO, Kazuya; TAKAOKA, Yousuke; MINATO, Daishirou; TSUKIJI, Shinya; HAMACHI, Itaru

## Asian International Symposium -Biofunctional Chemistry and Biotechnology-Monday, March 28, PM

(13:30~13:40)

**3B5-28**<sup>#</sup> Opening Remark (Ritsumeikan Univ.) TAMIAKI, Hitoshi (13:30 ∼13:40)

Chair: NABESHIMA, Tatsuya (13:40~14:50)

**3B5-29** Keynote Lecture Exploitation of Luminescent Cyclometalated Iridium(III) Polypyridine Complexes as Biomolecular and Cellular Probes (City Univ., Hong Kong) Kenneth Kam-Wing Lo (13:40∼14:10)

3B5-33<sup>#</sup> Invited Lecture Molecular Hula-Hoop: Observations of Rotary Movement of a Rotor (Osaka Univ.) TAKASHIMA, Yoshinori (14:20~14:50)

Chair: TAKENAKA, Shigeori (14:50~16:00)

**3B5-36** Keynote Lecture Nanocatalyst- and Artificial Enzyme-Based Biomolecular Detection (Pusan National Univ., Korea) Haesik Yang (14:50∼15:20)

**3B5-40**<sup>#</sup> Invited Lecture Optical Enzyme Assay with Cell-Penetrative Polymers (Ryukoku Univ.) MIYATAKE, Tomohiro (15:30∼16:00)

Chair: TAKAGI, Masahiro  $(16:00\sim17:00)$ 

3B5-43<sup>#</sup> Invited Lecture Mimicking Multipass Transmembrane Proteins: Folding and Assembly of Alternating Amphiphilic Multiblock Molecules in Liposomal Membranes (Tohoku Univ.) MURAOKA, Takahiro (16:00∼ 16:30)

**3B5-46**<sup>#</sup> Invited Lecture Tongue cancer diagnosis using FND-based electrochemical telomerase assay (Kyushu Inst. Tech.) SATO, Shinobu (16:30∼17:00)

## Biofunctional Chemistry ; Biotechnology Tuesday, March 29, AM

#### Nucleic Acid

Chair: HIRAO, Ichiro (9:00  $\sim$ 10:00)

\* 8:50-9:00: interval for laptop PC connection.(4B5-01, 4B5-02, 4B5-03, 4B5-04, 4B5-05, 4B5-06)

485-01 Triplex and duplex forming properties of oligonucleotides containing 4-thiopseudouridine (Tokyo Institute of Technology) HATTORI, Yusaku; CAO, Shioi; TSUNODA, Hirosuke; OHKUBO, Akihiro; SEIO, Kohji; SEKINE, Mitsuo

4B5-02 Synthesis of new PNA unit having 3-aminopyridazine skeleton as the base moiety (Tokyo Institute of Technology) SEIO, Kohji; SATO, Yuta; KANAMORI, Takashi; TSUNODA, Hirosuke; OHKUBO, Akihiro; SEKINE. Mitsuo

4B5-03<sup>#</sup> Metal-ion binding property of DNA duplexes containing 6-thioguanosine (Kanagawa Univ.) SAMANTA, Anirban; OKAMOTO, Itaru; ONO, Akira

485-04 Development of a new method for the synthesis of modified oligonucleotides having a 2,2,7-trimethylguanosine cap structure. (Tokyo Institute of Technology) YAMADA, Ken; YOKOUCHI, Akira; TSUNODA, Hirosuke; OHKUBO, Akihiro; SEIO, Khouji; SEKINE, Mitsuo

4B5-05 Synthesis and properties of oligonucleotide derivatives acylated at the 5'- and 3'-terminal hydroxy groups (Tokyo Institute of Technology) OHKUBO, Akihiro; TAGO, Nobuhiro; NISHINO, Yuudai; TSUNODA, Hirosuke; SEIO, Kohji; SEKINE, Mitsuo

4B5-06 Synthesis of DNA bearing the strand exchange ability by the click chemistry (Gunma Univ.) SAGA, Yuki; MORIGUTI, Tomohisa; SINOZUKA, Kazuo

Chair: SHINOZUKA, Kazuo (10:10 $\sim$ 11:10)

\* 10:00-10:10: interval for laptop PC connection.(4B5-08, 4B5-10, 4B5-12, 4B5-13)

4B5-08\*† Synthesis and triplex forming properties of oligonucleotides containing 4-thiopseudoisocytidine (Department of Life Science, Graduate School of Bioscience and Biotechnology, Tokyo Institute of Technology) CAO, Shiqi; OKMOTO, Itaru; HATTORI, Yusaku; TSUNODA, Hirosuke; OHKUBO, Akihiro; SEIO, Kohji; SEKINE, Mitsuo

**4B5-10\*** The real-time PCR by an unnatural base pair system (SSBC, RIKEN; TagCyx Biotechnologies; Grad. Sch. of Sci., Univ. of Tokyo) YAMASHIGE, Rie; KIMOTO, Michiko; SATO, Akira; MITSUI, Tsuneo; YOKOYAMA, Shigeyuki; HIRAO, Ichiro

**4B5-12** Investigation of the Interaction between Artificial DNA based on Alkynyl *C*-Nucleosides and Natural DNA (Graduate School of Pharmaceutical Sciences, Univ. of Toyama) SHIRARO, Wataru; CHIBA, Junya; INOUYE, Masahiko

4B5-13 Synthesis and oligomerization of alkynyl C-nucleosides with a different linking position of the bases (Graduate School of Pharmaceutical Sciences, Univ. of Tovama) AZUCHI. Junichi: CHIBA, Junva: INOUYE, Masahiko

Chair: INOUYE, Masahiko (11:20~12:20)

\* 11:10-11:20: interval for laptop PC connection.(4B5-15, 4B5-16, 4B5-18, 4B5-20)

4B5-15 Composition of the non-natural nucleoside which forms base pair of hydrogen bond of cyanuric acid and the Amino pyrimidine (Shibaura Institute of Technology) SHIMAZAKI, Kei; HATANO, Akihiko

485-16\* Development of crosslink-forming oligonucleotide for the regulation of gene expression in cells (Tohoku Univ., Institute of Multidisciplinary Research for Advanced Materials) HAGIHARA, Shinya; IMOTO, Shuhei; HORI, Tsuneaki; CHAO, Shougoan; NAGATSUGI, Fumi

4B5-18\* Synthesis and evaluation of DNA containing a hydrophobic region (ISIR, Osaka Univ.) SHIBATA, Tomonori; MAKISHI, Shingo; DOHNO, Chikara: NAKATANI, Kazuhiko

4B5-20 Interaction of DNA containing hydrophobic region with lipid bilayer membrane. (ISIR, Osaka Univ.) MAKISHI, Shingo; SHIBATA, Tomonori; DOHNO, Chikara; NAKATANI, Kazuhiko

#### Tuesday, March 29, PM

#### Nucleic Acid

Chair: WADA, Takehiko (13:30~14:30)

\* 13:20-13:30: interval for laptop PC connection.(4B5-28, 4B5-29, 4B5-30, 4B5-31, 4B5-32, 4B5-33)

485-28 Development of a new method for non-enzymatic primer extension reactions with DNA duplexes as templates (Tokyo Institute of Technology) NISHINO, Yuudai; ITO, Yu; TSUNODA, Hirosuke; OHKUBO, Akihiro; SEIO, Kohji; SEKINE, Mitsuo

4B5-29<sup>†</sup> P-N bond formation directed toward innovative improvement of the coupling efficiency in the synthesis of morpholino nucleic acids (Tokyo Institute of Technology) HARAKAWA, Taro; TSUNODA, Hirosuke; OHKUBO, Akihiro; SEIO, Kohji; SEKINE, Mitsuo

**4B5-30** DNA modification on phosphate groups using a fluorine-containing diazomethylbenzene derivative (Dept. Biomol. Engineering, Tokyo Inst. of Tech.) SAKAI, Masahiro; KAWASAKI, Takayoshi; OKAHATA, Yoshio

4B5-31 Synthesis and properties of RNA oligomers incorporating 2'-O-{(2-N-phenyl)carbamoyl]ethyl modified uridines (Tokyo Institute of Technology) YAMADA, Takeshi; OKANIWA, Natsuki; TSUNODA, Hirosuke; OHKUBO, Akihiro; SEIO, Kohji; SEKINE, Mitsuo

4B5-32 Synthesis of 2'-O-cyanoethylated antisense oligonucleotides (Tokyo Institute of Technology Graduate school of Bioscience and Biotechnology) OKUNO, Yasuhiro; MASAKI, Yoshiaki; TSUNODA, Hirosuke; OHKUBO, Akihiro; SEIO, Kohji; SEKINE, Mitsuo

4B5-33 Design of artificial nucleotide for strand invader (Nagoya Univ.) KUMANAMI, Kazuya; LIANG, Xingguo; KASHIDA, Hiromu; ASANUMA, Hiroyuki

Chair: WADA, Takeshi (14:40~15:40)

\* 14:30-14:40: interval for laptop PC connection.(4B5-35, 4B5-36, 4B5-37, 4B5-38, 4B5-39, 4B5-40)

485-35 Photochemical properties of DNA base analogs containing aromatic compound via an ethynyl linkage (Nihon Univ.) TANAKA, Makiko; OGUMA, Kazuhiro; SAITO, Yoshio; SAITO, Isao

4B5-36 Synthesis and photochemical properties of C8 arylbutadienyl substituted 2'-deoxyguanosine derivatives (Nihon Univ.) SAITO, Yoshio; KODA, Makio; SHINOHARA, Yuta; SAITO, Isao

**4B5-37** Synthesis and photochemical properties of 1,6- and 2,7-disubstituted pyrene-labeled 2'-deoxyguanosine derivatives (Nihon Univ.) SAITO, Yoshio; SUZUKI, Azusa; ISHIOROSHI, Shinya; SAITO, Isao

**4B5-38** Photoreaction of 5-halocytosine-containing DNA based on local conformations. (Kyoto Univ.) SANNOHE, Yuta; MORINAGA, Hironobu; SUGIYAMA, Hiroshi

485-39 Fluorescent properties of the double-stranded oligonucleotides containing dC<sup>PPI</sup> and 2-aminopurine (Tokyo Institute of Technology) SEIO, Kohji; OHZEKI, Hiroki; TOKUGAWA, Munehumi; TSUNODA, Hirosuke; OHKUBO, Akihiro; SEKINE, Mitsuo

4B5-40 The self-association and fluorescence properties of double-stranded fluorescence oligonucleotides containing G-richsingle-stranded region at the 3'-end (Tokyo Institute of Technology) SEIO, Kohji; TOKUGAWA, Munefumi; TSUNODA, Hirosuke; OHKUBO, Akihiro; SEKINE, Mitsuo

Chair: SAITO, Yoshio (15:50~16:50)

\* 15:40-15:50: interval for laptop PC connection.(4B5-42, 4B5-43, 4B5-44, 4B5-45, 4B5-46, 4B5-47)

485-42 Synthesis of Fluorescent Probe bearing Silylated Perylene Moiety. (Gunma Univ.) SATOU, Yuzuru; MORIGUCHI, Tomohisa; SHINOZUKA, Kazuo

485-43 Introduction of novel Nile Red fluorescent labeled compound to DNA and its fluorescence behavior (Gunma Univ.) NAKAMORI, Kazuya; MORIGUCHI, Tomohisa; SHINOZUKA, Kazuo

4B5-44 Synthesis and properties of nucleoside derivatives having the imidazole-2-ylcarbonyl group (Tokyo Institute of Technology) YAMADA, Ken; TSUNODA, Hirosuke; OHKUBO, Akihiro; SEIO, Kohji; SEKINE, Miteuo

4B5-45 Solid-phase synthesis of stereoregular oligoribonucleoside phosphor-

- othioates by 2'-O-CEM- oxazaphospholidine approach (Univ. of Tokyo; Frontier Sciences) NUKAGA, Yohei; YAMADA, Kohei; OGATA, Toshihiko; WADA, Takeshi
- 4B5-46 Synthesis and base recognition of 4-O-protected 2'-deoxyuridine derivatives (Tokyo Institute of Technology) TSUNODA, Hirosuke; OHKUBO, Akihiro; SEIO, Kohji; SEKINE, Mitsuo
- 4B5-47 Synthesis and properties of deoxyuridine derivatives modified with a new type of substituents at the 5-position. (Tokyo Institute of Technology) YAMADA, Kenji; TSUNODA, Hirosuke; OHKUBO, Akihiro; SEIO, Kohji; SEKINE, Mitsuo

# Room B6

Bldg. 7 7-53

## Biofunctional Chemistry ; Biotechnology Saturday, March 26, PM

### Proteins(Metals)

Chair: KURODA, Yutaka (13:00 $\sim$ 14:00)

- \* 12:50-13:00: interval for laptop PC connection.(1B6-25, 1B6-26, 1B6-27, 1B6-28, 1B6-29, 1B6-30)
- **1B6-25** Structure and Properties of a Blue copper protein, Pseudoazurin Thr36Lys Mutant (Grad. Sch. Sci. Eng., Ibaraki Univ.) MATSUGI, Kanako; ASAMURA, Sayaka; OBARA, Yuji; UNNO, Masaki; KOHZUMA, Takamitsu
- 1B6-26 Synthesis and Pharmacokinetics of Gold Nanoparticles that Carry Diatomic Molecules (O<sub>2</sub> and CO) in Aqueous Solution. (Doshisha Univ., Faculty of Science and Engineering) KARASUGI, Keiichi; KITAGISHI, Hiroaki; KANO, Koji
- **186-27** Mechanism of reaction of cyterome *c* with reactive oxygen species in the intermembrane space of mitochondria during respiration (Faculty of Sci. Hokkaido Univ.) SEKINE, Yukari; UCHIDA, Takeshi; ISHIMORI, Koichiro
- 1B6-28 Atomic Resolution Molecular Structure and Reactivity of Cytochrome c' from Alcaligenes xylosoxidans (Univ. of Ibaraki; Institute of Applied Beam) TAKASHINA, Akiko; UNNO, Masaki; KOHZUMA, Takamitsu
- 1B6-29 Structural transition of Laccase (Ibaraki Univ.) MUROYA, Tomonori; TAKAHASHI, Rika; TERAKADO, Hideto; KAMINAGA, Masanori; KOHZUMA, Takamitu
- 186-30 Dynamics of Copper Atom in a Blue Copper Protein, Pseudoazurin (Grad. Sch. Sci. Eng., Ibaraki Univ.) ASAMURA, Sayaka; UNNO, Masaki; KOUZUMA, Takamitsu

Chair: UNNO, Masaki (14:10~15:10)

- \* 14:00-14:10: interval for laptop PC connection.(1B6-32, 1B6-33, 1B6-34, 1B6-35)
- 186-32 Synthesis and Oxygen Binding Ability of Hemoglobin/Albumin Hetero-oligomers (Faculty of Sci. and Eng., Chuo Univ.) TOMITA, Daiki; KOMATSU, Teruyuki
- 1B6-33 Synthesis of Recombinant human Serum Albumin-Heme Complexes and Their Peroxidase Activities (Faculty of Sci. and Eng., Chuo Univ.) WATANABE, Kyohei; KOMATSU, Teruyuki
- 1B6-34 Chemical Modification on the External Surface of Cage-like Protein Ferritin with Iminodiacetic Acid Derivatives (Idas) (Grad. Sch. Sci. Nagoya Univ., RCM Sci., Nagoya Univ.) SUGI, Naoki; FUKUSHIMA, Takashi; WATANABE, Yoshihito
- 1B6-35 Young Scholar Lectures of CSJ Structure-based Chemical Perspectives on Specificity and Promiscuity for Molecular Recognition in Inter- biomolecular Electron Transfer (Grad. Sch. Sci., Osaka Univ.) NOJIRI, Masaki

Chair: MORI, Toshiaki (15:20 $\sim$ 16:20)

- \* 15:10-15:20: interval for laptop PC connection.(1B6-39, 1B6-40, 1B6-42, 1B6-43)
- 186-39 Creation of GAGA metallo finger protein: its structure and function (Faculty of Pharmaceutical Science, Doshisha Women's Univ.) MASUYAMA, Saeko; NEGI, Shigeru; NOGUCHI, Noriko; SUGIURA, Vukio
- **1B6–40\*** Crystal structure analysis of Cytochrome  $P450_{SP\,\alpha}$  and oxidation reactions induced by the binding of a dummy substrate. (Grad. School of Sci. Nagoya Univ.) SHOJI, Osami; FUJISHIRO, Takashi; KIMOTO, Hiroshi; SUGIMOTO, Hiroshi; NAGANO, Shingo; SHIRO, Yoshitsugu; WATANABE, Yoshihito
- 1B6-42 Cytochrome c bearing a detachable heme derivative- Overproduction, purification, and preparation of the apo-form (Grad. Sch. Sci., Nagoya Univ.; RCMS, Nagoya Univ.) NAKAJIMA, Hiroshi; IBRAHIM, Shaikh Mohammad; RAMANATHAN, Kalaivani; WATANABE, Yoshihito
- 1B6-43\*\* Cytochrome c bearing a detachable heme derivative Characterization and reconstitution of the apo-form (Grad. Sch. Sci., Nagoya Univ.; RCMS,

Nagoya Univ.) IBRAHIM, Shaikh Mohammad; NAKAJIMA, Hiroshi; RAMANATHAN, Kalaiyani; WATANABE, Yoshihito

Chair: WATANABE, Yoshihito (16:30~17:30)

- \* 16:20-16:30: interval for laptop PC connection.(1B6-46, 1B6-48, 1B6-50)
- 1B6-46\* Binding of cyanide ion to porphinatoiron(III)/cyclodextrin supramolecules (Doshisha Univ., Faculty of Science and Engineering) WATANABE, Kenji; KITAGISHI, Hiroaki; KANO, Koji
- 1B6-48\*† Electron transfer reaction between Pseudoazurin M16X mutants and Nitrite reductase from Achromobacter cycloclastes. (Ibaraki Univ.) FUJITA-HIRASAWA, Mika; KOHZUMA, Takamitsu
- 1B6-50\* Construction of Supramolecular Protein Assembly Composed of Hemoprotein and Streptavidin (Graduate School of Engineering, Osaka Univ.; Department of Chemistry, Univ. of Basel) OOHORA, Koji; ONODA, Akira; WARD, Thomas R.; HAYASHI, Takashi

Chair: ONODA, Akira (17:40~18:30)

- \* 17:30-17:40: interval for laptop PC connection.(1B6-53, 1B6-54, 1B6-55, 1B6-56, 1B6-57)
- 1B6-53 Multi-dimensional NMR Analysis of Interactions in Electron Transfer Complexbetween Cytochrome c and Cytochromec Oxidase in RespiratoryChain (Graduate School of Chemical Sciences and Engineering,Hokkaido Univ.) IMAI, Mizue; INOUE, Kaoru; NOMOTO, Naoko; UCHIDA, Takeshi; SHINZAWA(ITO), Kyoko; YOSHIKAWA, Shinya; ISHIMORI, Koichiro
- 186-54 Pharmacokinetics of pegylated myoglobin model conpound (Doshisha Univ.) UEDA, Takunori; KITAGISHI, Hiroaki; KANO, Koji
- 1B6-55 Temperature dependence of catalytic reaction by thermophilic cytochrome P450 (Department of Biotechnology and Life Science, Tokyo Univ. of Agri. & Tech.) SHIONOIRI, Megumi; HAYAKAWA, Syohei; NAKAMURA, Nobuhumi; YOHDA, Masafumi; OHNO, Hiroyuki
- 1B6-56 Reconstitution of apo-cytochrome P450<sub>BS β</sub> prepared using heme acquisition protein from *P. aeruginosa* (Grad. School of Sci. Nagoya Univ.) MORIMOTO, Yoshiko; SHOJI, Osami; OZAKI, Shin-ich; WATANABE, Yoshihito
- 1B6-57 Interaction in protein affecting an electronic state of blue copper protein Pseudoazurin (Ibaraki Univ.; AIST) FUJIKAWA, Kazuhisa; OBARA, Yuji; YAMASAKI, Kazuhiko; KOHZUMA, Takamitsu

### Sunday, March 27, AM

### Proteins(Sensing)

Chair: KOBATAKE, Eiry  $(9:00\sim10:00)$ 

- \* 8:50-9:00: interval for laptop PC connection.(2B6-01, 2B6-03, 2B6-04, 2B6-06)
- **2B6-01\*** PH-dependent disulfide bond formation reactions between DsbA and DsbB detected by a Quartz-crystal microbalance (Dept. Biomol. Engineering, Tokyo Inst. of Tech.; JST-SENTAN) YAZAWA, Kenjiro; FURUSAWA, Hiroyuki; OKAHATA, Yoshio
- 2B6-03 In vitro evaluation of a membrane transport activity of the reconstructed Sec protein secretion system from E. coli (Dept. Biomol. Engineering, Tokyo Inst. of Tech.; JST-SENTAN) KOIZUMI, Shohei; FURUSAWA, Hiroyuki; OKAHATA, Yoshio
- 2B6-04\* Protein labeling by acyl transfer chemistry(1): Affinity-guided DMAP catalysts (Graduate School of Engineering. Kyoto Univ.) MINATO, Daishiro; WANG, Hangxiang; KOSHI, Youichiro; NONAKA, Hiroshi; KIYONAKA, Shigeki; MORI, Yasuo; TSUKIJI, Shinya; HAMACHI, Itaru
- 2B6-06 Protein Labeling by Acyl Transfer Chemistry (2): Development and characteristic of the Acyl Imidazole Type Probe (Graduate School of Engineering, Kyoto Univ.) HASHIMOTO, Yuki; YASUI, Ryosuke; FUJISHIMA, Shohei; OJIDA, Akio; HAMACHI, Itaru

Chair: SAKAMOTO, Seiji (10:10∼11:10)

- \* 10:00-10:10: interval for laptop PC connection.(2B6-08, 2B6-10, 2B6-11, 2B6-12)
- **2B6-08**\*† Protein Labeling by Acyl Transfer Chemistry (3): Application of the Acyl Imidazole Type Probe to Protein Labeling in Living Cells (Graduate School of Engineering, Kyoto Univ.) FUJISHIMA, Shohei; YASUI, Ryosuke; OJIDA, Akio; HAMACHI, Itaru
- 2B6-10 Saturation Mutagenesis of Proteins using Expanded Genetic Codes (Sch. Mat. Sci., JAIST) WATANABE, Takayoshi; MINEURA, Toshiya; HOHSAKA, Takahiro
- 2B6-11 Synthesis and FRET analysis of Double-Labeled Proteins by Incorporation of Fluorescent Amino Acids and GFP-Fusion Expression (Sch. Mat. Sci., JAIST) YAMAGUCHI, Atsushi; IIJIMA, Issei; HOHSAKA, Takahiro
- 2B6-12\* Incorporation of Nonnatural Amino Acid Derivatives into the N-terminus of Proteins through Expansion of Initiation Codon (Sch. Mat. Sci., JAIST) MIURA, Masanori; SHIRAGA, Kaori; HOHSAKA, Takahiro

Chair: HOHSAKA, Takahiro (11:20~12:20)

- \* 11:10-11:20: interval for laptop PC connection.(2B6-15, 2B6-16, 2B6-18, 2B6-19, 2B6-20)
- 2B6-15 Analysis of dependent on mRNA sequences E.coli translation

- initiation processes using Quartz\_Crystal Microbalance (Dept. Biomol. Engineering, Tokyo Inst. of Tech.; JST-SENTAN) AKIYAMA, Yuya; TAKAHASHI, Shuntaro; OKAHATA, Yoshio
- 2B6-16\* Enhancement of the amount of protein synthesis by the regulation of a ribosome mobility (Dept. Biomol. Engineering, Tokyo Inst. of Tech.; JST-SENTAN) TAKAHASHI, Shuntaro; FURUSAWA, Hiroyuki; OKAHATA, Yoshio
- 2B6-18 Chiral Separation and Enantioselective Detection for Binaphthyl Derivatives Using Monoclonal Antibodies (Grad. Sch. Sci., Osaka Univ.) ODAKA, Tomoki; YAMAGUCHI, Hiroyasu; HARADA, Akira
- 2B6-19 Analysis of Protein Synthesis Rate Dependent on the mRNA Sequences (Dept. Biomol. Engineering, Tokyo Inst. of Tech.) TSUJI, Kentaro; TAKAHASHI, Shuntaro; OKAHATA, Yoshio
- 2B6-20 Analysis of the completion of translation reaction using a Quartz-Crystal Microbalance (Dept. Biomol. Engineering, Tokyo Inst. of Tech.; JST-SENTAN) KUSAKABE, Takato; TAKAHASHI, Shuntaro; OKAHATA, Yoshio

## Sunday, March 27, PM

Chair: SANDO, Shinsuke (13:30~14:30)

- \* 13:20-13:30: interval for laptop PC connection.(2B6-28, 2B6-31, 2B6-32)
- 2B6-28 Young Scholar Lectures of CSJ Analytical observation of dynamic behaviors of biomolecules using a quartz crystal microbalance (Dept. Biomol. Engineering, Tokyo Inst. of Tech.) FURUSAWA, Hiroyuki
- 2B6-31 Construction of homogeneous immunoassay system using luciferase complementation (Tokyo Tech) MIE, Masayasu; NGO PHAN BICH, Thuy; KOBATAKE, Eiry
- 2B6-32\* Design of a Sensing System for Protease Activities Using a Combination of Split-GFP and Split-Intein. (IMRAM, Tohoku Univ.) SAKAMOTO, Seiji; TERAUCHI, Mika; KIM, Tanner; ARAKI, Yasuyuki; WADA, Takehiko

Chair: OJIDA, Akio (14:40~15:40)

- \* 14:30-14:40: interval for laptop PC connection.(2B6-35, 2B6-37, 2B6-38, 2B6-40)
- 2B6-35\* The Pulsed-vibration Effects on Protease Reactions on a Solid Surface (Dept. Biomol. Engineering, Tokyo Inst. of Tech.; JST-SENTAN) KAWASAKI, Takayoshi: OKAHATA, Yoshio
- 2B6-37 Electrochemical detection of protease activity aiming at periodontal disease diagnosis (Kyutech) OHSHIMA, Takeshi; OHTSUKA, Keiichi; SATO, Shinobu; TAKENAKA, Shigeori
- 2B6-38\* Fluorescence labeling of proteins inside and outside living cells using a unique biotinylation reaction (Kyushu Inst. of Tech.) SUEDA, Shinji; HAYASHI, Hideki: YONEDA, Sawako
- HAYASHI, Hideki; YONEDA, Sawako **2B6-40** In Vivo Chemistry (1): <sup>19</sup>F-NMR probes for the functional analysis of psychiatric disorder-related enzyme (Graduate School of Engineering, Kyushu Univ.) YAMAGUCHI, Koya; UEKI, Ryosuke; NONAKA, Hiroshi; SANDO, Shinsuke

Chair: MORI, Toshiaki (15:50 $\sim$ 16:50)

- \* 15:40-15:50: interval for laptop PC connection.(2B6-42, 2B6-43, 2B6-44, 2B6-45, 2B6-46, 2B6-47)
- 2B6-42 In Vivo Chemistry (2): NMR probes for the analysis of neurotransmitter metabolism (Graduate School of Engineering, Kyushu Univ.) UEKI, Ryosuke; YAMAGUCHI, Koya; NONAKA, Hiroshi; SANDO, Shinsuke
- 2B6-43 Isoform selective fluorescent labeling of 14-3-3 protein by fusicoccin analogs (ISIR, Osaka Univ.) TAKAHASHI, Michiko; KAWAMURA, Akie; KATO, Nobuo; HAMACHI, Itaru; OHKANDA, Junko
- 2B6-44 In Vivo Chemistry (3): Exploration of molecular structures with a long hyperpolarized state. (Kyushu Univ.) HATA, Ryunosuke; NISHIHARA, Tatsuya; NONAKA, Hiroshi; SANDO, Shinsuke
- 2B6-45 In Vivo Chemistry (4): A New Reporter Protein Using Hyperpolarized Substrates (Kyushu Univ.) NISHIHARA, Tatsuya; HATA, Ryunosuke; NONAKA, Hiroshi; SANDO, Shinsuke
- 2B6-46 New evolution of LDT chemistry 1: Creation of fluorescent biosensor on the basis of crystal structural analysis (Graduate School of Engineering. Kyoto Univ.) KIOI, Yoshiyuki; TAMURA, Tomonori; TAKAOKA, Yousuke; OTANI, Jungi; ARIYOSHI, Mariko; TOCHIO, Hidehito; SHIRAKAWA, Masahiro; TSUKIJI, Shinya; HAMACHI, Itaru
- 2B6-47 New evolution of LDT chemistry 2 :FKBP12 fluorescent labeling and analysis of the protein-protein interaction (Graduate School of Engineering. Kyoto Univ.) MIKI, Takayuki; TAMURA, Tomonori; KIOI, Yoshiyuki; TSUKIJI, Shinya; HAMACHI, Itaru

Chair: TAKENAKA, Shigeori (17:00~17:50)

- \* 16:50-17:00: interval for laptop PC connection.(2B6-49, 2B6-50, 2B6-51, 2B6-52, 2B6-53)
- 2B6-49 Dynamic force spectroscopy analysis of verotoxin-Gb3 sugar interactions. (Dept. Biomol. Engineering, Tokyo Inst. of Tech.; JST-PRESTO) TSUYUKI, Yumi; MORI, Toshiaki; OKAHATA, Yoshio
- 2B6-50 Force-curve measurements of lipid bilayer membranes with Gb3 using verotoxins at a two dimentional surface. (Dept. Biomol. Engineering, Tokyo Inst. of Tech., JST-PRESTO) TSUYUKI, Yumi; MORI, Toshiaki; OKAHATA, Yoshio

- **2B6-51** Reaction analysis of a hyalronic acid synthase in lipid bilayers by using high-speed atomic force microscopy. (Dept. Biomol. Engineering, Tokyo Inst. of Tech.; JST-PRESTO) HIROSE, Atsushi; KAKUTA, Yoshimitsu; KIMATA, Kouji; MORI, Toshiaki; OKAHATA, Yoshio
- 2B6-52 Automatic detection method of PCR products from pathogenic bacteria using zinc finger fused luciferase (Tokyo Univ. of Agric. & Technol.School of Engineering, Dep.Biotech) IKEBUKURO, Kazunori; KEZUKA, Aki; HIRAOKA, Daisuke; MURAKAMI, Yoshiyuki; SHIMURA. Noriaki
- 2B6-53 Development of DNA methylation level evaluating method using magnetic beads (Dept. of Biotechnol., Tokyo Univ. of Agric. & Technol.) HIRAOKA, Daisuke; IKEBUKURO, Kazunori; YOSHIDA, Wataru; HATA, Kenichirou; SHIMURA, Noriaki

#### Monday, March 28, AM

#### **Proteins**

Chair: SATO, Toshinori (9:00  $\sim$ 10:00)

- \* 8:50-9:00: interval for laptop PC connection.(3B6-01, 3B6-03, 3B6-05)
- **3B6-01\*** Mechanistic studies of Ser/Thr dehydration catalyzed by a novel lantibiotics synthetase family (Univ. of Tokyo; Univ. of Illinois at Urbana-Champaign) GOTO, Yuki; VAN DER DONK, Wilfred A.
- 3B6-03\* N-terminal specific <sup>18</sup>F-labeling of peptides and proteins via the NEXT-A reaction (Okayama Univ.) TAKI, Masumi; KUROIWA, Hirovuki: SISIDO. Masahiko
- **3B6-05\*** Synthesis of Water-Soluble Dendritic Amino Acids and Their Properties (Okayama Univ.) KITAMATSU, Mizuki; KITABATAKE, Mayumi; NOUTOSHI, Yoshiteru

Chair: KAJIHARA, Yasuhiro (10:10~11:10)

- \* 10:00-10:10: interval for laptop PC connection.(3B6-08, 3B6-10, 3B6-12, 3B6-13)
- **3B6-08\*** Design and construction of hydrogels composed of filamentous viruses (The Univ. of Tokyo) SAWADA, Toshiki; SERIZAWA, Takeshi
- 3B6-10\* Identification of Peptides that Specifically Bind to Poly(phenylene vinylene) and their applications (The Univ. of Tokyo) EJIMA, Hirotaka; SERIZAWA, Takeshi
- 3B6-12 Novel Intracellular Protein Delivery Using Sugar Binding Peptide (Keio Univ.) OTANI, Ryohei; MATSUBARA, Teruhiko; SATO, Toshinori
- 3B6-13 LEA-like peptide coexpressed systems for enhanced protein expression in *E.coli* (Kyushu Institute of Technology LSSE) IKENO, Shinya; HARUYAMA. Tetsuva

Chair: HARUYAMA, Tetsuya (11:20∼12:20)

- \* 11:10-11:20: interval for laptop PC connection.(3B6-15, 3B6-17, 3B6-18, 3B6-19, 3B6-20)
- 3B6-15\* Study of the new peptide alpha-thioesterification using selective activation of the Xaa-Cys junction (Grad. Sch. Sci., Osaka Univ.) OKAMOTO, Ryo; IZUMI, Masayuki; ISHII, Kazuyuki; MOROOKA, Keiko; KAJIHARA, Yasuhiro
- 3B6-17<sup>†</sup> In vitro selection of photo-responsive peptide aptamer (RIKEN ASI) LIU, Mingzhe; SHIRAI, Haruna; ABE, Hiroshi; ITO, Yoshihiro
- **3B6-18** Detection of enzyme activity using lysine dendrimer with fluorescent peptides (Graduate School of Life Science and Systems Engineering, Kyushu Institute of Technology) HATTORI, Tsukasa; NISHINO, Norikazu; KATO, Tampeli.
- 3B6-19 Detection of Enzymic Activity by Immobilized Fluorescent Peptide (Graduate School of Life Science and SystemsEngineering, Kyushu Institute of Technology) YAMAMOTO, Shotaro; NISHINO, Norikazu; KATO, Tamaki
- 3B6-20 Interaction between a peptide with a partial sequence of haemagglutinin with multivalent anionic porphyrins (Doshisha Univ., Faculty of Science and Engineering) HATADA, Satoshi; WATANABE, Kenji; KITAGISHI, Hiroaki; KANO, Kouji

### Monday, March 28, PM

#### **Proteins**

Chair: MATSUURA, Kazunori (13:30 $\sim$ 14:30)

- \* 13:20-13:30: interval for laptop PC connection.(3B6-28, 3B6-30, 3B6-31, 3B6-32, 3B6-33)
- 3B6-28\*† Self-organized formation of engineered redox enzyme layeron a solid substrate (Kyushu Institute of Technology; Department of Biological Functions and Engineering) IWANAGA, Atsushi; TAKATSUJI, Yoshiyuki; LIENEMANN, Michael; JOENSUU, Jussi; LINDER, Marukus; HARUYAMA. Tetsuva
- 3B6-30 Cell penetrability with alpha-helical peptides conjugated with gold nanospheres (Tokyo Institute of Technology) PARK, Hyejin; TAKAHASHI, Tsuyoshi; MIHARA, Hisakazu
- 3B6-31 Interaction of glycopeptide-modified Au nanoparticles with lectin proteins (Tokyo Institute of Technology) OKUSA, Hiroyuki; PARK, Hyejin; TAKAHASHI, Tsuyoshi; YUASA, Hideya; MIHARA, Hisakazu
- 3B6-32 Detection of Protease Reaction by Anomalous Reflection of Gold

- (Tokyo Institute of Technology) TAJIMA, Kenichi; SYAHIR, Amir; KAJIKAWA, Kotaro; MIHARA, Hisakazu
- **3B6-33** Development of a novel NO sensor using an iron complex with fluorescent-labeled peptide conjugate. (FIRST, Konan Univ.) MIYAZAKI, Hiroshi; USUI, Kenji; FUJII, Satoshi

Chair: HASHIZUME, Mineo (14:40 $\sim$ 15:40)

- \* 14:30-14:40: interval for laptop PC connection.(3B6-35, 3B6-37, 3B6-38, 3B6-39, 3B6-40)
- 3B6-35\* Highly functional peptide immobilization method using cushion protein (Grad. Sch. of Natur. Sci. & Tech., Okayama Univ.) IMANAKA, Hiroyuki; KUNIKATA, Toshinobu; YANAGITA, Keisuke; IMAMURA, Koreyoshi; NAKANISHI, Kazuhiro
- 3B6-37 Stabilization of peptide nanocapsules self-assembled from viral β-annulus peptide by their crosslink (Graduate School of Eng., Kyushu Univ.) OKIZAKI, Tsuyoshi; MATSUURA, Kazunori; KIMIZUKA, Nobuo
- 3B6-38 Regulation of self-assembly of nanocapsules from viral β-Annulus peptide by metal ions (Graduate School of Eng., Kyushu Univ.) MATSUURA, Kazunori; NAKAMURA, Tomohiro; KIMIZUKA, Nobuo
- 3B6-39 Evaluation of interactions of helical peptides miniatured from various proteins with DNAs (Graduate School of Pharmaceutical Sciences, Univ. of Toyama) KAJINO, Masaoki; FUJIMOTO, Kazuhisa; INOUYE, Masahiko
- 3B6-40 Electron transfer of ferrocene-labeled peptides immobilized onto Au supports (Graduate School of Pharmaceutical Sciences, Univ. of Toyama) FUJIWARA, Masashi; FUJIMOTO, Kazuhisa; INOUYE, Masahiko

Chair: TAKAHASHI, Tsuyoshi (15:50~16:50)

- \* 15:40-15:50: interval for laptop PC connection.(3B6-42, 3B6-43, 3B6-44, 3B6-46, 3B6-47)
- **3B6-42** Synthesis of novel RNA binding oligo cationic peptides (Univ. of Tokyo) MAEDA, Yusuke; IWATA, Rintaro; WADA, Takeshi
- 3B6-43 Characterization of Cyclic Peptide Nanotube (Graduate School of Life Science and Systems Engineering, Kyushu Institute of Technology) WU, Zhe; KOHCHI, Asuka; TANAKA, Daichi; NISHINO, Norikazu; KATO, Tamaki
- 3B6-44\* Design and Evaluation of Peptide Hydrogels for Cell Stretch (Okayama Univ., Research Core for Interdisciplinary Sciences) MATSUURA, Koji; KITAMATSU, Mizuki; KURODA, Yuka; NAGAI, Yusuke; NARUSE, Keiji
- 3B6-46 Selective Mineralization on Microparticle Surfaces by Utilizing Peptides (Tokyo Univ. of Sci.; Keio Univ.) UCHIDA, Yuki; MATSUBARA, Teruhiko; SATO, Toshinori; HASHIZUME, Mineo
- 3B6-47 Mechanism of inhibitory activity against Influenza Virus Infectionby Saccharide Modified peptides (Keio Univ.) ARAMI, Shunsuke; MATSUBARA, Teruhiko; SATO, Toshinori

Chair: USUI, Kenji (17:00 $\sim$ 18:00)

- \* 16:50-17:00: interval for laptop PC connection.(3B6-49, 3B6-50, 3B6-51, 3B6-52, 3B6-53)
- 3B6-49 Self-assembling peptide nanofibers responsive to calcium ion for a novel biomaterial (Tokyo Institute of Technology) TSUCHIYA, Masaki; SAWADA, Toshiki; TAKAHASHI, Tsuyoshi; MIHARA, Hisakazu
- **3B6-50** Characterization of fluorescein-binding proteins selected from  $\alpha$  3  $\beta$  3 de novo protein libraries (Tokyo Institute of Technology) OKURA, Hiromichi; TAKAHASHI, Tsuyoshi; MIHARA, Hisakazu
- 3B6-51 Ferritin arrangement on single-walled carbon nanotubes with peptides.
  (Ryukoku Univ.) KUROSAWA, Takahiro; IMAI, Takahito;
  YAMAMOTO, Shin-ichi; TOMIZAKI, Kin-ya
- 3B6-52 Arraying gold nanoparticles onto peptide aggregates. (Ryukoku Univ.) WAKIZAKA, Shota; IMAI, Takahito; TOMIZAKI, Kin-ya
- 3B6-53\* Liposome Can Control Fibril Growth of Amyloid beta protein from Alzheimer's Disease 'LIPOzyme(XII) (Osaka Univ.) SHIMANOUCHI, Toshinori; ONISHI, Ryo; KITAURA, Nachi; KUBOI, Ryoichi; UAKOSHI, Hiroshi

## Tuesday, March 29, AM

#### Proteins(Metals)

Chair: ITOH, Shinobu  $(9:00\sim10:00)$ 

- \* 8:50-9:00: interval for laptop PC connection.(4B6-01, 4B6-02, 4B6-03, 4B6-04, 4B6-05, 4B6-06)
- **4B6-01** Structure and Properties of Pseudoazurin Met16His/Thr36Lys Mutant (Grad. Sch. Sci. Eng., Ibaraki Univ.) YAMAGUCHI, Takahide; NIHEI, Yuko; ASAMURA, Sayaka; KOHZUMA, Takamitsu
- **4B6-02** Active Site Structure and Enzyme Activity of a Heme Degradation Enzyme from *Mycobacterium tuberculosis*, MhuD (Tohoku Univ.; Inst. of Multidisciplinary Res. for Adv. Materials) KUSAMA, Shusuke; MATSUI, Toshitaka; GOULDING, Celia; AKIYAMA, Kimio; TAKAHASHI, Satoshi; IKEDA-SAITO, Masao
- 4B6-03 Functionalization of Porous Protein Crystals by the Accumulation of Metal Complexes (Grad. Sch. of Kyoto Univ.; iCeMS, Kyoto Univ.) TABE, Hiroyasu; ABE, Satoshi; KITAGAWA, Susumu; UENO, Takafumi
- 486-04 Creation of Organometallic Complex-containing Proteins Based on Functional Mechanism of Proteases (Graduate School of Materials Science,

- Nara Institute of Science and Technology (NAIST)) YOSHIDA, Takefumi; MATSUO, Takashi: IMAI, Tie: HIROTA, Shun
- 486-05 Molecular mechanism responsible for the control of functional properties ofmyoglobin through change in the electron density of heme iron atom. (Dept. Chem., Univ. of Tsukuba) NISHIMURA, Ryu; SHIBATA, Tomokazu; NAGAO, Satoshi; FUKAYA, Masashi; TAI, Hulin; NAGATOMO, Shigenori; MATSUO, Takashi; HIROTA, Shun; SUZUKI, Akihiro; IMAI, Kiyohiro; ISHIGAMI, Izumi; OGURA, Takashi; NEYA, Saburou: YAMAMOTO, Yasuhiko
- **4B6-06** Structure and Function of a Transcriptional Regulator YgfC Acting as a Heme Sensor (Natl. Inst. Natural Sci.; Okazaki Inst. Integ. Biosci.) YAMANAKA, Masaru; SAWAI, Hitomi; AONO, Shigetoshi

Chair: SAWAI, Hitomi (10:10~11:10)

- \* 10:00-10:10: interval for laptop PC connection.(4B6-08, 4B6-09, 4B6-10, 4B6-11, 4B6-12, 4B6-13)
- **4B6-08** Effects of the length of *N*-terminal polypeptide chain on the stability of the coordination bond between heme iron and *N*-terminal amino group in denatured cytochrome *c* (Dept. Chem., Univ. of Tsukuba) TONEGAWA, Ken; WATANABE, Naoki; SUGIMOTO, Akihiro; SINOHARA, Naoya; MIKAMI, Shin-ichi; TAI, Hulin; NAGATOMO, Shigenori; MUNEGUMI, Toratane; YAMAMOTO, Yasuhiko
- 486-09 Characterization of cytochrome c mutants with systematically length-enedloop region bearing the methionine coordinated to heme iron atom (Dept. Chem., Univ. of Tsukuba) IZUMOTO, Yukie; WATANABE, Soichiro; MIKAMI, Shin-ichi; TAI, Hulin; NAGATOMO, Shigenori; YAMAMOTO, Yasuhiko
- 4B6-10 Structural change and oligomer formation of cytochrome c by ethanol
   (Nara Institute of Science and Technology, Graduate School of Materials
   Science) UEDA, Mariko; NAGAO, Satoshi; HIROTA, Shun
- 486-11 Formation of Hydrogenobacter thermophilus cytochrome c<sub>552</sub> oligomers (Nara Institute of Science and Technology, Graduate School of Materials Science) HAYASHI, Yugo; NAGAO, Satoshi; HIROTA, Shun
- 4B6-12 Formation of horse myoglobin dimer by interaction with SDS or alcohol (Graduate School of Materials Science, Nara Institute of Science and Technology (NAIST)) NAGAO, Satoshi; HEILIGERS, Dave; HIROTA, Shun
- 4B6-13 Study on the heme orientation of horse myoglobin dimer by NMR spectroscopy (Graduate School of Materials Science, Nara Institute of Science and Technology (NAIST)) UNI, Takeshi; NAGAO, Satoshi; HIROTA, Shun

Chair: NAKAMURA, Nobufumi (11:20 $\sim$ 12:20)

- \* 11:10-11:20: interval for laptop PC connection.(4B6-15, 4B6-16, 4B6-17, 4B6-18, 4B6-20)
- 4B6-15 Construction of Hemoprotein Supramolecular Polymer Using Synthetic Heme Diad and Apoprotein Dimer (Graduate School of Engineering, Osaka Univ.) TAKAHASHI, Akinori; OOHORA, Koji; ONODA, Akira; HAYASHI, Takashi
- 4B6-16 Characterization of Peroxo Species of Tyrosinase Mutants Modified around CuA of the Enzyme Active Site (Graduate School of Engineering, Osaka Univ.) FUJIEDA, Noubutaka; IKEDA, Takuya; YABUTA, Shintaro; YANAGISAWA, Sachiko; OGURA, Takashi; ITOH, Shinobu
- 486-17 Characterization of Peroxo Species of Tyrosinase Mutants Modified around CuB of the Enzyme Active Site (Graduate School of Engineering, Osaka Univ.) YABUTA, Shintaro; IKEDA, Takuya; YANAGISAWA, Sachiko; FUJIEDA, Noubutaka; OGURA, Takashi; ITOH, Shinobu
- 4B6-18\* Stable Compound II Formation and Its Unique Reaction Behavior in Aqueous Solution (Doshisha Univ.) KITAGISHI, Hiroaki; UEDA, Takunori; TAMAKI, Mariko; KANO, Koji
- 486-20 Observation of Chemical Species Formed by the Reaction of Supramolecular Peroxidase Model Complex with Peracids (Doshisha Univ.) KUMEDA, Saki; KITAGISHI, Hiroaki; KANO, Koji

#### Tuesday, March 29, PM

#### **Proteins**

Chair: UENO, Takafumi (13:30∼14:20)

- \* 13:20-13:30: interval for laptop PC connection.(4B6-28, 4B6-29, 4B6-30, 4B6-31, 4B6-32)
- **4B6-28**<sup>†</sup> EXAFS Studies of a Fern Plastocyanin from *Dryopteris Crassirhizoma* (Ibaraki Univ.) TOGASHI, Hiromi; YANO, Junko; YACHANDRA, Vittal: YOSHIZAKI, Fuminori; KOHZUMA, Takamitsu
- 4B6-29 Introduction of a Rhodium Complex into the Cavity of an Aponitrophorin via Covalent Bonding (Osaka Univ.) FUKUMOTO, Kazuki; ONODA, Akira; HAYASHI, Takashi
- 486-30 Development of antigen peptide delivery system using peptide nanofiber as carrier (Kyoto institute of technology) KITAGAWA, Yuichi; WAKU, Tomonori; KUNUGI, Shigeru; TANAKA, Naoki
- 486-31 Inhibition of protein aggregation by chaperone peptide of amyloid fibril (Kyoto Institute of Technology) NISHIGAKI, Tatsutoshi; FUKUHARA, Sayuri; MIYATA, Keisuke; WAKU, Tomonori; KUNUGI, Shigeru; TANAKA, Naoki
- 486-32 THE MECHANISM OF FIBRIL FORMATION OF OVALBUMIN REVEALED BY THE IDENTIFICATION OF AMYLOIDOGENIC CORE

REGIONS (Kyoto Institute of Technology) KAWACHI, Yuki; MORIMOTO, Yumi; TAKAHASHI, Nobuyuki; MORII, Takashi; WAKU, Tomonori; KUNUGI, Shigeru; TANAKA, Naoki

Chair: WAKU, Tomonori (14:30~15:40)

- \* 14:20-14:30: interval for laptop PC connection.(4B6-34, 4B6-36, 4B6-37, 4B6-38, 4B6-39, 4B6-40)
- 486-34\* Analysis of amyloid fibrillation of tau derived peptides (Kyoto Univ., Institute of advanced energy) NAKATA, Eiji; KAIDA, Shinji; NAKAGAWA, Katsunori; KONNO, Takashi; MORII, Takashi
- 486-36 Development of new catalytic system based on the external surface sequence of highly stable tubular protein (Grad. Sch. Sci. Nagoya Uni.Grad. Sch. Biosci. and Biotech. Tokyo Inst. Tech.Res. Ctr. Mat. Sci. Nagoya Uni. iCeMS, Kyoto Univ.Grad. Sch. Engn. Kyoto Univ.) INABA, Hiroshi; KANAMARU, Shuji; ARISAKA, Fumio; WATANABE, Yoshihito; KITAGAWA, Susumu; UENO, Takafumi
- 4B6-37 Construction of Protein Architectures by Accumulation of Robust Tubular Proteins on Substrates (iCeMS. Kyoto Univ.; Grad. Sch. Sci. Nagoya Univ.; UCLA; Grad. Sch. Eng. Kyoto Univ.) ABE, Satoshi; INABA, Hiroshi; STIEG, Adam; SANGHAMITRA, Nusrat; GIMZEWSKI, James; KITAGAWA, Susumu; UENO, Takafumi
- 486-38 Selective labeling of cell surface receptor proteins using the reactive tag and the supramolecular handle. (Department of Synthetic Chemistry and Biological Chemistry Kyoto Univ.) TSUTSUMI, Hiroshi; NONAKA, Hiroshi; UCHINOMIYA, Shohei; FUJICHIMA, Shohei; OJIDA, Akio; HAMACHI, Itaru
- 486-39<sup>†</sup> Development of His reactive tag for tag fused protein labeling in cell (Department of Synthetic Chemistry and Biological Chemistry Kyoto Univ.) UCHINOMIYA, Shohei; FUJISHIMA, Shohei; NONAKA, Hiroshi; OJIDA, Akio; HAMACHI, Itaru
- **4B6-40** Preparation of carbon nanotube-casein complexes and their properties (Grad. Sch. of Sci. and Emg., Univ. of Toyama) ONO, Shin; TAGA, Fumihiko; YAMAKOSHI, Risa; TAKIUCHI, Satoshi

## Room B7

Bldg. 7 7-63

## Biofunctional Chemistry; Biotechnology Saturday, March 26, PM

Chair: SANDO, Shinsuke  $(13:00\sim14:00)$ 

- \* 12:50-13:00: interval for laptop PC connection.(1B7-25, 1B7-26, 1B7-27, 1B7-28, 1B7-29)
- 1B7-25 Screening of DNA aptamers which bind to alpha-fetoprotein(AFP) (Tokyo Univ. of Agric. & Technol.) IKEBUKURO, Kazunori; SAITO, Taiki; NONAKA, Yoshihiko; TUKAKOSHI, Kaori; ABE, Koichi
- 1B7-26 Improvement of DNA aptamers which bound to VEGF by in silico maturation (Tokyo Univ. of Agri. & Technol.) IKEBUKURO, Kazunori; FUKAYA, Takahiro; NONAKA, Yoshihiko; HAFUKA, Kenji; ABE, Koichi
- 1B7-27 Development of detection system of VEGF using DNA aptamer labaled with GDH (Tokyo Univ. of Agric. & Technol.) IKEBUKURO, Kazunori; TATSUMI, Atsuro; MURAKAMI, Yoshiyuki; NONAKA, Yoshihiko; TSUKAKOSHI, Kaori; ABE, Koichi; SODE, Koji
- 1B7-28 Effects of screening conditions on binding properties of emerged nucleic acid aptamers (Grad. Sch. Eng., Gunma Univ.) KASAHARA, Yuuya; IRISAWA, Yuuta; KUWAHARA, Masayasu
- 1B7-29\* Screening of VEGF-binding aptamer and engineering for biosensor element. (Tokyo Univ. of Agri. & Tecnol.) NONAKA, Yoshihiko; ABE, Koichi; SODE, Koji; IKEBUKURO, Kazunori

Chair: KUWAHARA, Masayasu (14:10 $\sim$ 15:10)

- \* 14:00-14:10: interval for laptop PC connection.(1B7-32, 1B7-33, 1B7-34, 1B7-36)
- 187-32 Selection of DNA aptamer inhibiting enzyme activity (Faculty of Eng., Kobe Univ.) MIYACHI, Yusuke; OGINO, Chiaki; KONDO, Akihiko
- 1B7-33<sup>†</sup> Molecular sensing on cell surface using nucleic acid aptamer. (Kyushu Univ.) TOKUNAGA, Takeshi; YAMADA, Katsuhiro; IMAISHI, Takahiro; NONAKA, Hiroshi; SANDO, Shinsuke
- 1B7-34\*† Development of anti-amyloid oligomer DNA aptamers and its application. (Tokyo Univ. of Agric. & Technol.) TSUKAKOSHI, Kaori; ABE, Koichi; SODE, Koji; IKEBUKURO, Kazunori
- **1B7-36\*** Reversible photoregulation of translation by photoresponsive 5'-cap (Bioengineering Laboratory, RIKEN) OGASAWARA, Shinzi; MAEDA,

Chair: LIANG, Xingguo (15:20~16:20)

- \* 15:10-15:20: interval for laptop PC connection.(1B7-39, 1B7-40, 1B7-41, 1B7-42, 1B7-43, 1B7-44)
- 1B7-39 Withdrawn
- 1B7-40 Effect of molecular environments on the behaviors of biomolecules

- (25): Effect of molecular crowding on structure of mRNA (FIRST, Konan Univ.; FIBER, Konan Univ.) MURAKAMI, Kentaro; ENDOH, Tamaki; SUGIMOTO, Naoki
- 1B7-41 Effect of molecular environments on the behaviors of biomolecules (26): Method for analyzing translation elongation affected by high order structure formation of mRNA (FIRST, Konan Univ.; FIBER, Konan Univ.) KAWASAKI, Yu; ENDOH, Tamaki; SUGIMOTO, Naoki
- 1B7-42 Effect of molecular environments on the behaviors of biomolecules (27): RNA selection with RNA-protein allosteric interaction toward development of functional switches of biomolecules (FIBER, Konan Univ.; FIRST, Konan Univ.) ENDOH, Tamaki; SUGIMOTO, Naoki
- 1B7-43\* Effect of molecular environments on the behaviors of biomolecules(17): Molecular crowding effect of osmolytes on the thermodynamics of RNA and DNA hybrid formation (FIBER, Konan Univ.; FIRST, Konan Univ.) PRAMANIK, Smritimoy; NAGATOISHI, Satoru; SAXENA, Sarika; BHATTACHARYYA, Jhimli; SUGIMOTO, Naoki
- 1B7-44 Effect of molecular environments on the behaviors of biomolecules (18) :Thermodynamic stability of DNA duplexes in ionic liquids (FIBER, Konan Univ.; FIRST, Konan Univ.) TATEISHI, Hisae; SUGIMOTO, Naoki

Chair: TORIGOE, Hidetaka (16:30~17:30)

- \* 16:20-16:30: interval for laptop PC connection.(1B7-46, 1B7-47, 1B7-48, 1B7-50)
- 1B7-46 Effect of molecular environments on the behaviors of biomolecules (19): Effects of the neighbor bases at the branch point on the structure and thermodynamics of the RNA three way junction (FIRST, Konan Univ.; FIBER, Konan Univ.) MIMURA, Kenta; MIYOSHI, Daisuke; NAKANO, Shu-ichi; SUGIMOTO, Naoki
- 1B7-47 Effect of molecular environments on the behaviors of biomolecules (20):Importance of unpaired regions on thermodynamic stability and hydration of RNA duplexes (FIRST, Konan Univ.; FIBER, Konan Univ.) FUJIMOTO, Takeshi; MIYOSHI, Daisuke; NAKANO, Shu-ichi; SUGIMOTO, Naoki
- 1B7-48\*† Evaluation of antisense effect in living cells using fluorescent imaging procedure (Kyoto Inst. Tech.) WAKI, Reiko; YAMAYOSHI, Asako; KOBORI, Akio; MURAKAMI, Akira
- 1B7-50\*† Enhancement of RNAi activity by chemical modification of siRNA (Nagoya Univ.) ITO, Hiroshi; LIANG, Xingguo; ASANUMA, Hiroyuki

Chair: NAKANO, Shuichi (17:40~18:30)

- \* 17:30-17:40: interval for laptop PC connection.(1B7-53, 1B7-54, 1B7-55, 1B7-56, 1B7-57)
- 1B7-53 Regulation of RISC function by photo-reactive oligonucleotides (Kyoto Inst. of Tech.) MATSUYAMA, Yohei; YAMAYOSHI, Asako; KOBORI, Akio; MURAKAMI, Akira
- 1B7-54 Development of novel nucleic acid analogs that mimic functions of non-coding RNA (7SK) (II)Characterization of 7SK mimics as an inhibitor of HIV-replication (Kyoto Inst. of Tech.) YAMAYOSHI, Asako; HAYASHI, Rie; KOBORI, Akio; KOMANO, Jun; KOYANAGI, Yoshio; MURAKAMI, Akira
- 1B7-55 Development of a method for detecting small molecule-miRNA interactions (ISIR, Osaka Univ.) MURATA, Asako; HARADA, Yasue; FUKUZUMI, Takeo; UMEMOTO, Shiori; IM, Seongwang; HAGIHARA, Masaki; NAKATANI, Kazuhiko
- 1B7-56 Binding of naphthyridine tetramer derivatives to RNA containing GG-mismatches (ISIR, Osaka Univ.) KOHYAMA, Izumi; DOHNO, Chikara; NAKATANI, Kazuhiko
- 187-57 Synthesis and evaluation of fluorescent dyes for evaluation of RNA-ligand interactions (ISIR, Osaka Univ.) IM, Seongwang; HARADA, Yoshie; MURATA, Asako; FUKUZUMI, Takeo; UMEMOTO, Shiori; NAKATANI, Kazuhiko

## Sunday, March 27, AM

## Nucleic Acid

Chair: OKAMOTO, Akimitsu  $(9:00\sim10:00)$ 

- \* 8:50-9:00: interval for laptop PC connection.(2B7-01, 2B7-02, 2B7-04, 2B7-05, 2B7-06)
- 2B7-01 Application of DNA films with metallo-organic complexes for organic photoelectric conversion devices (Dept. Biomol. Engineering, Tokyo Inst. of Tech.) FUJIWARA, Yuuko; KAWASAKI, Takayoshi; OKAHATA, Yoshio 2B7-02\* Photoreactivity of 2'-Iodo-adenosine containing DNA (Kyoto
- Univ.) OHTSUKI, Akimichi; TASHIRO, Ryu; SUGIYAMA, Hiroshi **2B7-04** The interaction between G-G mismatch binding molecule and (CGG)<sub>n</sub> containing hairpin DNA (2) (Osaka Univ.; The institute of Scientific and Industrial Research) HONG, Changfeng; HAGIHARA, Masaki; NAKATANI, Kazuhiko
- 2B7-05 Specific nucleobase recognition on designed DNA scaffold (Department of Applied Chemistry and Biochemistry, Graduate School of Science and Technology, Kumamoto Univ.) FUTAMURA, Akika; IHARA, Toshihiro; JYO, Akinori; IMOTO, Takeshi; SATO, Yusuke; NISHIZAWA, Seiichi; TERAMAE, Norio
- 2B7-06 Strict recognition of DNA by PNA with a flexible linker (RCAST, The Univ. of Tokyo) NISHIYAMA, Yukari; AIBA, Yuichiro;

- Chair: ASANUMA, Hiroyuki (10:10∼11:10)
- \* 10:00-10:10: interval for laptop PC connection.(2B7-08, 2B7-10, 2B7-12, 2B7-13)
- 2B7-08\*† DNA fluorescent probes utilizing excitonic interaction between two molecules of dye (RIKEN ASI, JST) IKEDA, Shuji; KUBOTA, Takeshi; YUKI, Mizue; YANAGISAWA, Hiroyuki; WANG, Dan; NAKAMURA, Akiko: OKAMOTO, Akimitsu
- 2B7-10\*† The rational strategy for functional conversion of the ATP-binding ribonucleopeptide receptor (Kyoto Univ., Institute of Advanced Energy) NAKANO, Shun; NAKATA, Eiji; MORII, Takashi
- 2B7-12# A modular strategy to construct an aptamer-based fluorescent biosensor (Kyoto Univ., Institute of Advanced Energy) LIEW, Fong Fong; NAKATA, Eiji; MORII, Takashi
- 2B7-13 Development of a novel molecular beacon-shaped fluorescence nucleic acid probe using excimer emission of silylated pyrene (Gunma Univ.) SUZUKI, Kenya; MORIGUCHI, Tomohisa; SHINOZUKA, Kazuo
  - Chair: ENDO, Masayuki (11:20~12:20)
- \* 11:10-11:20: interval for laptop PC connection.(2B7-15, 2B7-16, 2B7-17, 2B7-18, 2B7-19)
- 2B7-15 Detection of three-base deletion by using novel DNA probe containing perylene derivatives (Nagoya Univ.) KONDO, Nobuyo; SEKIGUCHI, Koji; KASHIDA, Hiromu; ASANUMA, Hiroyuki
- 2B7-16 Super-sensitive in-stem molecular beacon system with the aid of cationic graft copolymer (Nagoya Univ.) ASANUMA, Hiroyuki; OSAWA, Takuya; FUJII, Taiga; LIANG, Xingguo; KASHIDA, Hiromu; YOSHIDA, Yasuko; SHIMADA, Naohiko; MARUYAMA, Atsushi
- 2B7-17 Molecular Mechanism of the Specific Interaction between Yeast Triplex DNA Binding Protein STM1 and Triplex DNA (Tokyo Univ. of Sci.) SATO, Norihiro; SASAKI, Kiyomi; TORIGOE, Hidetaka
- 2B7-18 <sup>19</sup>F-NMR spectra of DNA duplex and triplex possessing 5-fluorour-acil unit (Kyoto Univ.) TANABE, Kazuhito; SUGIURA, Masaaki; ITO, Takeo; NISHIMOTO, Sei-ichi
- 2B7-19\*† Development of gene detection probe with rapid signal amplification (riken) SHIBATA, Aya; ABE, Hiroshi; ITO, Mika; NAKASHIMA, Yuko; SYUTO, Satoshi; ITO, Yoshihiro

### Sunday, March 27, PM

#### Nucleic Acid

Chair: TORIGOE, Hidetaka (13:30~14:30)

- \* 13:20-13:30: interval for laptop PC connection.(2B7-28, 2B7-30, 2B7-31, 2B7-33)
- 2B7-28\* Effect of molecular environments on the behaviors of biomolecules (21): DNA hydration studies by using non-natural nucleotides (FIRST, Konan Univ.; Fac. of Sci. and Eng., Konan Univ.; FIBER, Konan Univ.) NAKANO, Shu-ichi; YAMAGUCHI, Daisuke; MIYOSHI, Daisuke; MATSUI, Jun; SUGIMOTO, Naoki
- 2B7-30 Effect of molecular environments on the behaviors of biomolecules (22):Elucidation of the mechanisms for DNA G-quadruplex stabilization with its binding to thrombin (FIBER, Konan Univ.; FIRST, Konan Univ.; Inst. Med. Sci., The Univ. of Tokyo) NAGATOISHI, Satoru; ISONO, Noburu; TSUMOTO, Kouhei; SUGIMOTO, Naoki
- 2B7-31\* Identification of G-quadruplex recognition mechanism of TLS (Shizuoka Univ.) TAKAHAMA, Kentaro; TAKADA, Asami; TADA, Shota; OYOSHI, Takanori
- 2B7-33 Characterization of RGG domain as a G-quadruplex DNA- and RNA-binding motif (Shizuoka Univ.) TAKADA, Asami; TAKAHAMA, Kentaro; OYOSHI, Takanori
  - Chair: MORI-I, Takashi (14:40 $\sim$ 15:40)
- \* 14:30-14:40: interval for laptop PC connection.(2B7-35, 2B7-36, 2B7-38, 2B7-39, 2B7-40)
- 2B7-35 Analyses of the quadruplex structure of fission yeast telomeric DNA sequences (Tokyo Univ. of Sci.) IMAZAKI, Mari; FUKUSHI, Miyako; TAKEHARA, Takashi; KOZASA, Tetsuo; TORIGOE, Hidetaka
- 2B7-36\* The quadruplex structure of budding yeast telomeric DNA sequences and its unfolding by telomere-binding protein Cdc13 (Tokyo Univ. of Sci.) FUKUSHI, Miyako; WADA, Shunsuke; NAKAMURA, Yoh; KOZASA, Tetsuo; TORIGOE, Hidetaka
- 2B7-38 Reaction of Guanine with reactive species in Telomere G-quartets (Kyoto Institute of Technology; Korean Univ.) NOSE, Takeshi; SAKURAI, Yasuhiro; PACK, Seung Pil; TAJIMA, Kunihiko; KANAORI, Kenii
- 2B7-39 Characterization of reaction oxanine with cysteine (Kyoto Institute of Technology; Korean Univ.) KOIKE, Yohei; SAKURAI, Yasuhiro; PACK, Seung Pil; TAJIMA, Kunihiko; KANAORI, Kenji
- 2B7-40 Synthesis of telomestatin derivatives containing methyl oxazole and evaluation of their G-quadruplex stabilizing ability (Tokyo Univ of Agri and Tech (TUAT)) MAJIMA, Satoki; IIDA, Keisuke; Shin-ya, Kazuo; TERA, Masayuki; NAGASAWA, Kazuo

- Chair: KANAORI, Kenji (15:50∼16:50)
- \* 15:40-15:50: interval for laptop PC connection.(2B7-42, 2B7-43, 2B7-44, 2B7-46)
- 2B7-42 Synthesis of caged G4 ligand with macrocyclic hexaoxazole derivatives (6OTD) as a core skeleton and evaluation of their G4 stabilizing activities (Tokyo Univ of Agri and Tech (TUAT)) NAKAMURA, Takahiro; IIDA, Keisuke; Shin-ya, Kazuo; TERA, Masayuki; NAGASAWA, Kazuo
- 2B7-43 Synthesis of macrocyclic hexaoxazole dimers and evaluation of their stabilizing ability against G-quadruplex structure. (Tokyo Univ of Agri and Tech (TUAT)) TSUBOUCHI, Gen; IIDA, Keisuke; SHIN-YA, Kazuo; TERA, Masayuki; NAGASAWA, Kazuo
- 2B7-44\* Folding Pathways of Human Telomeric G-quadruplex Structures (Kyoto Univ.) MASHIMO, Tomoko; SANNOHE, Yuta; SUGIYAMA, Hiroshi
- 2B7-46\* Telomere length analysis of single chromosome by ARCUT (RCAST, The Univ. of Tokyo) ISHIZUKA, Takumi; ITO, Kenichiro; XU, Yan; KOMIYAMA, Makoto

Chair: NAGASAWA, Kazuo (17:00~17:30)

- \* 16:50-17:00: interval for laptop PC connection.(2B7-49, 2B7-51)
- 2B7-49\* Structure and biological function of human telomere RNA (The Univ. of Tokyo, RCAST) XU, Yan; KOMIYAMA, Makoto
- 2B7-51 Characterization of RGG domain in Ewing's sarcoma (EWS) as a G-quadruplex DNA- and RNA-binding motif. (Shizuoka Univ.) SUGIMOTO, Chieri; TAKAHAMA, Kentaro; OYOSHI, Takanori

## Monday, March 28, AM

#### Nucleic Acid

Chair: NAKATANI, Kazuhiko (9:00  $\sim$ 10:00)

- \* 8:50-9:00: interval for laptop PC connection.(3B7-01, 3B7-02, 3B7-03, 3B7-05, 3B7-06)
- 3B7-01 Single molecular observation of G-quadruplex formation using the structural change of double-stranded DNAs placed in a DNA nanostructure (Kyoto Univ. Graduate School of Science; Kyoto Univ. iCeMS) SANNOHE, Yuta; ENDO, Masayuki; KATSUDA, Yousuke; HIDAKA, Kumi.; SUGIYAMA, Hiroshi
- 3B7-02 Direct observation of the site-specific DNA recombination in a DNA nanostructure (Kyoto Univ. Dept. of Science; Kyoto Univ.iCeMS) OU, Keiyu; KATSUDA, Yousuke; ENDO, Masayuki; HIDAKA, Kumi; SUGIYAMA, Hiroshi
- **3B7-03\*** Direct observation of stepwise movement of DNA motor (Kyoto Univ. Dept. of Science; Kyoto Univ.iCeMS) KATSUDA, Yousuke; ENDO, Masayuki; HIDAKA, Kumi; WICKHAM, Shelley; BATH, Jonathan; TUBERFIELD, Andrew; SUGIYAMA, Hiroshi
- 3B7-05 Development of an immobilization technology of functional macro-molecules onto DNA origami (Kyoto Univ., Institute of Advanced Energy) UWATOKO, Chisana; LI, Hongmei; TAINAKA, Kazuki; NAKATA, Eiji; MORII, Takashi
- 3B7-06 Construction of Protein Heteroarray on a DNA Origami Scaffold by the Use of Multiple Protein-Ligand Interactions (RCAST, The Univ. of Tokyo) YAMAZAKI, Takahiro; KUZUYA, Akinori; KOMIYAMA, Makoto

Chair: MORI-I, Takashi (10:10∼11:10)

- \* 10:00-10:10: interval for laptop PC connection.(3B7-08, 3B7-10, 3B7-11, 3B7-13)
- 3B7-08\*# Self-assembly of DNA origami in two-dimensional space by using jigsaw shape (Kyoto Univ. Dept. of Science) RAJENDRAN, Arivazhagan; ENDO, Masayuki; KATSUDA, Yousuke; HIDAKA, Kumi; SUGIYAMA, Hiroshi
- **3B7-10** Single molecular observation of RNA polymerase using a DNA nanostructure (Kyoto Univ. Dept. of Science; Kyoto Univ. iCeMS) TATSUMI, Koichi; ENDO, Masayuki; HIDAKA, Kumi; SUGIYAMA, Hiroshi
- 3B7-11\* Nanomechanical DNA Origami Devices as a Visual Detector for Various Single Molecular Targets (RCAST, The Univ. of Tokyo) KUZUYA, Akinori; SAKAI, Yusuke; YAMAZAKI, Takahiro; KOMIYAMA, Makoto
- **3B7-13** Allosteric Control of Nanomechanical DNA Origami Devices for Highly Sensitive Target Detection (RCAST, The Univ. of Tokyo) KUZUYA, Akinori; SAKAI, Yusuke; KOSHI, Naohiro; YAMAZAKI, Takahiro; KOMIYAMA, Makoto

Chair: ENDO, Masayuki (11:20~12:20)

- \* 11:10-11:20: interval for laptop PC connection.(3B7-15, 3B7-17, 3B7-19)
- 3B7-15\* Spin assemblies on DNA nanostructures (The Institute of Scientific and Industrial Research, Osaka Univ.; Graduate School of Science, Osaka City Univ.) ATSUMI, Hiroshi; MAEKAWA, Kensuke; NAKAZAWA, Shigeaki; SHIOMI, Daisuke; SATO, Kazunobu; KITAGAWA, Masahiro; TAKUI, Takeji; NAKATANI, Kazuhiko
- 3B7-17\* Creation of silica nano-structures reflecting morphological transition mediated by a task-specific ionic liquid incorporating an alkoxysilane group (JAEA) SHIMOJO, Kojiro; MITAMURA, Hisayoshi; MOURI, Tsuyoshi;

NAGANAWA, Hirochika

3B7-19\* Molecular Arrangement by Using Hydrophobic Cavities within DNA (Univ. of Hyogo) TAKADA, Tadao; OTSUKA, Yumiko; NAKAMURA, Mitsunobu; YAMANA, Kazushige

### Monday, March 28, PM

#### Nucleic Acid

Chair: WADA, Takehiko (13:30~14:30)

- \* 13:20-13:30: interval for laptop PC connection.(3B7-28, 3B7-29, 3B7-30, 3B7-32, 3B7-33)
- 3B7-28 Association and dissociation reactions of a DNA duplex in agarose gel (FIRST, Konan Univ.; FIBER, Konan Univ.) YAMAGUCHI, Daisuke; NAKANO, Shu-ichi; MATSUI, Jun
- 3B7-29 Structure evaluation of the DNA which formed base pair by disulfide bonding (Graduate School of Shibaura Inst. Tech.; Biomolecular Chemistry Lab.) OKADA, Munehiro; HATANO, Akihiko
- 3B7-30\* Aberrant methylation detection of TERT gene using ferrocenyl-naphthalene diimide-based electrochemical hybridization assay (Kyutech) SATO, Shinobu; KANEZAKI, Yusuke; TAKENAKA, Shigeori
- **3B7-32** Synthesis of dimeric naphthyridine derivatives connected at the 7 position (ISIR, Osaka Univ.) TODA, Mariko; HE, Hanping; NAKATANI, Kazubiko
- **3B7-33** Membrane permeation of the molecular umbrella-DNA conjugate (Graduate school of arts and sciences, The Univ. of Tokyo) SHOHDA, Koh-ichiroh; SUYAMA, Akira

Chair: FUJIMOTO, Kenzo (14:40 $\sim$ 15:40)

- \* 14:30-14:40: interval for laptop PC connection.(3B7-35, 3B7-36, 3B7-37, 3B7-39, 3B7-40)
- **3B7-35** Synthesis of Self-Replicating Peptide Ribonucleic Acid (PRNA) System with Click Chemistry 2 (IMRAM, Tohoku Univ.) HAGINIWA, Naomichi: SAKAMOTO, Seiii: ARAKI, Yasuvuki: WADA, Takehiko
- 3B7-36 Molecular design of azobenzene modification for the photoregulation of DNA function with visible lightirradiation (Nagoya Univ.) ISHIKAWA, Teruchika; NISHIOKA, Hidenori; SAWABE, Kyoichi; LIANG, Xingguo; ASANUMA, Hiroyuki
- **3B7-37\*** Construction of advanced light-driven DNA nanodevice involving two kinds of modified azobenzenes (Nagoya Univ.) NISHIOKA, Hidenori; ISHIKAWA, Teruchika; LIANG, Xingguo; ASANUMA, Hiroyuki
- 3B7-39 Molecular design of photoresponsive sticky ends for constructingnanodevices operated by light (Nagoya Univ.) LIANG, Xingguo; MIZUTANI, Haruka: ASANUMA. Hirovuki
- 3B7-40 Studies on the mechanism of alkali degradation of the pyrimidine(6-4) pyrimidone photoproduct (Osaka Univ.) ARICHI, Norihito; INASE, Aki; YAMAMOTO, Junpei; IWAI, Shigenori

Chair: IWAI, Shigenori (15:50∼16:50)

- \* 15:40-15:50: interval for laptop PC connection.(3B7-42, 3B7-44, 3B7-45, 3B7-46)
- 3B7-42\* Asymmetric clustering of dye molecules for the efficient quenching of fluorophore (Nagoya Univ.) FUJII, Taiga; HARA, Yuichi; OSAWA, Takuya; KASHIDA, Hiromu; LIANG, Xingguo; YOSHIDA, Yasuko; ASANUMA, Hiroyuki
- **3B7-44** Synthesis of linked DNA duplexes and their thermal denaturation study (Kanagawa Univ.) KIMURA, Subaru; OKAMOTO, Itaru; ONO, Akira
- 3B7-45 Photochemical site-specific DNA and RNA editing by using of reversible DNA photocrosslinking (JAIST) FUTAMURA, Daiki; HIRATSUKA, Kaoru; YOSHIMURA, Yoshinaga; SAKAMOTO, Takashi; FUJIMOTO, Kenzo
- **3B7-46\*** Surface DNA Recognition by Self-assembled Spherical Complexes (School of Engineering, the Univ. of Tokyo; CREST;Div. of Protein Eng., Cancer Inst., JFCR) KIKUCHI, Takashi; SATO, Sota; SHIBA, Kiyotaka; FUJITA, Makoto

Chair: ONO, Akira (17:00 $\sim$ 18:00)

- \* 16:50-17:00: interval for laptop PC connection.(3B7-49, 3B7-50, 3B7-52, 3B7-53)
- 3B7-49 Development of gene regulation by using photoreactive antisense oligonucleotide containing of 3-cyanovinylcarbazole (JAIST) SHIGENO, Atsuo; SAKAMOTO, Takashi; YOSHIMURA, Yoshinaga; FUJIMOTO, Kenzo
- 3B7-50\* Development of signal turn-on probe for <sup>19</sup>F MR imaging of nucleic acids: Improvement of the detection limit by the use of multi-<sup>19</sup>F labeled probe (JAIST) SAKAMOTO, Takashi; SHIMIZU, Yu-ki; SASAKI, Jyun; HAYAKAWA, Hikaru; FUJIMOTO, Kenzo
- **3B7-52** Electrochemical detection of double stranded DNA using a novel ferrocenylnaphthalene diimide in homogenous solution (Kyushu Institute of Technology) TAKENAKA, Hirotomo; WATANABE, Sadayoshi; SATO, Shinobu; TAKENAKA, Shigeori
- **3B7-53\*** Electrochemical behavior of the complex of naphthalene diimide carrying ferrocene and β-cyclodextrin with DNA duplex (Kyushu Institute of Technology) WATANABE, Sadayoshi; OHTSUKA, Keiichi; SATO,

Shinobu; TAKENAKA, Shigeori

## Tuesday, March 29, AM

#### Nucleic Acid

Chair: KUWAHARA, Masayasu (9:00 ~10:00)

- \* 8:50-9:00: interval for laptop PC connection.(4B7-01, 4B7-02, 4B7-03, 4B7-04, 4B7-06)
- 4B7-01 Synthesis of artificial base pairs for the improvement of insulating ability. (Nagoya Univ.) SEKIGUCHI, Koji; KASHIDA, Hiromu; ASANUMA, Hiroyuki
- 4B7-02 Cleavage of viral genome by artificial restriction endonucleases (Kyoto Univ.) ASHIMOTO, Toru; MORI, Tomoaki; AOYAMA, Yasuhiro; SERA, Takashi
- 4B7-03 Synthesis of novel functional TFO cleaving double strand DNA (Gunma Univ.) KAMIMURA, Mariko; MORIGUCHI, Tomohisa; SHINOZUKA, Kazuo
- 4B7-04\* Site-selective DNA hydrolysis by Ce(IV)/EDTA and mixed-base PNA-peptide conjugate (RCAST, The Univ. of Tokyo) AIBA, Yuichiro; HAMANO, Yuya; ACCETTA, Alessandro; SFORZA, Stefano; MARCHELLI, Rosangela; CORRADINI, Roberto; KOMIYAMA, Makoto
- 4B7-06 Artificial restriction DNA cutter for targeted gene knockout (RCAST, The Univ. of Tokyo) ITO, Kenichiro; SHIGI, Narumi; KOMIYAMA, Makoto

Chair: WADA, Takehiko (10:10∼11:10)

- \* 10:00-10:10: interval for laptop PC connection.(4B7-08, 4B7-11, 4B7-12, 4B7-13)
- 4B7-08 Young Scholar Lectures of CSJ Nucleic acid devices responding to celluar environmental factors (FIRST, Konan Univ.; FIBER, Konan Univ.) MIYOSHI, Daisuke
- 4B7-11 Incorporation of modified nucleoside triphosphates using DNA polymerases, and its application to DNA sequence analysis (Grad. Sch. Eng., Gunma Univ.) KUWAHARA, Masayasu; ANAHARA, Keisuke; KAJIYAMA, Tomoharu; GOTO, Mari; KAMBARA, Hideki
- 4B7-12 Effect of molecular environments on the behaviors of biomolecules (23): Effect of high order structure formation of DNA template on transcriptional activity (FIRST, Konan Univ.; FIBER, Konan Univ.) ISONO, Noburu; TATEISHI, Hisae; SUGIMOTO, Naoki
- 4B7-13 Effect of molecular environments on the behaviors of biomolecules (24): Effect of high order structure formation of nascent RNA on transcriptional activity (FIRST, Konan Univ.; FIBER, Konan Univ.) ONO, Ryoya; NAGATOISHI, Satoru; SUGIMOTO, Naoki

Chair: SERA, Takashi (11:20~12:20)

- \* 11:10-11:20: interval for laptop PC connection.(4B7-15, 4B7-16, 4B7-17, 4B7-19)
- 4B7-15 Synthesis and Interaction Behavior of Peptide Ribonucleic Acid (PRNA)-PNA-DNA Chimeras and Application to Expression Control of Genetic Information-1 (IMRAM Tohoku Univ.) MIZUTANI, Tatsuya; SAKAMOTO, Seiji; ARAKI, Yasuyuki; WADA, Takehiko
- 4B7-16 Control of helical structure of SNA duplex by sequence design (Nagoya Univ.) MURAYAMA, Keiji; TODA, Takasuke; KASHIDA, Hiromu; ASANUMA, Hiroyuki
- 4B7-17\* Development of novel functional oligonucleotides that induce ubiquitin-dependent proteolysis of virulence protein (Kyoto Inst. of Tech.) YAMAYOSHI, Asako; YOSHIKAWA, Mikimasa; YASUHARA, Mariko; GALANDE, Sanjeev; KOBORI, Akio; MURAKAMI, Akira
- 4B7-19\* Development of cationic artificial base pairs for the strong attachment of DNA duplexes. (Nagoya Univ.) KASHIDA, Hiromu; HAYASHI, Takamitsu; FUJII, Taiga; ASANUMA, Hiroyuki

### Tuesday, March 29, PM

#### Nucleic Acid

Chair: YAMANA, Kazushige (13:30 $\sim$ 14:30)

- \* 13:20-13:30: interval for laptop PC connection.(4B7-28, 4B7-30, 4B7-31, 4B7-32, 4B7-33)
- **4B7-28\*** Observation of a DNA-gel film on a substrate using a Quartz-crystal microbalance based on an admittance analysis (Dept. Biomol. Engineering, Tokyo Inst. of Tech.; JST-SENTAN) FURUSAWA, Hiroyuki; OKAHATA, Yoshio
- 4B7-30 Electron Mobility in Mercury-Mediated Duplex of Triazole-Linked DNA (TLDNA) (Tohoku Univ., Osaka Univ.) YAMAZAKI, Naomi; ISOBE, Hiroyuki; ASANO, Atsushi; FUJINO, Tomoko; NAKANISHI, Waka; SEKI, Shu
- 4B7-31 The relationship between products and distance in electron transfer oxidation (Kagawa Sch. Pharm. Sci., Tokushima Bunri Univ.) MORIKAWA, Masayuki; KOBAYASHI, Takanobu; KOMORI, Rie; MIYAZAWA, Hiroshi; KINO, Katsuhito
- 4B7-32 Electrochemical detection of nuclease activity using ferrocenyl hairpin oligonucleotide-immobilized electrode (Kyushu Inst. Tech.) FUKUTAKI, Shuji; SATO, Shinobu; TAKENAKA, Shigeori

4B7-33 Immobilization of double strand DNA on the gold electrode using naphthalene diimide derivatives having two thiol moieties at its both termini (Kyushu Inst. Tech.) YAMAMURA, Kosuke; SATO, Shinobu; TAKENAKA, Shigeori

Chair: SEKI, Shu (14:40~16:00)

- \* 14:30-14:40: interval for laptop PC connection.(4B7-35, 4B7-36, 4B7-37, 4B7-38, 4B7-39, 4B7-40, 4B7-41, 4B7-42)
- 4B7-35 Synthesis and Characteristic of Porphyrin-Ferrocene-DNA conjugate (Univ. of Hyogo) HASEGAWA, Yusuke; TAKADA, Tadao; NAKAMURA, Mitsunobu; YAMANA, Kazushige
- 4B7-36 Charge migration from photo-excited pyrene to nitrobenzene on RNA duplex (Univ. of Hyogo) SAEKI, Yusuke; NAKAMURA, Mitsunobu; TAKADA, Tadao; YAMANA, Kazushige
- 4B7-37 Formation of Charge Transfer Complexes Using DNA with Binding Cavities (Univ. of Hyogo) OTSUKA, Yumiko; TAKADA, Tadao; NAKAMURA, Mitsunobu; YAMANA, Kazushige
- 4B7-38 Classification of periodontal disease patients by FT-IR coupled with multivariate analysis (Kyushu Inst. Tech.) FUKDA, Keisuke; NAKASHIMA, Keisuke; NISHIHARA, Tatsuji; FJII, Satoshi; SATO, Shinobu; OHTSUKA, Keiich; TAKENAKA, Shigeori
- 4B7-39 Monitoring of Targeted Metabolic Reactions by Triple Resonance NMR Analysis: Catabolic Reactions of Stable Isotope-Labeled Uracil Probe (Advanced Biomedical Engineering Research Unit, Kyoto Univ.) YAMADA, Hisatsugu; MIZUSAWA, Keigo; IGARASHI, Ryuji; TOCHIO, Hidehito; SHIRAKAWA, Masahiro; TABATA, Yasuhiko; SANDO, Shinsuke; AOYAMA, Yasuhiro
- 4B7-40 Aggregates composed of DNA block copolymers bearing disulfide bond: Radiolytic activation and degradation properties (Graduate School of Engineering, Kyoto Univ.) ASADA, Takumi; TANABE, Kazuhito; NISHIMOTO, Sei-ichi
- 4B7-41 Immobilization of alkyne modified DNA by Huisgen cycloaddition and 5' priming of RNA by transcription (Univ. of Osaka; ISIR) UMEMOTO, Shiori; HAGIHARA, Masaki; NAKATANI, Kazuhiko
- **4B7-42** Development of potassium ion sensing probe for <sup>19</sup>F magnetic resonance imaging (JAIST) HAYAKAWA, Hikaru; SAKAMOTO, Takashi; FUJIMOTO, Kenzo

## Room C1

Bldg. 8 8-13

## Organic Chemistry -Reaction and Synthesis-Aliphatic and Alicyclic Compounds

#### Saturday, March 26, AM

Chair: HASHIMOTO, Takuya (9:00  $\sim$ 10:00)

- \* 8:50-9:00: interval for laptop PC connection.(1C1-01, 1C1-02, 1C1-03, 1C1-04, 1C1-05, 1C1-06)
- 1C1-01\* Silver amide-catalyzed cycloaddition of azomethine imines to terminal alkynes (Graduate School of Science, The Univ. of Tokyo; Graduate School of Pharmaceutical Sciences, The Univ. of Tokyo) IMAIZUMI, Takaki; YAMASHITA, Yasuhiro; KOBAYASHI, Shu
- 1C1-02\* Allylation of ketones using a copper(II) amide catalyst (Graduate School of Science, The Univ. of Tokyo; Graduate School of Pharmaceutical Sciences, The Univ. of Tokyo) YAMASHITA, Yasuhiro; SUZUKI, Hirotsugu; LI, Wei; KOBAYASHI, Shu
- 1C1-03<sup>#</sup> Efficient Allylation Reactions of Ketones under Microwave Heating (Graduate School of Science, The Univ. of Tokyo; Graduate School of Pharmaceutical Sciences, The Univ. of Tokyo) SATO, Takehiro; YAMASHITA, Yasuhiro; KOBAYASHI, Shu
- 1C1-04 Design of Highly Active Nucleophilic Catalysts for Biomimetic Halocyclization of Polyprenoids. (Nagoya Univ.; CREST) SAWAMURA, Yasuhiro; NAKATSUJI, Hidefumi; SAKAKURA, Akira; ISHIHARA, Kazuaki
- 1C1-05 Chiral Lewis Base-Assisted Broensted Acid (LBBA) Catalyzed Enantioselective Polyene Cyclization and Its Applications (Nagoya Univ. CREST) SAKUMA, Masayuki; SAKAKURA, Akira; ISHIHARA, Kazuaki
  1C1-06 Withdrawn

Chair: TANAKA, Hiroshi  $(10:10{\sim}11:10)$ 

- \* 10:00-10:10: interval for laptop PC connection.(1C1-08, 1C1-10, 1C1-11, 1C1-12, 1C1-13)
- 1C1-08\*† Asymmetric Inverse Electron Demand 1,3-Dipolar Cycloaddition of C,N-Cyclic Azomethine Imines (Department of Chemistry, Graduate School of Science, Kyoto Univ.) OMOTE, Masato; HASHIMOTO, Takuya; MARUOKA, Keiji
- 1C1-10 Copper-Catalyzed Asymmetric Alkynylation of C,N-Cyclic Azomethine Imines (Department of Chemistry, Graduate School of Science, Kyoto Univ.) OMOTE, Masato; HASHIMOTO, Takuya; MARUOKA, Keiji

- 1C1-11 Preparation of Indoles by Intramolcular Cyclization of o-Alkynylaniline Catalyzed by Silver Nitrate (Fac. Sci., Gakushuin Univ.) NOGUCHI, Hideyuki; MOHAMED AHMED, Mohamed Soliman; MORI, Keiji; AKIYAMA, Takahiko
- 1C1-12 Syntheses of five-membered ring compounds by using Nazarovoxyallyl cation intermediate (Kyusyu Institute of Technology) SATO, Kazuki; ESAKI, Kanako: KITAMURA, Mitsuru: OKAUCHI, Tatsuo
- 1C1-13 Acid-Promoted Cyclization of 5-Hexynyl Ketones (Saitama Univ.) MIYAMA, Chika; YAMAMOTO, Kiyomi; KINOSHITA, Hidenori; ICHIKAWA, Junji; MIURA, Katsukiyo

Chair: UENO, Masaharu (11:20~12:20)

- \* 11:10-11:20: interval for laptop PC connection.(1C1-15, 1C1-16, 1C1-17, 1C1-18, 1C1-19, 1C1-20)
- 1C1-15 General synthetic method of catechins and epicatechins (1) (Tokyo Institute of Technology) HATTORI, Fumihiko; FURUYA, Yuu; STADLBAUER, Sven; OHMORI, Ken; SUZUKI, Keisuke
- 1C1-16 General synthetic method of catechin and epicatechins (Graduate School of Science and Technology, Tokyo Institute of Technology) FURUYA, Yuu; HATTORI, Fumihiko; STADLBAUER, Sven; OHMORI, Ken; SUZUKI, Keisuke
- 1C1-17 Stereoselective synthesis of 3-O-acyl catechin derivatives by intramolecular Friedel-Crafts reaction (Tokyo Institute of Technology) TANAKA, Hiroshi; CHINO, Ayaka; TAKAHASHI, Takashi
- 1C1-18 The development of an efficient synthetic method for spiro[4.4]nonane structure by way of intramolecular [3+2] cycloaddition (Department of Applied Chemistry, Graduate School of Science and Engineering, Tokyo Institute of Technology) MASUI, Hisashi; FUSE, Shinichirou; TAKAHASHI. Takashi
- 1C1-19 Synthetic Study on Isoquinoline Skeleton via sp<sup>3</sup> C-H Functionalization and its Application to the Synthesis of Tetrahydropalmatine. (Fac. Sci., Gakushuin Univ.) KAWASAKI, Taro; MORI, Keiji; AKIYAMA, Takahiko
- 1C1-20 Expeditious Construction of Carbobicyclic Skeleton via sp3 C-H Functionalization: Hydride Shift from Aliphatic Tertiary Position in Internal Redox Process (Fac. Sci., Gakushuin Univ.) SUEOKA, Shosaku; MORI, Keiji; AKIYAMA, Takahiko

#### Saturday, March 26, PM

Chair: AKIYAMA, Takahiko (13:30∼14:30)

\* 13:20-13:30: interval for laptop PC connection.(1C1-28)

1C1-28 CSJ Award for Creative Works Designing, Synthesis, and Reaction of Unnatural Chiral Molecules (IMCE, Kyushu Univ.) TOMOOKA, Katsuhiko

Chair: KIKUCHI, Satoshi (14:40 $\sim$ 15:40)

- \* 14:30-14:40: interval for laptop PC connection.(1C1-35, 1C1-36, 1C1-37, 1C1-38, 1C1-39, 1C1-40)
- 1C1-35 Enantioselective Lewis Acid Catalyzed 5-endo-dig Carbocyclization (Nagoya Institute of Technology) SUZUKI, Satoru; REDDY, Dhande Sudhakar; TOKUNAGA, Etsuko; SIBATA, Norio
- 1C1-36 "Syn-Effect" in 1,4-Elimination Reaction of (E)-Allylic Sulfones and Subsequent [1,2]-Wittig Rearrangement (Kanazawa Univ., Graduate School of Natural Science and Technology) HORII, Susumu; ISHIMARU, Isao; UKAJI, Yutaka; INOMATA, Katsuhiko
- 1C1-37 "Syn-Effect" in 1,4-Elimination Reaction of (E)-Allylic Ester Derivatives and Subsequent [1,2]-Wittig Rearrangement (Kanazawa Univ., Graduate School of Natural Science and Technology) NAKANO, Takeo; TAKENAKA, Hiroyuki; UKAJI, Yutaka; INOMATA, Katsuhiko
- 1C1-38<sup>†</sup> Novel ketene formation by [1,5] H shift of linear dienal compounds (Kwansei Gakuin Univ.) SAKAGUCHI, Taku; OKUNO, Yudai; TSUTSUMI, Yohei; TSUCHIKAWA, Hiroshi; KATSUMURA, Shigeo
- 1C1-39 Studies on Catalytic Rearrangement of Endoperoxides with Ferrocenyl Sulfides (Kumamoto Univ.) KITOH, Fukashi; FUJISHIMA, Takashi; IMAHORI, Tatsushi; IRIE, Ryo
- 1C1-40 Synthesis of 2,4-Substituted Homoallylamines via 1,3-Rearrangement Catalyzed by Bronsted Acid (Graduate School of Science. Tohoku Univ.) SANO, Asuka; MOMIYAMA, Norie; TERADA, Masahiro

Chair: MOMIYAMA, Norie (15:50~16:40)

- \* 15:40-15:50: interval for laptop PC connection.(1C1-42, 1C1-43, 1C1-44, 1C1-45, 1C1-46)
- 1C1-42 Organocatalytic, Enantioselective Intramolecular [6 + 2]Cycloaddition Reaction for the Formation of Tricyclopentanoids (Faculty of Engineering, Tokyo Univ. of Science; Faculty of Science, Tokyo Univ. of Science, AIST) HAYASHI, Yujiro; GOTOH, Hiroaki; HONMA, Masakazu; ISHIKAWA, Hayato; KONNO, Kohzo; YUI, Hiroharu; TSUZUKI, Seiji; UCHIMARU. Tadafumi
- 1C1-43 Mechanistic Insight from a Computational Study on Organocatalytic, Enantioselective Intramolecular [6+2] Cycloaddition Reaction for the Formation of Tricyclopentanoids (AIST; Fac. Eng., Tokyo Univ. of Science) UCHIMARU, Tadafumi; TSUZUKI, Seiji; GOTOH, Hiroaki; HONMA, Masakazu; ISHIKAWA, Hayato; HAYASHI, Yujiro
- 1C1-44 Synthesis of Optical Active Bicyclic Compounds via Intramolecular [2 +2] Photocycloaddition (Graduate School of Environment and Information

- Sciences, School of Engineering, Yokohama National Univ.) HONDA, Kiyoshi; UENO, Keiko; AONO, Yohei; KONISHI, Mari; HOSHINO, Yuiiro: INOUE. Seiichi
- 1C1-45 Enantioselective 1,3-Dipolar Cycloadditions of Nitrones with Propiolamides Induced by Chiral π-Cation Catalysts and Their Applications (Nagoya Univ.; CREST) HORI, Masahiro; SAKAKURA, Akira; ISHIHARA, Kazuaki
- 1C1-46 Enantioselective Conjugate Addition Induced by Chiral n-Cation Catalysts (Nagoya Univ.; CREST) MATSUMURA, Yuki; SAKAKURA, Akira; ISHIHARA, Kazuaki

Chair: TAKIKAWA, Hiroshi (16:50~17:30)

- \* 16:40-16:50: interval for laptop PC connection.(1C1-48, 1C1-49, 1C1-50, 1C1-51)
- 1C1-48 Chiral Phosphoric Acid-Catalyzed Asymmetric C-H Functionalization: Concise Approach to Chiral Tetrahydroquinoline Skeleton(1) (Fac. Sci., Gakushuin Univ.) EHARA, Kensuke; KURIHARA, Kazuki; MORI, Keiji; AKIYAMA, Takahiko
- 1C1-49 Chiral Phosphoric Acid-Catalyzed Asymmetric C-H Functionalization: Concise Approach to Chiral Tetrahydroquinoline Skeleton (Fac. Sci., Gakushuin Univ.) KURIHARA, Kazuki; EHARA, Kensuke; MORI, Keiji; AKIYAMA, Takahiko
- 1C1-50 Construction of Unsymmetrical Binaphthyl Skeletons Based on Ferrier Type Rearrangement Catalyzed by Organic Super Base (Graduate School of Science, Tohoku Univ.) DAN, Katsunori; TERADA, Masahiro
- 1C1-51 Development of enantioselective synthesis of optically active phosphoric acid monoestersby a catalytic enantioselective protonation (Nagoya Institute of Technology) HAYASHI, Masashi; NAKAMURA, Shuichi

Chair: FUJITA, Takeshi (17:40~18:20)

- \* 17:30-17:40: interval for laptop PC connection.(1C1-53, 1C1-54, 1C1-55, 1C1-56)
- 1C1-53 Synthetic studies on anthraquinone-type natural products by exploiting 1,3-dipolar cycloaddition and benzoin cyclization (Graduate School of Science and Technology, Tokyo Institute of Technology) YOSHINAGA, Yuki; TAKIKAWA, Hiroshi; SUZUKI, Keisuke
- 1C1-54 Synthetic Study of Neocitreamicin I (Mie Univ.) KAWANISHI, Mami; HACHIYA, Iwao; SHIMIZU, Makoto
- 1C1-55 Construction of Polycyclic Carbon Frameworks on the Basis of Divinylcyclopropane Rearrangement (Hokkaido Univ.) YAMADA, Takumasa; TANINO, Keiji
- 1C1-56 Synthetic Study of Artocarpin (Mie Univ.) INAGAKI, Tatuhiko; SHIMIZU. Makoto

### Sunday, March 27, AM

Chair: AMAYA, Toru (9:00  $\sim$ 10:00)

- \* 8:50-9:00: interval for laptop PC connection.(2C1-01, 2C1-02, 2C1-03, 2C1-04, 2C1-05, 2C1-06)
- 2C1-01\* Preparation of a Polymer-incarcerated Bifunctional Catalyst for the Sequential Aerobic Oxidation-Michael Addition of 1,3-Dicarbonyl Compounds to Allylic Alcohols (Graduate School of Science, The Univ. of Tokyo; Graduate School of Pharmaceutical Sciences, The Univ. of Tokyo) YOO, Woo-jin; MIYAMURA, Hiroyuki; KOBAYASHI, Shu
- 2C1-02\* Efficient Aerobic Oxidative Synthesis of 2-Substituted Benzoxazoles Catalyzed by Polymer Incarcerated Metal Nano-clusters (Graduate School of Science, The Univ. of Tokyo; Graduate School of Pharmaceutical Sciences, The Univ. of Tokyo) YOO, Woo-jin; YUAN, Hao; MIYAMURA, Hiroyuki; KOBAYASHI, Shu
- 2C1-03 New odorless method for the Swern oxidation with Ion-supported sulfoxide (Chiba Univ.) TSUCHIYA, Daisuke; MORIYAMA, Katsuhiko; TOLIGOL, Hideo
- 2C1-04 Novel Wittig reaction with Ion-supported Triphenylphosphines (Univ. of Chiba; Science) IMURA, Yumi; SHIMOZU, Naoya; MORIYAMA, Katsuhiko; TOGO, Hideo
- 2C1-05 Mechanistic study on iron-catalyzed aerobic asymmetric coupling of2-naphthols and development of cross-coupling reaction (Kyushu Univ.) OGUMA, Takuya; EGAMI, Hiromichi; MATSUMOTO, Kenji; KUNISU, Takashi; KATSUKI, Tsutomu
- 2C1-06 A New Asymmetric Oxidation Catalysis of Iron-Salan Complexes: Aerobic Oxidative Kinetic Resolution of Racemic Alcohols. (Kyushu Univ.) KUNISU, Takashi; OGUMA, Takuya; KATSUKI, Tsutomu

Chair: MORIYAMA, Katsuhiko (10:10∼11:10)

- \* 10:00-10:10: interval for laptop PC connection.(2C1-08, 2C1-09, 2C1-10, 2C1-11, 2C1-12, 2C1-13)
- 2C1-08 Aerobic Dehydrogenative Oxidation Catalyzed by Hybrid of Poly (aniline sulfonic acid) and Metal Nanoparticles in Aqueous Solution (Osaka Univ.) AMAYA, Toru; ITO, Tsubasa; HIRAO, Toshikazu
- 2C1-09 Regioselective oxidation of unsymmetric bissulfide with resin-supported imidazole/hemin catalyst (IIS, The Univ. of Tokyo) SUGAWARA, Takahiro; AKAGAWA, Kengo; KUDO, Kazuaki
- 2C1-10 Nanoporous gold as a catalyst for the oxidation of organosilanes (Faculty of Science, Tohoku Univ.; Graduate School of Science, Tohoku Univ.; WPI-Advanced Institute for Materials Research, Tohoku Univ.;

- Institute for Materials Research, Tohoku Univ.) ISHIKAWA, Yoshifumi; HATAKEYAMA, Naoya; MENGGEN, Bateer; ASAO, Naoki; YAMAMOTO, Yoshinori; CHEN, Mingwei; ZHANG, Wei; INOUE, Akihisa
- 2C1-11 Iron-Catalyzed Hydration of Aromatic Alkynes (Graduate School of Socio-Arts and Science, The Univ. of Tokushima) KIKUCHI, Makoto; OKADA, Saki; MIYOSHI, Norikazu; WADA, Makoto
- 2C1-12 Niobium catalyzed asymmetric epoxidation of allylic alcohols using hydrogen peroxide as oxidant (Kyushu Univ.) EGAMI, Hiromichi; OGUMA, Takuya; KATSUKI, Tsutomu
- 2C1-13 Synthesis of C<sub>3</sub> symmetric amine triphenolate complexes with control of propeller-like chirality and application to asymmetric reaction (Kyushu Univ.) SHIGENAGA, Miyuki; MATSUMOTO, Kazuhiro; KATSUKI, Tsutomu

Chair: KOBAYASHI, Shoji (11:20∼12:20)

- \* 11:10-11:20: interval for laptop PC connection.(2C1-15, 2C1-17, 2C1-18, 2C1-19, 2C1-20)
- 2C1-15\* Chiral Hypervalent Iodine(III)-Catalyzed Enantioselective Kita Spirolactonization with m-CPBA (Nagoya Univ.) YASUI, Takeshi; OKAMOTO, Hiroaki; UYANIK, Muhammet; ISHIHARA, Kazuaki
- 2C1-17 Chiral (Hypo)iodite-Catalyzed Enantioselective Kita Spirolactonization with Hydrogen Peroxide (Nagoya Univ.) KANEKO, Erina; YASUI, Takeshi; UYANIK, Muhammet; ISHIHARA, Kazuaki
- 2C1-18 Alkali or Alkaline Earth Metal Bulky Borate Salt Catalysis for Baeyer-Villiger Oxidation with Hydrogen Peroxide (Nagoya Univ.) NAKASHIMA, Daisuke; UYANIK, Muhammet; ISHIHARA, Kazuaki
- 2C1-19 Diastereoselective Addition-type Ozone Oxidation: Asymmetric Synthesis of Acyloin (Inst. for Materials Chemistry and Engineering, Kyushu Univ., Interdisciplinary Graduate School of Engineering Sciences, Kyushu Univ., Department of Applied Chemistry, Tokyo Inst. of Technology) IGAWA, Kazunobu; KAWASAKI, Yuuya; NISHINO, Kosuke; KOKAN, Naoto; TOMOOKA, Katsuhiko
- 2C1-20<sup>†</sup> Synthesis and Reactions of Sila-carboxylic Acid Ester (Inst. for Materials Chemistry and Engineering, Kyushu Univ., Interdisciplinary Graduate School of Engineering Sciences, Kyushu Univ., Department of Applied Chemistry, Tokyo Inst. of Technology) IGAWA, Kazunobu; KAWASAKI, Yuuya; KOKAN, Naoto; TOMOOKA, Katsuhiko

#### Sunday, March 27, PM

Chair: IGAWA, Kazunobu (13:30~14:30)

- \* 13:20-13:30: interval for laptop PC connection.(2C1-28, 2C1-30, 2C1-31, 2C1-32, 2C1-33)
- 2C1-32, 2C1-33)

  2C1-28\*† Dehydrative Ester Condensation in Water Catalyzed by N,N-Diarylammonium Sulfate Supramolecular Complexes (Nagoya Univ.; CREST) KOSHIKARI, Yoshiki; SAKAKURA, Akira; ISHIHARA, Kazuaki
- 2C1-30 Broensted Base-Assisted Boronic Acid-Catalyzed Intramolecular Dehydrative Condensation of Dicarboxylic Acids (Nagoya Univ.; Aichi Univ. of Education; CREST) YAMASHITA, Risa; AKAKURA, Matsujiro; SAKAKURA, Akira; ISHIHARA, Kazuaki
- 2C1-31 Stereocontrolled Synthesis of Substituted Bicyclic Ethers through oxy-Favorskii Rearrangement (Osaka Prefecture Univ.; Osaka Institute of Technology, Graduate School of Science) KINOSHITA, Tatsuhiro; KOBAYASHI, Shoji; KATAYAMA, Tatsuya; WADA, Masato; MASUYAMA, Araki; RYU, Ilhyong
- 2C1-32 A C-C bond formation between alcohols and olefins by a photochemical reaction (AIST) OUCHI, Akihiko; LIU, Chuanxiang; KANEDA, Masayuki; HYUGANO, Takeshi
- 2C1-33 Formal asymmetric synthesis of (+)-PD-128907 using enantioselective aziridination as key step (Faculty of Science, Graduate School, and Institute for Advanced Study, Kyushu Univ.) UCHIDA, Tatsuya; FUKUNAGA, Yuusuke; KATSUKI, Tsutomu

Chair: SAKAKURA, Akira (14:40 $\sim$ 15:40)

- \* 14:30-14:40: interval for laptop PC connection.(2C1-35, 2C1-37, 2C1-38, 2C1-39)
- **2C1-35\***# Remarkable Effect of Bimetallic Nanocluster Catalysts for Aerobic Oxidation of Alcohols (Graduate School of Science, The Univ. of Tokyo; Graduate School of Pharmaceutical Sciences, The Univ. of Tokyo) KAIZUKA, Kosuke; MIYAMURA, Hiroyuki; KOBAYASHI, Shu
- 2C1-37# Remarkable Rate Acceleration in Gold-nanocluster-catalyzed Aerobic Oxidative Esterification Using 1,2- and 1,3-Diols and Derivatives (Graduate School of Science, The Univ. of Tokyo; Graduate School of Pharmaceutical Sciences, The Univ. of Tokyo) YASUKAWA, Tomohiro; MIYAMURA, Hirovuki: KOBAYASHI. Shu
- 2C1-38\* Development of Direct Oxidative Ethyl Ester Formation Reactions from Primary Alcohols Catalyzed by Polymer-Incarcerated Metal Nano-cluster Catalysts (Graduate School of Science, The Univ. of Tokyo; Graduate School of Pharmaceutical Sciences, The Univ. of Tokyo) FUKUSATO, Yu; KAIZUKA, Kosuke; MIYAMURA, Hiroyuki; KOBAYASHI, Shu
- 2C1-39\* Carboxylate Ligand Effects on Reactions Catalyzed by Tetranuclear Zinc Cluster (Graduate School of Engineering Science, Osaka Univ.; Graduate School of Pharmaceutical Sciences, Kyushu Univ.) HAYASHI, Yukiko; MAEGAWA, Yusuke; AGURA, Kazushi; IWASAKI, Takanori;

Chair: IWASAKI, Takanori (15:50~16:40)

- \* 15:40-15:50: interval for laptop PC connection.(2C1-42, 2C1-43, 2C1-44, 2C1-45, 2C1-46)
- 2C1-42 New Cyclization of Enals with Enones Catalyzed by NHC (Hiroshima Univ.) OKINAGA, Kosuke; TAKAHASHI, Shintaro; SHIRAISHI, Kazuhiro; KOMEYAMA, Kimihiro; TAKAKI, Ken
- 2C1-43 NHC-Catalyzed Difluoromethylation of Amides: Synthesis of Difluoromethyl Imidates (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) FUCHIBE, Kohei; AONO, Tatsuya; SASAGAWA, Hisashi; KOSEKI, Yuta; ICHIKAWA, Junji
- 2C1-44 Construction of Contiguous Quaternary Stereocenters with NHC Organocatalyst (Okayama Univ.) EMA, Tadashi; OBAYASHI, Ryoko; AKIHARA, Kumiko; KORENAGA, Toshinobu; SAKAI, Takashi
- 2C1-45 Development of Asymmetric Bis(alkoxycarbonylation) Reactions Catalyzed by Palladium(II) Chloride in the Presence of Copper(I) Triflate (Kanazawa Univ., Graduate School of Natural Science and Technology) YONEZAWA, Yasushi; ARATANI, Takahiro; UKAJI, Yutaka; INOMATA, Katsuhiko
- 2C1-46 Silver Catalyzed Incorporation of Carbon Dioxide into Alkyne Derivatives (Keio Univ.) KIKUCHI, Satoshi; SEKINE, Kohei; YAMADA, Tohru

Chair: EMA, Tadashi (16:50~17:30)

- \* 16:40-16:50: interval for laptop PC connection.(2C1-48, 2C1-49, 2C1-50, 2C1-51)
- 2C1-48 A New Cross-Coupling Route for the Synthesis of Aryl(difluoro-methyl)phosphonates (Kobe Univ.; Gunma Univ.) IWAMOTO, Rei; FUJIKAWA, Kenichi; AMII, Hideki
- 2C1-49 Photochemically Promoted Transition Metal-Free Cross-Coupling of Acylsilanes with Organoboron Compounds (Tokyo Institute of Technology) TAMASHIMA, Hiroto; ITO, Kazuta; IWASAWA, Nobuharu; KUSAMA, Hiroyuki
- 2C1-50\* Development of Polymer-Incarcerated Palladium Catalyst Containing Carbon Black and Application to Coupling Reaction (Graduate School of Science, the Univ. of Tokyo) AKIYAMA, Ryo; KOBAYASHI, Shu
- 2C1-51 Development of flow systems using polysilane-supported palladium catalysts (Graduate School of Science, The Univ. of Tokyo. Nikko Chemicals CO.,LTD.) AKATSUKA, Yuichi; NUMATA, Yoshiyuki; MURAKOSHI, Kanako; MURAMOTO, Ikuyo; OYAMADA, Hidekazu; KOBAYASHI, Shu

#### Monday, March 28, AM

Chair: ISHIKAWA, Hayato  $(9:00\sim10:00)$ 

- \* 8:50-9:00: interval for laptop PC connection.(3C1-01, 3C1-02, 3C1-03, 3C1-04, 3C1-05, 3C1-06)
- 3C1-01 Synthesis of a new ruthenium-salen complex and asymmetric epoxidation using molecular oxygen as oxidant (Faculty of Science, Graduate School, and Institute for AdvancedStudy, Kyushu Univ.) KOYA, Shota; UCHIDA, Tatsuya; KATSUKI, Tsutomu
- 3C1-02 Synthesis of a novel ruthenium-salen complex and asymmetric aerobic oxidation using the complex as catalyst under non-irradiation: kinetic resolution of secondary alcohols (Kyushu Univ.) MIZOGUCHI, Hirotaka; UCHIDA, Tatsuya; KATSUKI, Tsutomu
- **3C1-03** Preparation of chiral α-hydroxyaldehydes Synthon (Kurashiki Univ. of Science and The Arts) MANDAI, Tadakatsu; AKEHI, Masaru
- **3C1-04** Kinetic Resolution of Racemic 2-Hydroxylactones by the Asymmetric Esterification Using MA-BTM Combined System (Tokyo Univ. of Science) NAKATA, Kenya; GOTOH, Kouya; SEKIGUCHI, Akihiro; ONO, Keisuke; SHIINA, Isamu
- 3C1-05 Kinetic Resolution of Racemic 2-Hydroxy Weinreb Amides by the Asymmetric Esterification Using MA-BTM Combined System (Tokyo Univ. of Science) NAKATA, Kenya; SEKIGUCHI, Akihiro; KAWANISHI, Tatsuya; SHIINA, Isamu
- 3C1-06 Kinetic Resolution of a Variety of Racemic Symmetric 1,2-Diols by the Asymmetric Esterification Using MA-BTM Combined System (Tokyo Univ. of Science) NAKATA, Kenya; KATAOKA, Jun; SHIINA, Isamu

Chair: UCHIDA, Tatsuya  $(10:10{\sim}11:10)$ 

- \* 10:00-10:10: interval for laptop PC connection.(3C1-08, 3C1-09, 3C1-10, 3C1-11, 3C1-12, 3C1-13)
- 3C1-08 The role of triple bond for diastereomeric resolution of optically active propagyl alcohol derivatives (Grad. Sch. Sci., Eng., Yamagata Univ.) SAGAWA, Nanae; KUSAKARI, Miho; MURAKAMI, Satoshi; MATSUMOTO, Takatoshi; WATANABE, Masataka; SATO, Ei-ichi; KIJIMA, Tatsuro
- **3C1-09** Kinetic Resolution of *dl*-1,2-Bis(1-hydroxyalkyl)benzenes Using (+)-Benzotetramisole as a Catalyst (Graduate School of Engineering, Yokohama National Univ.) HIWATASHI, Yuya; ANEZAKI, Satoshi; HOSODA, Naoya; ASAMI, Masatoshi
- **3C1-10** Kinetic Resolution of β-Hydroxy Selenides by Catalytic Asymmetric Acylation (Coll. Sci., Ibaraki Univ.) KOIKE, Kenji; ORIYAMA, Takeshi
- **3C1-11** Solvent Effects on the Catalytic Asymmetric Esterification Using MA-BTM Combined System in the Kinetic Resolution of Racemic Carboxylic

- Acids (Tokyo Univ. of Science) ONO, Keisuke; NAKATA, Kenya; SHIINA, Isamu
- 3C1-12 Rationalization of the Catalytic Asymmetric Esterification Using MA-BTM Combined System in the Kinetic Resolution of Racemic Secondary Benzylic Alcohols (Tokyo Univ. of Science) NAKATA, Kenya; ONO, Keisuke; FUTAMI, Kengo; SHIINA, Isamu
- 3C1-13 Rationalization of the Catalytic Asymmetric Esterification Using MA-BTM Combined System in the Kinetic Resolution of Racemic 1-Heteroarylcarbinols (Tokyo Univ. of Science) ONO, Keisuke; NAKATA, Kenya; KITAJIMA, Hirotaka; SHIINA, Isamu

Chair: NAKATA, Kenya (11:20~12:10)

- \* 11:10-11:20: interval for laptop PC connection.(3C1-15, 3C1-16, 3C1-17, 3C1-18, 3C1-19)
- **3C1–15** (Hypo)iodite-Catalyzed α-Oxyacylation of Carbonyl Compounds with TBHP (Nagoya Univ.) SUZUKI, Daisuke; UYANIK, Muhammet; ISHIHARA, Kazuaki
- 3C1-16 Chiral (Hypo)iodite Catalyzed Enantioselective Intramolecular Oxidative Amination to 2-Acylindoline Derivatives (Nagoya Univ.) OKAMOTO, Hiroaki; UYANIK, Muhammet; ISHIHARA, Kazuaki
- 3C1-17 Chiral (Hypo)iodite Catalyzed Enantioselective Intramolecular Oxidative Etherification to 2-Acylchroman Derivatives (Nagoya Univ.) HAYASHI, Hiroki; UYANIK, Muhammet; ISHIHARA, Kazuaki
- 3C1-18 Highlly Enantioselective Synthesis of the Intermediate of Tamiflu (Graduate School of Science, Kobe Univ.) TANAKA, Takanori; TAN, Oitao: HAYASHI, Masahiko
- **3C1–19** Asymmetric Epoxidation of α-Substituted Acroleins Catalyzed by Diphenylprolinol Silyl Ether (Faculty of Engineering, Tokyo Univ. of Science) BONDZIC, Bojan; URUSHIMA, Tatsuya; ISHIKAWA, Hayato; HAYASHI, Yujiro

#### Monday, March 28, PM

Chair: YAJIMA, Tomoko (14:30~15:30)

- \* 14:20-14:30: interval for laptop PC connection.(3C1-34, 3C1-35, 3C1-36, 3C1-37, 3C1-39)
- **3C1-34** Double Addition of Methanol to Terminal AlkynesCatalyzed by Cobalt Complexes (Department of Chemistry and Research Center for Materials Science, Nagoya Univ.) USHIMARU, Richiro; TACHINAMI, Tadashi; NOYORI, Ryoji; NAKA, Hiroshi
- 3C1-35 Ring Expansion Metathesis Oligomerization of Medium Sized Nitrones (Graduate School of Engineering Science, Osaka Univ) IMADA, Yasushi; NISHIDA, Yuri; OKITA, Chiaki; KISHIMOTO, Masayuki; SUGANO, Yoshinori; NOTA, Takeshi
- 3C1-36 Synthesis of dialkyl carbonates from 1 atm CO<sub>2</sub> and N,N-dimethyl-formamide (DMF) dialkyl acetals (Grad.Sch. Sci., Nagoya Univ.) YAMAZAKI, Yusuke; DU, Ya; NOYORI, Ryoji; SAITO, Susumu
- 3C1-37\* Tail-to-Tail Dimerization of Methyl Methacrylate Catalyzed by N-Heterocyclic Carbene (Nagoya Institute of Technology) MATSUOKA, Shin-ichi; OTA, Yoshiya; WASHIO, Atsushi; TAKAGI, Koji; SUZUKI,
- 3C1-39 CO<sub>2</sub> Fixation by N-heterocyclic Carbenes: Carboxylation of N-Substituted Aziridines. (Tokyo Institute of Technology, Graduate School of Science and Engineering) UENO, Atsushi; KAYAKI, Yoshihito; IKARIYA, Takao

Chair: OHMORI, Ken (15:40∼16:40)

- \* 15:30-15:40: interval for laptop PC connection.(3C1-41, 3C1-44, 3C1-45, 3C1-46)
- 3C1-41 Young Scholar Lectures of CSJ use of diazocarbonyl compounds in acid catalysis (Grad. Sch. Sci., Kyoto Univ.) HASHIMOTO, Takuva
- 3C1-44 Application of molecular sieves 5A as an acidic reagent (Kwansei Gakuin Univ.; School of Science and Technology) HIROKANE, Tsukasa; ASAKURA, Noriaki; HOSHIDA, Hayato; YAMADA, Hidetoshi
- 3C1-45 Esterification reaction between acetic acid and ethanol utilizing polymer-immobilized catalysts in water (Graduate School of Science, The Univ. of Tokyo; SHOWA DENKO K.K.) IGARASHI, Takeshi; YAGYU, Daisuke; OKUMURA, Yoshikuni; NAKAJO, Tetsuo; MORI, Yuichiro; KOBAYASHI, Shu
- 3C1-46 Etherification of alcohols in ionic liquids (Graduated School of Engineering, Nagoya Institute of Technology) TAKAHASHI, Fusako; HIRASHITA, Tsunehisa; ARAKI, Shuki

Chair: IMADA, Yasushi (16:50 $\sim$ 17:50)

- \* 16:40-16:50: interval for laptop PC connection.(3C1-48, 3C1-49, 3C1-50, 3C1-51, 3C1-52, 3C1-53)
- 3C1-48 Radical reduction of N-alkyl-2-(phenylseleno)ethanesulfonamide (Dep. of Chemistry, Fac. of Science, Kanagawa Univ.) UZAWA, Yoshinori; KIHARA, Nobuhiro
- 3C1-49 Synthesis and Conformational Study of Fluorinated β-Peptide (Ochanomizu Univ.) SEKINE, Izumi; YAJIMA, Tomoko
- 3C1-50 stereoselective synthesis of enantiomerically pure double-stranded cyclophanes (Graduate School of Science and Technology, Tokyo Institute of Technology) HOMMA, Sunao; TAKIGUCHI, Hiromu; MORI, Keiji;

- OHMORI, Ken; SUZUKI, Keisuke
- 3C1-51 Stereocontrol in the radical reaction of β-trichlorosiloxy-α-methylene esters (Ochanomizu Univ.) MANABE, Naoko: YAJIMA, Tomoko
- 3C1-52\* Indium(I)-Catalyzed Alkyl-Allyl Coupling between Ethers and Allyl-boranes (Graduate School of Science, The Univ. of Tokyo; Graduate School of Pharmaceutical Sciences, The Univ. of Tokyo) DAO, Thanh Hai; SCHNEIDER, Uwe; KOBAYASHI, Shu
- 3C1-53<sup>#</sup> Nickel-Catalyzed Regioselective Allyl-Allyl Cross-Coupling between Alcohols and Boronates (Graduate School of Science, The Univ. of Tokyo; Graduate School of Pharmaceutical Sciences, The Univ. of Tokyo) JIMENEZ-AQUINO, Agustin; FERRER FLEGEAU, Emmanuel; SCHNEIDER, Uwe; KOBAYASHI, Shu

## Tuesday, March 29, AM

Chair: HASHIMOTO, Takuya  $(9:10 \sim 9:50)$ 

- \* 9:00-9:10: interval for laptop PC connection.(4C1-02, 4C1-03, 4C1-04, 4C1-05)
- 4C1-02 Benzylic Amidation Using Chloramine-T/I<sub>2</sub> System (Osaka Univ.) MINAKATA, Satoshi; YANO, Kazuki; HAYAKAWA, Junpei
- **4C1-03** Hypervalent Iodine-Catalyzed α-Amidation of Ethers Using Chloramine Salts (Osaka Univ.) MINAKATA, Satoshi; HAYAKAWA, Junpei
- **4C1-04** Design of Chiral Ammonium 1,1'-Binaphthyl-2,2'-disulfonate Catalysts for the Enantioselective Aza-Friedel-Crafts Reaction (Nagoya Univ., Aichi Univ. of Education, CREST) SUGIURA, Yoshihiro; HATANO, Manabu; AKAKURA, Matsujiro; ISHIHARA, Kazuaki
- **4C1-05** Catalytic Enantioselective Aminal Synthesis Using Chiral Ammonium 1,1'-Binaphthyl-2,2'-disulfonates (Nagoya Univ., CREST) OZAKI, Takuya; SUGIURA, Yoshihiro; HATANO, Manabu; ISHIHARA, Kazuaki

Chair: HATANO, Manabu (10:00~11:00)

- \* 9:50-10:00: interval for laptop PC connection.(4C1-07, 4C1-08, 4C1-09, 4C1-10, 4C1-11, 4C1-12)
- 4C1-07 Development of Practical Synthetic Method for N-Boc α-Ketimino Esters and its Application for Asymmetric Trisubstituted Aziridination (Department of Chemistry, Graduate School of Science, Kyoto Univ.) YAMAMOTO, Kumiko; HASHIMOTO, Takuya; MARUOKA, Keiji
- 4C1-08 Asymmetric Synthesis of Trisubstituted Aziridines Using Chiral Bronsted Acid Catalyst (Department of Chemistry, Graduate school of Science, Kyoto Univ.) NAKATSU, Hiroki; HASHIMOTO, Takuya; MARUOKA, Keiji
- 4C1-09 Chiral Aluminum Lewis Acid-Catalyzed Stereoselective Ring Expansion with α-Alkyl-diazoacetates (Department of Chemistry, Graduate School of Science, Kyoto Univ.) NAGANAWA, Yuki; HASHIMOTO, Takuya; MARUOKA, Keiji
- **4C1-10** Umpolung *N*-Alkylation of α-Imino Ester Followed by Nucleophilic Addition Reaction. (Mie Univ.) MIZOTA, Isao; SANO, Takanori; SHIMIZU, Makoto
- **4C1–11** Umpolung Reaction to α-Iminothioester (Mie Univ.) MIZOTA, Isao; UEDA, Chihiro; SHIMIZU, Makoto
- **4C1-12** Claisen Rearrangement of α-Imino Allyl Esters Using Umpolung Reaction (Mie Univ.) MIZOTA, Isao; SHIMIZU, Makoto

Chair: MORI, Keiji (11:10∼12:10)

- \* 11:00-11:10: interval for laptop PC connection.(4Cl-14, 4Cl-15, 4Cl-16, 4Cl-17, 4Cl-18, 4Cl-19)
- **4C1-14** Studies on Catalytic Asymmetric Nitrene-Transfer Reactions with Chiral Metal-Biisoquinoline Complexes (Kumamoto Univ.; Kyushu Univ.) UMEDA, Shinji; TOKUSHIMA, Hiroki; OZAKI, Kyohei; IMAHORI, Tatsushi; IGAWA, Kazunobu; TOMOOKA, Katsuhiko; IRIE, Ryo
- 4C1-15 Pt-Catalyzed Intramolecular Direct Amination of Allylic Alcohols-Giving N-Heterocyclic Compounds (Graduate School of Engineering Science, Osaka Univ.) NAKAHARA, Yasuhito; GERMAN, Nicolas; FRENKEL, Nataliya; MIYAMOTO, Yoshiki; OHSHIMA, Takashi; MASHIMA, Kazushi
- **4C1–16** Synthesis of 2,2-Disubstituted Indoline-3-ones by Cyclization of  $\alpha$ -Imino Esters via Aza-Brook Rearrangement (Mie Univ.) TAKAO, Yuki; SHIMIZU, Makoto
- **4C1-17** *N*-Alkylation of  $\beta$ ,  $\gamma$ -Alkynyl- $\alpha$ -iminoester Followed by Regioselective Electrophilic Addition with Various Electrophiles (Mie Univ.) KAMIMURA, Satoshi; SHIMIZU, Makoto
- 4C1-18 Sodium Methoxide Catalyzed Ester-amide Exchange Reaction and Application to Peptide Bond Formation Reaction (Graduate School of Engineering Science, Osaka Univ.) AGURA, Kazushi; HAYASHI, Yukiko; FUJII, Yuka; OHSHIMA, Takashi; MASHIMA, Kazushi
- 4C1-19 Intramolecular Bromoamidation of N-alkenylsulfonamide via Oxidative Umpolung Reaction of Inorganic Bromides. (Chiba Univ.) IZUMISAWA, Yuhta; MORIYAMA, Katsuhiko; TOGO, Hideo

## Room C2

Bldg. 8 8-14

## Organic Chemistry -Reaction and Synthesis-Aliphatic and Alicyclic Compounds

### Saturday, March 26, AM

## Aldol Reaction

Chair: MASE, Nobuyuki  $(9:00\sim10:00)$ 

- \* 8:50-9:00: interval for laptop PC connection.(1C2-01, 1C2-02, 1C2-03, 1C2-04, 1C2-05, 1C2-06)
- 1C2-01 Polymeric Ethyl Glyoxylate in an Asymmetric Aldol Reaction Catalyzed by Diarylprolinol (Faculty of Engineering, Tokyo Univ. of Science) HAYASHI, Yujiro; YASUI, Yusuke; URUSHIMA, Tatsuya; ISHIKAWA, Hayato
- 162-02 Diarylprolinol in the Direct Asymmetric Aldol Reaction of Trifluor-oacetaldehyde Ethyl Hemiacetal with Aldehyde (Faculty of Engineering, Tokyo Univ. of Science) HAYASHI, Yujiro; YASUI, Yusuke; KAWAMURA, Tsuyoshi; KOJIMA, Masahiro; ISHIKAWA, Hayato
- 1C2-03 One-pot Synthesis of Chiral Epoxide via the Asymmetric Aldol Reaction of Chloroacetaldehyde Catalyzed by Diarylprolinol (Faculty of Engineering, Tokyo Univ. of Science) HAYASHI, Yujiro; YASUI, Yusuke; KAWAMURA, Tsuyoshi; KOJIMA, Masahiro; ISHIKAWA, Hayato
- 1C2-04\* Development of catalytic asymmetric Mannich reactions using a fluorenylidene moiety as protecting and activating group. (Graduate School of Science, The Univ. of Tokyo; Graduate School of Pharmaceutical Sciences, The Univ. of Tokyo) MATSUMOTO, Masatoshi; YAMASHITA, Yasuhiro; KOBAYASHI, Shu
- 1C2-05<sup>#</sup> Catalytic direct aldol reactions of α-aminoester derivatives bearing fluorenylidene group (Graduate School of Science, The Univ. of Tokyo;) RAHMANI, Raphael; YAMASHITA, Yasuhiro; KOBAYASHI, Shu
- 1C2-06 Asymmetric aldol reaction of trihalomethyl ketones using organocatalysts having heteroarenesulfonyl groups (Nagoya Institute of Technology) TAMURA, Ryota; HARA, Noriyuki; NAKAMURA, Shuichi

Chair: HACHIYA, Iwao (10:10 $\sim$ 11:10)

- \* 10:00-10:10: interval for laptop PC connection.(1C2-08, 1C2-09, 1C2-10, 1C2-11, 1C2-12, 1C2-13)
- 1C2-08 Synthesis of OFF-ON Fluorogenic Sensors to Detect Chemical Bond Formation and Its Application for Catalyst Screening (Shizuoka Univ.) KOYAMA, Naoki; MASE, Nobuyuki; TAKABE, Kunihiko
- 1C2-09 Synthesis of Chiral 2-Hydroxymetylcycloalkanones by Use of Organocatalyst (Shizuoka Univ.) WADA, Yoshifumi; MASE, Nobuyuki; TAKABE, Kunihiko
- 1C2-10<sup>†</sup> Design of New Organocatalysts with a Dihydroanthracene Framework for Asymmetric Conjugate Additions (Department of Chemistry, Graduate School of Science, Kyoto Univ.) ARIMITSU, Satoru; MOTEKI, Shin; MARUOKA, Keiji
- 1C2-11 Excellent Switch of Product Selectivity in Asymmetric Direct Aldol Reaction with Chiral cis-Diamine Based Catalyst with or without Achiral Additive (Department of Chemistry, Graduate School of Science, Kyoto Univ.) MOTEKI, Shin; MARUOKA, Keiji
- 1C2-12\* Facile and Highly Enantioselective Synthesis of (+) and (-)-Fluvastatin and Their Analogues (Graduate School of Science, Kobe Univ.)
  ZACHARIA, James Tano; TANAKA, Takanori; HAYASHI, Masahiko
- 162-13 Catalytic ability and enantioselectivity of the novel homoproline derivatives bearing a chiral hydroxyl group in the asymmetric aldol reactions (Department of Chemistry, Graduate School of Science, Hiroshima Univ.) HIRAGA, Yoshikazu; KUNISHI, Tsuyoki; TRIANA, Widianti; ABE, Manabu

Chair: HAYASHI, Masahiko (11:20 $\sim$ 12:20)

- \* 11:10-11:20: interval for laptop PC connection.(1C2-15, 1C2-16, 1C2-17, 1C2-18, 1C2-20)
- **1C2–15** Prins-type Reaction of γ-Alkoxy Alkynyl Ketone Derivatives Promoted by Titanium Tetraiodide (Mie Univ.) ITO, Shingo; HACHIYA, Iwao; SHIMIZU, Makoto
- 1C2-16 Regioselective Ring-Opening Reaction of Azetidin-3-one Oxime and O-Alkyl Oxime Promoted by Titanium Tetraiodide (Mie Univ.) FUKUDA, Daisuke; ARIGA, Shizuka; HACHIYA, Iwao; SHIMIZU, Makoto
- 162-17 Aldol Reaction via Regioselective Reductive Ring-Opening of Azetidin-3-one Promoted by Titanium(IV) Halide Reagents (Mie Univ.) FUKUDA, Daisuke; HACHIYA, Iwao; SHIMIZU, Makoto
- 1C2-18\* Ordered Mesoporous Aluminosilicate-catalyzed Carbon-Carbon Bond-forming Reactions Using Organosilicon Reagents (Graduate School of Engineering, Yokohama National Univ.) ITO, Suguru; KUBOTA, Yoshihiro; ASAMI, Masatoshi
- 102-20 Reactions of Ketene Silyl Acetals with Aldehydes and Acetals
  Catalyzed by Ordered Mesoporous Aluminosilicate (Graduate School of

Enginnering, Yokohama National Univ.) ITO, Suguru; TANUMA, Kenji; KUBOTA, Yoshihiro: ASAMI, Masatoshi

#### Saturday, March 26, PM

Chair: NAKAO, Yoshiaki (13:30~14:30)

- \* 13:20-13:30: interval for laptop PC connection.(1C2-28, 1C2-31, 1C2-32, 1C2-33)
- 1C2-28 Young Scholar Lectures of CSJ Development of synthetic reactions by efficient activation of carbon-hydrogen bonds (The Univ. of Tokyo) YAMASHITA, Yasuhiro
- 162-31 Development of New Aminohydroxyacetone Synthons: Application to Natural Product Synthesis (Kochi Univ., Faculty of Science) WATANABE, Riki; KOMATSU, Yoshiyuki; IKISHIMA, Hideaki; KOTSUKI, Hiyoshizo

#### micheal reaction

- 1C2-32 Cu-catalyzed asymmetric conjugate addition by using azolium salt derived from natural α-aminoester (Kansai Univ.) YOSHIMURA, Misato; SHIBATA, Naoatsu; SAKAGUCHI, Satoshi
- 1C2-33 Synthesis of a new hydroxyamide-functionalized azolium salt: Reversal of stereoselectivity in Cu-catalyzed conjugate addition reaction (Kansai Univ.) SHIBATA, Naoatsu; SAKAGUCHI, Satoshi

Chair: 00I, Takashi (14:40~15:40)

- \* 14:30-14:40: interval for laptop PC connection.(1C2-35, 1C2-37, 1C2-38, 1C2-39, 1C2-40)
- 1C2-35\* Organocatalytic Asymmetric Oxy-Michael Addition Reaction to gamma-Hydroxy-alpha,beta-Unsaturated Ketones via a Formation of Hemiacetals (Kyoto Univ.) ASANO, Keisuke; MATSUBARA, Seijiro
- 102-37 Organocatalytic Asymmetric Oxy-Michael Addition Reaction to gamma-Hydroxy-alpha, beta-Unsaturated Thioesters (Kyoto Univ.)
  OKAMURA, Takaaki; ASANO, Keisuke; MATSUBARA, Seijiro
- 1C2-38 Organocatalytic Asymmetric Aza-Michael Addition Reaction to gamma-Hydroxy-alpha,beta-Unsaturated Ketones (Kyoto Univ.) FUKATA, Yukihiro; ASANO, Keisuke; MATSUBARA, Seijiro
- 1C2-39 Convenient synthesis of optically active fluorine-containing sugar derivatives bearing a tetrafluoroethylene unit (Kyoto Institute of Technology, Department of Chemistry and Materials Technology) HOSHINO, Tomoko; TAKANO, Synya; KONNO, Tsutomu; ISHIHARA, Takashi
- 1C2-40 Synthesis of optically active fluorine-containing molecules via highly stereoseletive conjugate addition using organocatalyst (Kyoto Institute of Technology, Department of Chemistry and Materials Technology) IWASA, Tomoya; KONNO, Tsutomu; ISHIHARA, Takashi

Chair: INOKUCHI, Tsutomu (15:50 $\sim$ 16:50)

- \* 15:40-15:50: interval for laptop PC connection.(1C2-42, 1C2-43, 1C2-44, 1C2-45, 1C2-46, 1C2-47)
- 1C2-42<sup>†</sup> Development of Asymmetric Conjugate Addition Reaction with Methylenemalonate Catalyzed by a Biphenyl-based Amino Alcohol (Graduate School of Science, Kyoto Univ.) SHIROZU, Fumitaka; KANO, Taichi; MARUOKA, Keiji
- 1C2-43 Syn-selective Asymmetric Aldol Reaction of Glyoxylate or Glyox-amide Catalyzed by an Axially Chiral Amino Sulfonamide (Kyoto Univ. Graduate School of Science) SAKAMOTO, Ryu; KANO, Taichi; MARUOKA, Keiji
- 1C2-44\* Asymmetric Amination of Nitroolefins Catalyzed by Chiral Bifunctional Ammonium Salt in Neutral Water-Rich Reaction System (Department of Chemistry, Graduate School of Science, Kyoto Univ.) WANG, Lijia; SHIRAKAWA, Seiji; MARUOKA, Keiji
- **1C2-45** P-Spiro Chiral Triaminoiminophosphorane: Structural Analyses and Application to Catalytic Asymmetric Reactions (Nagoya Univ.) NAKAMURA, Shinji; URAGUCHI, Daisuke; OOI, Takashi
- 1C2-46 Highly Stereoselective Conjugate Addition to Cyanoacetylene (Nagoya Univ.) SUGIYAMA, Atsushi; UEKI, Yusuke; URAGUCHI, Daisuke: OOI. Takashi
- 1C2-47 Precise structural control of the supramolecularly assembled chiral aminophosphonium salts (Nagoya Univ.) UEKI, Yusuke; URAGUCHI, Daisuke; OOI, Takashi

Chair: SHIRAKAWA, Seiji (17:00 $\sim$ 17:40)

- \* 16:50-17:00: interval for laptop PC connection.(1C2-49, 1C2-50, 1C2-51, 1C2-52)
- 1C2-49 Diastereoselective Michael Addition of Mg Amides to Cinnamoyl-TEMPOs (Toyama National College of Technology, Okayama Univ. of Science, Okayama Univ.) MA, Riken; BAI, Shinbu; RIKU, Bunketsu; KAWAFUCHI, Hiroyuki; NOKAMI, Junzou; INOKUCHI, Tsutomu
- 1C2-50 N-Alkylaniline synthesis by Buchwald-Hartwig reaction and application to indole-quinoline structure (Okayama Univ.; Toyama National College of Technology) BAI, Shinbu; O, Riki; RIKU, Bunketsu; KAWAFUCHI, Hiroyuki; INOKUCHI, Tsutomu
- 1C2-51 Solvent-free Micorowave-Assisted Multicomponent Reactions of 2-Chloroketones and Enamines (Okayama Univ.; Toyama National College of Technology) MA, Riken; WEI, Peng; RIKU, Bunketsu; KAWAFUCHI, Hiroyuki; INOKUCHI, Tsutomu

1C2-52 Reactions using N-arylcyclohexanediamine as catalyst (Hiroshima Univ.) NOMURA, Takuto; KOJIMA, Satoshi; YAMAMOTO, Yohsuke

Chair: KANO, Taichi (17:50~18:30)

- \* 17:40-17:50: interval for laptop PC connection.(1C2-54, 1C2-55, 1C2-56, 1C2-57)
- 102-54 Synthesis of 3-Amino-2-Pyridone Derivatives Using Conjugate Addition of 2-Amino Malonic Ester Derivatives to Alkynyl Imines (Mie Univ.) HACHIYA, Iwao; NODA, Shogo; SHIMIZU, Makoto
- 1C2-55 Synthetic Study of Muscopyridine Analogue via 2-Pyridone Synthesis by Conjugate Addition of β-Keto Ester to Alkynyl Imine as a Key Reaction (Mie Univ.) MATSUMOTO, Hisae; HACHIYA, Iwao; SHIMIZU, Makoto
- 1C2-56 Asymmetric, One-pot Four Components Coupling Reaction for the Synthesis of Substituted Tetrahydropyran Catalyzed by Diphenylprolinol Silyl Ether (Faculty of Engineering, Tokyo Univ. of Science) ISHIKAWA, Hayato; SAWANO, Satoshi; YASUI, Yusuke; SHIBATA, Yusuke; HAYASHI, Yujiro
- 162-57 Enantio- and Diastereoselective Synthesis of Piperidines by Coupling of Four Components in a One-PotSequence Involving Diphenylprolinol Silyl Ether Mediated Michael Reaction (Faculty of Engineering, Tokyo Univ. of Science) URUSHIMA, Tatsuya; SAKAMOTO, Daisuke; ISHIKAWA, Hayato; HAYASHI, Yujiro

### Sunday, March 27, AM

Chair: FURUNO, Hiroshi (9:00 ∼10:00)

- \* 8:50-9:00: interval for laptop PC connection.(2C2-01, 2C2-02, 2C2-03, 2C2-04, 2C2-06)
- 2C2-01<sup>#</sup> Development of Synthetic Reactions Using a High functionalized Barium Catalyst (Graduate School of Science, The Univ. of Tokyo; Graduate School of Pharmaceutical Sciences, The Univ. of Tokyo) TSUBOGO, Tetsu; KANO, Yuichiro; YAMASHITA, Yasuhiro; KOBAYASHI, Shu
- 2C2-02\* Development of Asymmetric Mannich Reactions Catalyzed by a Chiral Cu(I) Amide Complex (Graduate School of Science, The Univ. of Tokyo; Graduate School of Pharmaceutical Sciences, The Univ. of Tokyo) YAMASHITA, Yasuhiro; YOSHIMOTO, Susumu: KOBAYASHI, Shu
- 2C2-03\* Development of Highly Efficient Mannich Reactions of Sulfonylimidates Using Organosuperbases (Graduate School of Science, the Univ. of Tokyo; Graduate School of Pharmaceutical Sciences, the Univ. of Tokyo) NAKANO, Junya; YAMASHITA, Yasuhiro; KOBAYASHI, Shu
- 2C2-04\* Catalytic Asymmetric Acylation of Racemic or Meso Compounds
  Using Removable Directing Group, "Pyroc" (Nagoya Univ.; CREST)
  UMEMURA. Shuhei: SAKAKURA. Akira: ISHIHARA. Kazuaki
- 2C2-06 Enantioselective Diels-Alder Reaction of α-(Carbamoylthio)acroleins Catalyzed by Chiral Organoammonium Salts (Nagoya Univ.; CREST) YAMADA, Hiroki; SAKAKURA, Akira; ISHIHARA, Kazuaki

Chair: UYANIK, Muhammet (10:10~11:10)

- \* 10:00-10:10: interval for laptop PC connection.(2C2-08, 2C2-10, 2C2-12, 2C2-13)
- 2C2-08\* Novel Betaine-type Chiral Metal Complex Catalyst-Ionic Liquid System for Environmentally-Benign Asymmetric Catalysis (Graduate School of Science, Kyushu Univ.; Institute for Materials Chemistry and Engineering (IMCE), Kyushu Univ.) FUJII, Saori; ONITSUKA, Satoaki; FURUNO, Hiroshi; INANAGA, Junii
- 2C2-10\*\* Catalytic silicon-mediated direct-type Mannich reactions of unactivated amides (Graduate School of Science, The Univ. of Tokyo; Graduate School of Pharmaceutical Sciences, The Univ. of Tokyo) YAMAGUCHI, Miyuki; KIYOHARA, Hiroshi; KOBAYASHI, Shu
- 2C2-12 Selectivities in Chiral Lewis-Acid Catalyzed Diels-Alder Reactions of Acetylenic Ketones (Aichi Univ. of Education) AKAKURA, Matsujiro
- 2C2-13 Addition of Phosphonate Diesters to Imines Using Dimethyl Sulfoxide and Molecular Sieves 4A (Coll. Sci., Ibaraki Univ.) KOJIMA, Yosuke; KOIKE, Kenji; ORIYAMA, Takeshi

Chair: YAMASHITA, Yasuhiro (11:20~12:20)

- \* 11:10-11:20: interval for laptop PC connection.(2C2-15, 2C2-16, 2C2-17, 2C2-19, 2C2-20)
- 2C2-15 Aza Diels-Alder Reaction Catalyzed by Bronsted acids (Osaka City Univ.; Tosoh Finechem Coporation) HATANAKA, Yasuo; ARIMA, Hiroko; MINAMI, Tatsuya; KAJI, Eiichi
- 2C2-16 Quantum Chemical Study of Diels-Alder Reactions Catalyzed by the Lewis Acid Activated Oxazaborolidines (Hoshi Univ.) SAKATA, Ken
- 2C2-17\* Chiral Group I or II Metal Binaphtholate Salts for Catalytic Enantioselective Direct Mannich-type Reaction of Aldimines and Direct Phosphonylation of Ketones (Nagoya Univ., CREST) HORIBE, Takahiro; HATANO, Manabu; ISHIHARA, Kazuaki
- 2C2-19 Unusual Endo- and Enantioselective Diels-Alder Reaction of alpha-Substituted Acroleins Induced by Chiral Supramolecular Catalysts (Nagoya Univ., Aichi Univ. of Education, CREST) USAMI, Ryota; MIZUNO, Tomokazu; HATANO, Manabu; AKAKURA, Matsujiro; ISHIHARA, Kazuaki
- **2C2-20** Design of Chiral Supramolecular Catalysts for the Enantio- and Endo/Exo-Selective Diels-Alder Reaction (Nagoya Univ., CREST)

IZUMISEKI, Atsuto; HATANO, Manabu; ISHIHARA, Kazuaki

### Sunday, March 27, PM

Chair: SUZUKI, Keisuke (13:30~14:20)

\* 13:20-13:30: interval for laptop PC connection.(2C2-28)

2C2-28<sup>#</sup> Special Lecture Recent Advances in the Chemistry of Masked o-Benzoquinones. (Dept. Chem, National Tsing Hua Univ., Taiwan) Chun-Chen Liao

Chair: MATSUNAGA, Shigeki (14:30~15:20)

- \* 14:20-14:30: interval for laptop PC connection.(2C2-34, 2C2-35, 2C2-36, 2C2-37, 2C2-38)
- 2C2-34 Chiral Bis-Phosphoric Acid Catalyzed Enantioselective Diels-Alder Reaction of Acrolein with Amidodiene (Graduate School of Science, Tohoku Univ.) KONNO, Tohru; MOMIYAMA, Norie; FURIYA, Yuichi; IWAMOTO, Takeaki; TERADA, Masahiro
- 2C2-35 Synthesis of novel donor/acceptor conjugated dienes and their reactivities (Department of Chemistry, Tokyo Institute of Technology) AOKI, Yoshifumi; MOCHIZUKI, Yuta; YOSHINARI, Tomohiro; OHMORI, Ken; SUZUKI, Keisuke
- **2C2-36** Enantioselective 1,4-Reduction of Benzopyrylium Ion as aReactive Intermediate Catalyzed by a Chiral Bronsted Acid (Graduate School of Science. Tohoku Univ.) YAMANAKA, Takuto; TODA, Yasunori; TERADA, Masahiro
- 2C2-37 Enantioselective Reduction of Oxocarbenium Ylide by a Metal-complex/Chiral Bronsted Acid Binary System (Graduate School of Science. Tohoku Univ.) TODA, Yasunori; TERADA, Masahiro
- 2C2-38 Isotope Effect on Hydrogen Bonding Catalyzed Reaction (Osaka City Univ.) HATANAKA, Yasuo; SEKIKAWA, Tohru; HIROSE, Daichi; MINAMI, Tatsuya

Chair: ARAI, Noriyoshi (15:30~16:20)

- \* 15:20-15:30: interval for laptop PC connection.(2C2-40, 2C2-41, 2C2-42, 2C2-43, 2C2-44)
- **2C2-40** Development of Direct Catalytic Asymmetric Mannich-type Reactions of α-Isothiocyanato Esters with Ketimines (Graduate School of Pharmaceutical Sciences, the Univ. of Tokyo) YOSHINO, Tatsuhiko; LU, Gang; MORIMOTO, Hiroyuki; MATSUNAGA, Shigeki; KANAI, Motomu; SHIBASAKI, Masakatsu
- 2C2-41 Regioselective Hydrosilylation of Asymmetric Alkyne (Interdisciplinary Graduate School of Engineering Sciences, Inst. for Materials Chemistry and Engineering, Kyushu Univ.) KAWASAKI, Yuuya; ISHIKAWA, Youhei; IGAWA, Kazunobu; TOMOOKA, Katsuhiko
- **2C2-42** The Enantioselective Borohydride Reduction of Aliphatic Ketones Catalyzed by Optically Active Ketoiminatecobalt Complexes(1):Effect of Haloalkanes as Axial Ligands (Keio Univ.) YOKOMORI, Minako; TSUBO, Tatsuyuki; FUKUI, Kousuke; CHEN, Hsiu-hui; KIKUCHI, Satoshi; YAMADA, Tohru
- 2C2-43 The Enantioselective Borohydride Reduction of Aliphatic Ketones Catalyzed by Optically Active Ketoiminatecobalt Complexes(2):Analysis of Reaction Intermediates (Keio Univ.) TSUBO, Tatsuyuki; YOKOMORI, Minako; FUKUI, Kousuke; KIKUCHI, Satoshi; YAMADA, Tohru
- **2C2-44**\* The Enantioselective Borohydride Reduction of Aliphatic Ketones Catalyzed by Optically Active Ketoiminatecobalt Complexes(3):Recovery and Recycle of Catalyst (Keio Univ.) CHEN, Hsiu-hui; YOKOMORI, Minako; TSUBO, Tatsuyuki; KIKUCHI, Satoshi; YAMADA, Tohru

Chair: IGAWA, Kazunobu (16:30~17:00)

- \* 16:20-16:30: interval for laptop PC connection.(2C2-46, 2C2-47, 2C2-48)
- 2C2-46 Asymmetric Hydrogenation of Bicyclic Ketones Catalyzed by BINAP/ IPHAN-Ru(II) Complex (Faculty of Eng., Hokkaido Univ.) ARAI, Noriyoshi; AKASHI, Masaya; SUGIZAKI, Satoshi; OOKA, Hirohito; INOUE, Tsutomu; OHKUMA, Takeshi
- 2C2-47 Asymmetric Si-H bond insertion reaction using an Ir(salen) catalyst (2): Construction of enantioenriched silicon center. (Kyushu Univ.) YASUTOMI, Yoichi; SUEMATSU, Hidehiro; KATSUKI, Tsutomu
- 2C2-48 Reductive SN2' reaction of epoxy unsaturated esters (Kogakuin Univ.) SHIMANUKI, Yohei; NAKANO, Tacko; NAGOYA, Saori; YASUI, Eiko: MIYASHITA, Masaaki: NAGUMO, Shinii

### Monday, March 28, AM

Chair: SOHTOME, Yoshihiro (9:00 ∼10:00)

- \* 8:50-9:00: interval for laptop PC connection.(3C2-01, 3C2-02, 3C2-03, 3C2-04, 3C2-05, 3C2-06)
- **3C2-01** Study of *N*-Allylideneamine Synthesis and a 1,4- and 1,2-Double Nucleophilic Addition (Mie Univ.) AGATANI, Shun; MIZOTA, Isao; HACHIYA, Iwao; SHIMIZU, Makoto
- **3C2-02** Study of a Catalytic 1,4- and 1,2-Double Nucleophilic Addition Reaction to Acrolein (Mie Univ.) KAWANISHI, Mami; ITO, Akinori; HACHIYA, Iwao; SHIMIZU, Makoto
- 3C2-03 Catalytic Asymmetric Synthetic Study of Chimonanthine: Application of Catalytic Asymmetric Michael Reaction to Nitroethylene using Dinuclear Schiff Base Catalyst (Graduate School of Pharmaceutical Sciences The Univ.

- of Tokyo) MITSUNUMA, Harunobu; MATSUNAGA, Shigeki; KANAI, Motomu: SHIBASAKI, Masakatsu
- 3C2-04 A Direct Catalytic Asymmetric Vinylogous Michael Reaction of an alpha, beta-Unsaturated gammma-Butyrolactam under Dinuclear Nickel Catalysis (Graduate School of Pharmaceutical Sciences The Univ. of Tokyo) TANABE, Hirooki; XU, Yingjie; MATSUNAGA, Sigeki; KANAI, Motomu; SHIBASAKI, Masakatu
- 3C2-05 Chiral Bis(Imidazolidine)Pyridine-CoCl2 Complex-catalyzed Enantio-selective Michael Addition of Malonates to Nitroalkenes (Graduate school of Science, Chiba Univ.) SHIRASUGI, Mayu; MISHIRO, Asami; ARAI, Takayoshi
- 3C2-06 Catalytic Asymmetric 1,4-Addition Using Chiral Imidazoline-amino-phenol-Metal Complexes (Graduate School of Science, Chiba Univ.) WASAI, Makiko; ARAI, Takayoshi

Chair: MATSUNAGA, Shigeki (10:10∼11:00)

- \* 10:00-10:10: interval for laptop PC connection.(3C2-08, 3C2-09, 3C2-10)
- **3C2-08** Chiral Diamine-catalyzed Asymmetric Robinson-type Annulation: Applicationto Natural Product Synthesis (Kochi Univ.) SASAKURA, Niiha; KOTSUKI, Hiyoshizo
- **3C2-09** Michael Addition Reaction of β-Ketoesters Promoted by aThiourea/DMAP combination (Kochi Univ., Faculty of Science) MORITAKA, Maya; KOTSUKI, Hiyoshizo
- **3C2-10** Young Scholar Lectures of CSJ The design of acyclic guanidine/thiourea organocatalysts: their applications to catalytic asymmetric reactions (Tokyo Univ. of Agri. and Technol.) SOHTOME, Yoshihiro

Chair: ARAI, Takayoshi (11:10 $\sim$ 12:10)

- \* 11:00-11:10: interval for laptop PC connection.(3C2-14, 3C2-15, 3C2-16, 3C2-17)
- **3C2–14** Asymmetric Michael addition of alkenyl boronic acid to  $\alpha$ ,  $\beta$ -unsaturated aldehyde catalyzed by peptide (IIS, The Univ. of Tokyo) SUGIYAMA, Masahide; AKAGAWA, Kengo; KUDO, Kazuaki
- 3C2-15 Mechanistic Studies on Guanidine/Bisthiourea-catalyzed Friedel-Crafts Reactions of Phenols (Department of Biotechnology and Life, Faculty of Technology, Tokyo Univ. of Agriculture and Technology) SOHTOME, Yoshihiro; SHIN, Bongki; HORITSUGI, Natsuko; NAGASAWA, Kazuo
- 3C2-16 Development of catalytic enantioselective phospha michael reaction using conformationally flexible guanidine/bisthiourea organocatalyst (Tokyo Univ. of Agriculture and Technology) HORITSUGI, Natsuko; SHIN, Bongki; SOHTOME, Yoshihiro; NAGASAWA, Kazuo
- 3C2-17 CSJ Award for Young Chemists Development of Anion-Recognizable Chiral Onium Salts and Their Applications to Catalytic Asymmetric Syntheses (Grad. Sch. Eng., Nagoya Univ.) URAGUCHI, Daisuke

## Monday, March 28, PM

Chair: TERADA, Masahiro (14:30 $\sim$ 15:30)

- \* 14:20-14:30: interval for laptop PC connection.(3C2-34)
- **3C2-34** CSJ Award for Creative Works Development of Organocatalyst-mediated Asymmetric Reactions and Its Application to the Total Synthesis of Natural Products (Fac. Eng., Tokyo Univ. of Sci.) HAYASHI, Yujiro

Chair: URAGUCHI, Daisuke (15:40 $\sim$ 16:30)

- \* 15:30-15:40: interval for laptop PC connection.(3C2-41, 3C2-42, 3C2-43, 3C2-44, 3C2-45)
- 3C2-41<sup>†</sup> Direct Vinylogous Michael Addition of Furanone Derivatives Catalyzed by Axially Chiral Guanidine Base (Graduate School of Science, Tohoku Univ.) ANDO, Kenichi; TERADA, Masahiro
- 3C2-42 Oxidative and enantioselective cross-coupling of aldehydes and nitromethane catalyzed by diphenylprolinol silyl ether and DDQ (Faculty of Engineering, Tokyo Univ. of Science) HAYASHI, Yujirou; ITOH, Takahiko; ISHIKAWA. Hayato
- 3C2-43 Asymmetric, Organocatalytic Reaction: An Effect of SilylGroup on Diphenylprolinol Silyl Ether Catalyst (Faculty of Engineering, Tokyo Univ. of Science; AIST) HAYASHI, Yujiro; OKAMURA, Daichi; GOTOH, Hiroaki; YAMAZAKI, Tatsuya; AMEDA, Yasuto; ISHIKAWA, Hayato; UCHIMARU. Tadahumi
- **3C2–44** Diphenylprolinol Silyl Ether as a Catalyst in Asymmetric, Catalytic, and Direct Michael Reaction of  $\alpha$ ,  $\beta$   $\gamma$ ,  $\delta$  -Unsaturated Aldehydes (Faculty of Engineering, Tokyo Univ. of Science; AIST) HAYASHI, Yujiro; UMEMIYA, Shigenobu; OKAMURA, Daichi; ISHIKAWA, Hayato; UCHIMARU. Tadafumi
- 3C2-45 Catalytic asymmetric Michael reaction of prochiral α-nitroesters (College of Engineering, Nihon Univ.; Ouchi Shinko Chemical Industrial Co. Ltd) OTANI, Toyohiro; SUGAWARA, Akifumi; TAMAI, Yasufumi

Chair: YAMAGO, Shigeru (16:40~17:20)

- \* 16:30-16:40: interval for laptop PC connection.(3C2-47, 3C2-48, 3C2-49, 3C2-50)
- 3C2-47 Development of Michael-type addition of 5H-oxazol-4-ones to vinylketones catalyzed by chiral guanidines bearing a hydroxy group (Univ.

- of Hyogo) MORITA, Akane; MISAKI, Tomonori; SUGIMURA, Takashi
- **3C2-48** Asymmetric Michael addition of malonates to enones using a primary beta-amino acid salt as a catalyst (Graduate School of Engineering, Hokkaido Univ.) YOSHIDA, Masanori; NARITA, Mao; HARA, Shoji
- 3C2-49 Highly Stereoselective Aza-Henry Reaction with Nitroolefins as a Nucleophile (Nagoya Univ.) OYAIZU, Keigo; URAGUCHI, Daisuke; OOI. Takashi
- 3C2-50 Ion-Paired Chiral Ligands for Asymmetric Palladium Catalysis (Nagoya Univ.) ITO, Mitsunori; OHMATSU, Kohsuke; OOI, Takashi

Chair: ISHIKAWA, Hayato (17:30 $\sim$ 18:20)

- \* 17:20-17:30: interval for laptop PC connection.(3C2-52, 3C2-53, 3C2-54, 3C2-55, 3C2-56)
- 3C2-52 Chiral N-sulfonyldiamine metal catalyst:Diastereoselective Henry reaction and the application (Graduate School of Science, Chiba Univ.) TANEDA, Yoshinori; ENDO, Yoko; NOZAKI, Yurie; ARAI, Takayoshi
- 3C2-53 Z-Selective Intramolecular Horner-Wadsworth-Emmons Reaction for the Synthesis of Macrocyclic Alkenes (Gifu Univ.) SATO, Kaori; ANDO, Kaori
- **3C2-54** Synthesis of α-Alkoxy Carboxylic Acids via Catalytic Asymmetric Protonation (Nagoya Univ.) KIZU, Tomohito; KINOSHITA, Natsuko; URAGUCHI, Daisuke; OOI, Takashi
- 3C2-55 Chiral Arylaminophosphonium Barfate Catalyzed Regio- and Enantioselective Protonation (Nagoya Univ.) KINOSHITA, Natsuko; URAGUCHI, Daisuke; OOI, Takashi
- 3C2-56<sup>†</sup> Stereoselective addition of olefins to α -alkoxy cation controlled by neighboring group participation (ICR, Kyoto Univ.; CREST,JST) MISHIMA, Eri; FUJITA, Takahiro; YAMAGO, Shigeru

## Tuesday, March 29, AM

Chair: USUKI, Yoshinosuke (10:10∼11:10)

- \* 10:00-10:10: interval for laptop PC connection.(4C2-08, 4C2-09, 4C2-10, 4C2-11, 4C2-12, 4C2-13)
- 4C2-08 Carboiodination of benzyne catalyzed by alkynyllithium (Department of Chemistry, School of Science and Technology, Kwansei Gakuin Univ.) CHUDA, Yu; SUZUKI, Keisuke; HAMURA, Toshiyuki
- 4C2-09 Nucleophilic addition to benzyne catalyzed by alkyllithium (Department of Chemistry, School of Science and Technology, Kwansei Gakuin Univ.) TAKEDA, Asa; CHUDA, Yu; SUZUKI, Keisuke; HAMURA, Toshiyuki
- 4C2-10 Catalytic Asymmetric Friedel-Crafts/Protonation of Nitroalkenes (Graduate School of Science, Chiba Univ.) AWATA, Atsuko; ARAI, Takayoshi
- 4C2-11 Structure-performance relationship of resin-supportedpeptide catalyst for asymmetric Friedel-Crafts-type reaction in aqueous media. (IIS, The Univ. of Tokyo) SUZUKI, Rieko; AKAGAWA, Kengo; KUDO, Kazuaki
- 4C2-12 Synthesis of Lasofoxifene and Nafoxidine, and Their Positional Isomers via the Novel Three-component Coupling Reaction (Tokyo Univ. of Science) NAKATA, Kenya; WANG, Yanwen; TOSAKI, Yu-ta; UMEDA, Eri; SHIINA, Isamu
- 4C2-13 Synthesis of Indene Derivatives via Lewis acid-promoted Addition-Cyclization Reactions of Arylallenes and Diethyl Ketomalonate (Nara Univ. of Education) YAMAZAKI, Shoko; FUKUSHIMA, Yugo; UKAI, Tetsuma

Chair: AKAGAWA, Kego (11:20∼12:10)

- \* 11:10-11:20: interval for laptop PC connection.(4C2-15, 4C2-16, 4C2-17, 4C2-18, 4C2-19)
- 4C2-15 Synthetic studies of fluorinated analogues of asparagine and glutamine (Osaka City Univ.) WAKAMATSU, Yousuke; USUKI, Yoshinosuke; IIO, Hideo
- 4C2-16 Structure and Catalysis of Supramolecular Gel Based on Flavin-Containing 1,2-Bis(alkanamido)cyclohexanes (Graduate School of Engineering Science, Osaka Univ) IMADA, Yasushi; ANDO, Daichi; NISHIOKA, Shingo; NOTA, Takeshi
- 4C2-17 A Convenient Synthesis of (-)-Malyngamide II (The Univ. of Shiga Prefecture) NIWA, Yutaka; IZUMI, Yuichi; INOUE, Yoshinori; WATANABE, Masataka; KUMAGAI, Tsutomu
- 4C2-18 Preparation of Enol Ethers of Benzoylacetamides Acting as UV-absorbents (Dept. Chem., Tokyo Gakugei Univ.) ARAKI, Kana; ITO, Yasushi; YAMADA, Michio; MAEDA, Yutaka; HASEGAWA, Tadashi
- 4C2-19 Synthetic study toward a convenient of FTY720 derivatives from optically active allylic nitro compounds (Yamaguchi Univ., Tottori Univ.) NAKANO, Toshiki; MIYAHARA, Mizuki; ITOH, Toshiyuki; KAMIMURA, Akio

## Room C3

Bldg. 8 8-15

## Organic Chemistry -Reaction and Synthesis-Aliphatic and Alicyclic Compounds

### Saturday, March 26, AM

Chair: OHMATSU, Kohsuke  $(9:00\sim10:00)$ 

- \* 8:50-9:00: interval for laptop PC connection.(1C3-01, 1C3-02, 1C3-03, 1C3-04, 1C3-05, 1C3-06)
- 1C3-01 Chemoselective Elimination Reaction of Vicinal Dibromoalkanes Bearing a Hetero-atom Functional Group (Tokyo Univ. of Science, Faculty of Science) TOGUCHI, Shohei; IIJIMA, Masatoshi; KUTSUMURA, Noriki; SAITO, Takao
- 1C3-02 An Efficient, One-pot Method for Regioselective Bromination of Allyl Alcohol Derivatives and Sequential Methylation. (Tokyo Univ. of Science) MATSUBARA, Yusuke; KUTSUMURA, Noriki; SAITO, Takao
- 1C3-03 Total Synthesis of Heteroplexisolide E (Tokyo Univ. of Science) KIRISEKO, Akito; KUTSUMURA, Noriki; SAITO, Takao
- **1C3–04** Stereoselective SN2' Mitsunobu Reaction of  $\alpha$ -Hydroxy- $\alpha$ -alkenylsilanes (Graduate School of Sci., Osaka City Univ.) IKEDA, Naoko; HIGASHINO, Masato; SHINADA, Tetsuro; SAKAGUCHI, Kazuhiko; OHFUNE, Yasufumi
- **1C3-05** Acid-catalyzed Intramolecular Chirality Transferring Cyclization Reaction of α-Hydroxy-α-alkenylsilanes (Graduate School of Sci., Osaka City Univ.) AKAGI, Wataru; SHINADA, Tetsuro; SAKAGUCHI, Kazuhiko; OHFUNE, Yasufumi
- 1C3-06 Stereoselective Synthesis of Substituted Heterocyclic Compounds viaIntramolecular Prins Cyclization of Allenylsilanes. (Graduate School of Sci., Osaka City Univ.) OKADA, Takuya; SAKAGUCHI, Kazuhiko; OHFUNE, Yasufumi

Chair: KUTSUMURA, Noriki (10:10 $\sim$ 11:10)

- \* 10:00-10:10: interval for laptop PC connection.(1C3-08, 1C3-09, 1C3-10, 1C3-11, 1C3-12, 1C3-13)
- **1C3–08** Umpolung Reactions of  $\alpha$ -Imino Ester Equivarents (Mie Univ.) HATA, Shingo; TATEISHI, Masasato; SHIMIZU, Makoto
- 1C3-09 Construction of a Quaternary Carbon Center using the Iminium Salt Generated from Amino Ketene Silyl Acetal (Mie Univ.) KOYAMA, Hiroshi; HATA, Shingo; SHIMIZU, Makoto
- 1C3-10 Molecular Design and Synthetic Application of Chiral1,2,3-Triazoliums as New Cationic Organic Catalysts with Anion-Recognition Ability (Department of Applied Chemistry, Graduate School of Engineering, Nagoya Univ.) KIYOKAWA, Mari; OHMATSU, Kohsuke; OOI, Takashi
- 1C3-11 Chiral 1,2,3-Triazolium Salt-Catalyzed Asymmetric Chlorination of meso-Aziridines (Department of Applied Chemistry, Graduate School of Engineering, Nagoya Univ.) HAMAJIMA, Yuta; OHMATSU, Kohsuke; OOL Takashi
- 1C3-12 Tandem Addition Reaction Using an Umpolung and Oxidation of Iminomalonate (Mie Univ.) KURITA, Daizi; MUSHIKA, Miki; SHIMIZU, Makoto
- **1C3–13** Stereoselective Mannich Reaction Using an Umpolung of  $\alpha$ -Imino Esters (Mie Univ.) KURITA, Daizi; SHIMIZU, Makoto

#### Saturday, March 26, PM

Chair: MIYAKE, Yoshihiro (13:30 $\sim$ 14:30)

- \* 13:20-13:30: interval for laptop PC connection.(1C3-28, 1C3-29, 1C3-30, 1C3-32)
- 1C3-28 Enantioselective Addition of Diethylzinc to Aldehyde by a Use of New Chiral 1,4-Amino Alcohol Having Aminal Moiety Deriverd from (S)-2-(Anilinomethyl)pyrrolidine (Yokohama National Univ.) ASAMI, Masatoshi; HASOME, Ayano; HOSODA, Naoya
- 1C3-29 Functionalized difluoromethylation of carbonyl compounds (Tokyo Institute of Technology) IIDA, Toshiaki; ITO, Shigekazu; MIKAMI, Koichi
- **1C3-30\*** Chiral Brønsted Acid-Catalyzed Asymmetric Friedel-Crafts Alkylation Reaction of Indoles with α, β-Unsaturated Ketones (Fac. Sci., Gakushuin Univ.) SAKAMOTO, Tsubasa; MORI, Keiji; AKIYAMA, Takahiko
- 1C3-32\* Catalytic Enantioselective Trifluoromethylation of Alkynyl Ketones and Synthesis of Aryl Heteroaryl Trifluoromethyl Carbinols (Nagoya Institute of Technology, Graduated School of Engineering) KAWAI, Hiroyuki; TACHI, Kentaro; TOKUNAGA, Etsuko; SHIBATA, Norio

Chair: MORIYAMA, Katsuhiko (14:40~15:40)

- \* 14:30-14:40: interval for laptop PC connection.(1C3-35, 1C3-37, 1C3-38, 1C3-39, 1C3-40)
- 1C3-35\* Generation and Exploitation of Acyclic Azomethine Imines in Axially Chiral Dicarboxylic Acid Catalysis (Graduate School of Science, Kyoto Univ.) KIMURA, Hidenori; HASHIMOTO, Takuya; MARUOKA, Keiji

- **1C3–37**<sup>#</sup> Catalytic Asymmetric Synthesis of 1,1-Disubstituted Tetrahydro- $\beta$ -carbolines by Phase-Transfer Catalyzed Alkylations (Department of Chemistry, Graduate School of Science, Kyoto Univ.) LIU, Kun; ITO, Hironobu; SHIRAKAWA, Seiji; MARUOKA, Keiji
- 1C3-38 Cooperative Catalytic Reactions Using Organocatalysts and Metal Catalysts: EnantioselectivePropargylic Alkylation of Propargylic Alcohols Bearing Internal Alkyne with Aldehydes (School of Engineering, The Univ. of Tokyo) MOTOYAMA, Kazuki; IKEDA, Masahiro; MIYAKE, Yoshiihiro: NISHIBAYASHI. Yoshiaki
- 1C3-39 Enantioselective Synthesis Using Enantiotopic Faces of Achiral Single Crystal of Pyrimidine-5-carbaldehyde in Conjunction with Asymmetric Autocatalysis (Tokyo Univ. of Science) KAMIMURA, Sayaka; AMIHARA, Ai; SUZUKI, Kenta; KAWASAKI, Tsuneomi; SOAI, Kenso
- 1C3-40 Asymmetric Autocatalysis Initiated by Chiral Crystal of Achiral Glycine Hydrobromide (Tokyo Univ. of Science) SATO, Susumu; SUZUKI, Kenta; KAITO, Nobuhiro; KAWASAKI, Tsuneomi; SOAI, Kenso
  - Chair: HATA, Takeshi (15:50~16:50)
- \* 15:40-15:50: interval for laptop PC connection.(1C3-42, 1C3-43, 1C3-44, 1C3-45, 1C3-46, 1C3-47)
- 1C3-42 Reversal of Enantioselectivity Using Two Chiral Catalysts Possessing the Same Face-selectivity in Asymmetric Autocatalysis(4) (Tokyo Univ. of Science) WAKUSHIMA, Yuki; SHIOZAWA, Kazuya; HARA, Atsushi; ASAHINA, Mai; KINOSHITA, Tomoyuki; LUTZ, Francois; KAWASAKI, Tsuneomi; SOAI, Kenso
- 1C3-43<sup>#</sup> Design and synthesis of novel bromodifluoromethylating reagents (Nagoya Institute of Technology) LIU, Guokai; MORI, Satoru; NORITAKE, Shun; TOKUNAGA, Etuko; SHIBATA, Norio
- 1C3-44 Study of the environmental benign transformation of alkyl and aryl bromides to the nitriles (Chiba Univ.; Reaction Organic Chemistry) ISHII, Genki; TOGO, Hideo; MORIYAMA, Katsuhiko
- 1C3-45 Novel One-pot Conversion of N,N-Disubstituted Amides and Esters into Nitriles (Chiba Univ.) SUZUKI, Yusuke; YOSHINO, Takumi; MORIYAMA, Katsuhiko; TOGO, Hideo
- 1C3-46 Metal free One-Pot conversion of Aromatics into Aromatic Nitriles (Chiba Univ.) USHIJIMA, Sousuke; MORIYAMA, Katsuhiko; TOUGOU, Hideo
- 1C3-47 Highly Enantioselective Synthesis of Non-Protected Cyanohydrins Catalyzed by Vanadium(salalen) Complexes (Kyushu Univ.) MATSUMOTO, Kazuhiro; SAKAI, Yoshifumi; MITOTE, Junko; KATSUKI. Tsutomu
  - Chair: MATSUMOTO, Kazuhiro (17:00 $\sim$ 17:40)
- \* 16:50-17:00: interval for laptop PC connection.(1C3-49, 1C3-50, 1C3-51, 1C3-52)
- 1C3-49 Stereoselective Nucleophilic Addition of Imidazoles and Imidazolines to Haloacetylenes (Tokyo Institute of Technology) YAMAGISHI, Masahito; NISHIGAI, Ken; OKAZAKI, Jun; HATA, Takeshi; URABE, Hirokazu
- 1C3-50 Preparation of Cyclic Amines Based on Nucleophilic Addition to Haloacetylenes (Tokyo Institute of Technology) YAMAGISHI, Masahito; OKAZAKI, Jun; HATA, Takeshi; URABE, Hirokazu
- 1C3-51 Nucleophilic Cyclization and Nucleophilic Cyclization/Sulfonylation of 5-Halo-4-alkyn-1-ol (Tokyo Institute of Technology) YAMAGISHI, Masahito; OKAZAKI, Jun; HATA, Takeshi; URABE, Hirokazu
- 1C3-52 Asymmetric cyanosilylation using achiral N-oxide catalyst in the presence of helical polymer (IIS, The Univ. of Tokyo) AKAGAWA, Kengo; KUDO, Kazuaki
  - Chair: AKAGAWA, Kego (17:50∼18:30)
- \* 17:40-17:50: interval for laptop PC connection.(1C3-54, 1C3-55, 1C3-56, 1C3-57)
- 1C3-54 The Addition Reaction of Isocyanides to Nitrone Promoted by TMSOAc (Kanazawa Univ., Graduate School of Natural Science and Technology) SUGIYAMA, Hirokazu; SOETA, Takahiro; UKAJI, Yutaka; INOMATA, Katsuhiko
- 1C3-55 Borinic Acid Catalyzed α-Addition to Isocyanides with Aldehydes and Water (Kanazawa Univ., Graduate School of Natural Science and Technology) KOJIMA, Yuuki; SOETA, Takahiro; UKAJI, Yutaka; INOMATA. Katsuhiko
- 1C3-56 Study of I2-catalyzed Oxidative Conversion from Aldehydes to Nitriles Using oxidant in Aq. NH3 (Chiba Univ.) HARADA, Takuya; MORIYAMA, Katsuhiko: TOGO, Hideo
- 103-57 Arylation of alchols and phenols using diaryliodonium salts. (Chiba Univ.) KAKINUMA, Yoji; MORIYAMA, Katsuhiko; TOGO, Hideo

## Organic Chemistry -Reaction and Synthesis-High-Throughput Synthesis

Sunday, March 27, AM
Chair: ARAI, Takayoshi (9:00 ~10:00)

- \* 8:50-9:00: interval for laptop PC connection.(2C3-01, 2C3-02, 2C3-03, 2C3-04, 2C3-05)
- 2C3-01<sup>†</sup> Fluolous tag Strategy for the Synthesis of Sulfated Oligosaccharides

- (Department of Applied Chemistry, Graduate School of Science and Engineering, Tokyo Institute of Technology) TATENO, Yusuke; TANAKA, Hiroshi: ISHIDA, Tadasuke: TAKAHASHI, Takashi
- 2C3-02 Fluorous synthesis of oligosaccharides using a phenyl ether linker (Tokyo Institute of Technology) TANAKA, Hiroshi; TANIMOTO, Youke; KAWAI, Tetsuya; TAKAHASHI, Takashi
- 2C3-03 Practical Synthesis of TAC-101 Using Flow Microreactor Systems (Kyoto Univ.) NAGAKI, Aiichiro; IMAI, Keita; KIM, Heejin; YOSHIDA, Jun-ichi
- **2C3-04** Synthesis of Vitamin K<sub>3</sub> by Chromium Oxide-Catalyzed Oxidation of 2-Methylnaphthalene Using Continuous Flow System (Toyama Industrial Technology Center) YAMAZAKI, Shigekazu
- 2C3-05\* Synthesis of Flavonoid Derivatives by Regioselective Cyclization and Application to a Flow Synthesis (Tohoku Univ., Graduate School of Pharmaceutical Sciences) YOSHIDA, Masahito; FUJINO, Yuta; DOI, Takayuki
  - Chair: NAGAKI, Aiichiro (10:10~11:10)
- \* 10:00-10:10: interval for laptop PC connection.(2C3-08, 2C3-10, 2C3-11, 2C3-12, 2C3-13)
- 2C3-08\*† Rapid Assembly of Resorcylic Acid Lactone Frameworks via Sequential Palladium-Catalyzed Coupling Reactions (Department of Applied Chemistry, Graduate School of Science and Engineering, Tokyo Institute of Technology) SUGIYAMA, Sakae; FUSE, Shinichiro; TAKAHASHI, Takashi
- 2C3-10 Development of an efficient synthetic method for pai-conjugated oligo heterocycles based on the palladium-catalyzed cross-coupling reaction of organosilicons. (Department of Applied Chemistry, Graduate school of Science and Engineering, Tokyo Institute of Technology) FUSE, Shinichiro; YOSHIDA, Hayato; TAKAHASHI, Takashi
- 2C3-11 Development and Application of Novel Diamine-metal Catalysts Using Solid-phase Catalysis/CD-HTS (Graduate school of science, Chiba Univ.) NOZAKI, Yurie: WATANABE, Masahiko: ARAI, Takayoshi
- 2C3-12 Development of an efficient amide formation reaction via acid chrolides utilizing a microreactor (Department of Applied Chemistry, Graduate School of Science and Engineering, Tokyo Institute of Technology) TANABE, Nobutake; HUSE, Shinichirou; TAKAHASHI, Takashi
- 2C3-13 Flow synthesis of Hexahydroxydiphenoyl Compounds (School of Science and Technology, Kwansei Gakuin Univ.) TANDA, Kentaro; FUJIMOTO, Syohei; MICHIHATA, Naoki; YAMADA, Hidetoshi
  - Chair: TANAKA, Hiroshi (11:20~12:20)
- \* 11:10-11:20: interval for laptop PC connection.(2C3-15, 2C3-16, 2C3-17, 2C3-18, 2C3-20)
- **2C3-15** Cylization of Epoxy Ketones into Furans by Polymer Supported Acid Catalysis under an Irradiation of Microwaves. (Kyoto Univ.) TONBE, Rihoko; MATSUBARA, Seijiro
- **2C3-16** Heterogeneous Sonogashira Coupling Reaction in a Microwave-Assisted Continuous Microflow System (Osaka Prefecture Univ.) YAMASHITA, Hiroyuki; MATSUZAWA, Mitsuhiro; SATO, Masaaki
- 2C3-17 Detection of Non-thermal Microwave effect with SiC Reaction Vials (Ehime Univ.) KOSHIMA, Hideko; MATSUDOMI, Masafumi
- 2C3-18\* Development of flow-type microwave reactor for high throughput screening (National Institute of Advanced Science and Technology) NISHIOKA, Masateru; DAINO, Youhei; MIYAGAWA, Masato; SUZUKI, Toshishige; OKAMOTO, Tadashi; YASUDA, Masahiro; MATSUMURA, Takeko
- 2C3-20 Development of Environmentally-Friendly Aerobic Oxidations with Micro- and Nano-bubbling System (Shizuoka Univ.) MIZUMORI, Tomoya; MASE, Nobuyuki; TATEMOTO, Yuji; TAKABE, Kunihiko

## Sunday, March 27, PM

Chair: ATOBE, Mahito (13:30~14:30)

- \* 13:20-13:30: interval for laptop PC connection.(2C3-28, 2C3-30, 2C3-31, 2C3-32, 2C3-33)
- 2C3-28\* A Flow Microreactor Enables the Use of Configurationally Unstable Organolithium Intermediates Before They Epimerize. An Application to Chiral Allene Synthesis (Kyoto Univ.) TOMIDA, Yutaka; NAGAKI, Aiichiro; YOSHIDA, Jun-ichi
- 2C3-30 Practical Synthesis of Diarylethenes Using Integrated Flow Microreactor Systems (Kyoto Univ.) ASAI, Tatsuro; IINUMA, Yoshiharu; TAKATA, Atsushi; NAGAKI, Aiichiro; YOSHIDA, Jun-ichi
- 2C3-31 Oxidative Homocoupling of Organolithium Compounds Using Integrated Flow Microreactor Systems (Kyoto Univ.) NAGAKI, Aiichiro; UESUGI, Yuki; YOSHIDA, Jun-ichi
- 2C3-32 Nitroxide-mediated living radical polymerization using a microflow reactor (Graduate School of Science, Osaka Prefecture Univ.) KAJIHARA, Yoshito; FUKUYAMA, Takahide; STUDER, Armido; RYU, Ilhyong
- 2C3-33 Synthesis of Block Copolymers by Anionic Polymerization Using Integrated Flow Microreactor Systems (Kyoto Univ.) MIYAZAKI, Atsuo; NAGAKI, Aiichiro; YOSHIDA, Jun-ichi

- Chair: YAMADA, Yoichi M. A. (14:40~15:40)
- \* 14:30-14:40: interval for laptop PC connection.(2C3-35, 2C3-36, 2C3-37, 2C3-38, 2C3-39, 2C3-40)
- 2C3-35 Enhancement of reaction rate in the phase-transfer catalytic reaction by using tandem acoustic emulsification (Tokyo Tech; Yokohama National Univ.) YANAGI, Hiroyuki; NAKABAYASHI, Koji; AMEMIYA, Fumihiro; FUCHIGAMI, Toshio; ATOBE, Mahito
- 2C3-36 A New Reaction of Dienals by Addition of Water as a Key Step. (Kochi Univ. of Technology) SUMOTO, Kana; CHEN, Xin; KOMATSU, Takaya; YAMAMOTO, Takuya; YOKOYAMA, Kazuya; WANG, Pengyu; KOBIRO, Kazuya
- 2C3-37<sup>#</sup> A Simple Permethylation Method of Catechol Derivatives in Subcritical and Supercritical Water (Kochi Univ. of Techonology) WANG, Pengyu; NISHIMURA, Daigo; KOMATSU, Takaya; KOBIRO, Kazuya
- 2C3-38 Synthesis of Cyclic Sulfonamdes Using Flow Microreactor Systems (Kyoto Univ.; Nihon Nohyaku Co.,Ltd.) TAKIZAWA, Eiji; NAGAKI, Aiichiro; YOSHIDA, Jun-ichi
- 2C3-39 Wittig-type Methylenation of Aldehydes by Flow Reaction (Kyoto Univ.) TAKADA, Yoshiaki; MATSUBARA, Seijiro
- 2C3-40 Preparation of Cycloheptane-1,3-dione from 1,2-Diketone by Flow Reaction (Kyoto Univ.) TAKADA, Yoshiaki; HARAGUCHI, Ryosuke; MATSUBARA, Sejjiro
  - Chair: FUSE, Shinichiro  $(15:50{\sim}16:50)$
- \* 15:40-15:50: interval for laptop PC connection.(2C3-42, 2C3-43, 2C3-44, 2C3-45, 2C3-46, 2C3-47)
- 2C3-42 Microflow-Controlled Photo-Halogenation of Cycloalkanes (Graduate School of Science, Osaka Prefecture Univ.) TOKIZANE, Masashi; MATSUBARA, Hiroshi; HINO, Yoshiko; RYU, Ilhyong
- 2C3-43 Selective Hydrogenation of Alkynes by the Microflow System (Osaka Prefecture Univ.) NAKATA, Katsuya; KANEKO, Norihisa; SATO, Masaaki
- **2C3-44** Precise Control of Diastereoselective [2+2] Photocycloaddition in Microflow System with *in situ* Analysis (Nara Institute of Science and Technology) TERAO, Kimitada; FUJIOKA, Yuji; NISHIYAMA, Yasuhiro; MORIMOTO, Tsumoru; TOKUDA, Takashi; NODA, Toshihiko; SASAGAWA, Kiyotaka; OHTA, Jun; KAKIUCHI, Kiyomi
- 2C3-45 Development of an Ionically Convoluted Poly(spiroborate) Iridium Catalyst and Its Application to the Dehydrative Alkylation of Amines with Alcohols in Water (RIKEN) YAMADA, Yoichi M. A.; OHTA, Hidetoshi; YUYAMA, Yoshinari; UOZUMI, Yasuhiro
- 2C3-46 Development of Membranous Polymeric Palladium Nanoparticle Composite-Installed Microdevices and Their Application to the Hydrodehalogenation (RIKEN) OHNO, Aya; WATANABE, Toshihiro; YAMADA, Yoichi M. A.; UOZUMI, Yasuhiro
- 2C3-47<sup>†</sup> Polymeric Membranous Acid Catalyst-Installed Microchannel Devices (RIKEN) MINAKAWA, Maki; YAMADA, Yoichi; UOZUMI, Yasuhiro

## Organic Chemistry -Reaction and Synthesis-Aliphatic and Alicyclic Compounds

#### Monday, March 28, AM

- Chair: KURONO, Nobuhito (9:00  $\sim$ 10:00)
- \* 8:50-9:00: interval for laptop PC connection.(3C3-01, 3C3-02, 3C3-03, 3C3-04, 3C3-05, 3C3-06)
- **3C3-01**\* Indium-Catalyzed Enantioselective Allylation of *N,O*-Aminals (Graduate School of Science, The Univ. of Tokyo) HUANG, Yiyong; CHAKRABARTI, Ananya; SCHNEIDER, Uwe; KOBAYASHI, Shu
- 3C3-02\* Catalytic Enantioselective Allenylation and Propargylation of N,O-Aminals (Graduate School of Science, The Univ. of Tokyo; Graduate School of Pharmaceutical Sciences, The Univ. of Tokyo) MORITA, Naohide; HUANG, Yiyong; CHAKRABARTI, Ananya; SCHNEIDER, Uwe; KOBAYASHI, Shu
- **3C3-03** A Unique Chemoselectivity in the Multinuclear Zinc Bisamidinate Catalyzed Asymmetric Alkylation. (Rikkyo Univ.) UEKI, Yoshiyuki; INABA, Masamitsu; YAMANAKA, Masahiro
- **3C3-04** The metal bisamidinate catalyzed enantioselective alkynylation of α-ketoesters (Rikkyo Univ.) TAKAHASHI, Satoru; YAMANAKA, Masahiro
- 3C3-05 Convenient synthesis of highly optically active homoallyl alcohols by Allyl-Transfer reaction (Fac. Eng., Okayama Univ. of Sci.) KAGA, Hiroyuki; NOKAMI, Junzo
- 3C3-06 Regioselective Bromoallylation of Allenes with Allyl Bromides (Graduate School of Science, Osaka Prefecture Univ.) KIPPO, Takashi; FUKUYAMA, Takahide; RYU, Ilhyong
  - Chair: YAMANAKA, Masahiro (10:10∼11:10)
- \* 10:00-10:10: interval for laptop PC connection.(3C3-08, 3C3-09, 3C3-10, 3C3-12, 3C3-13)
- 3C3-08 Enantioselective hydrocyanation of aldehydes catalyzed by ruthenium-lithium combined complexes (Faculty of Engineering, Hokkaido Univ.) KURONO, Nobuhito; YOSHIKAWA, Tatsuya; YAMASAKI, Mikio; OHKUMA, Takeshi
- **3C3-09** Asymmetric Conjugate Cyanation of  $\alpha$ ,  $\beta$ -Unsaturated Ketones catalyzed by the Ruthenium Complex/C<sub>6</sub>H<sub>3</sub>OLi Systems (Faculty of

- Engineering, Hokkaido Univ.) SAKAGUCHI, Yusuke; NII, Noriyuki; KURONO, Nobuhito: OHKUMA, Takeshi
- **3C3-10\***# Zinc hydroxide-catalyzed α-selective asymmetric allylations of aldehydes in aqueous media (Graduate School of Science, The Univ. of Tokyo) ENDO, Toshimitsu; UENO, Masaharu; KOBAYASHI, Shu
- 3C3-12\* Silver(I) Oxide-Catalyzed Anti- and α-Selective Allylation Reactions of Aldehydes in Water (Graduate School of Science, The Univ. of Tokyo; Graduate School of Pharmaceutical Sciences, The Univ. of Tokyo) TANOUE, Arata: UENO, Masaharu: KOBAYASHI, Shu
- 3C3-13\*\* Design and Development of Multifunctional Catalysts for Asymmetric C-C Bond Forming Reactions in Water (Graduate School of Science, The Univ. of Tokyo; Graduate School of Pharmaceutical Sciences, The Univ. of Tokyo) KITANOSONO, Taku; SAKAI, Masaru; UENO, Masaharu; KOBAYASHI, Shu
  - Chair: UENO, Masaharu (11:20~12:10)
- \* 11:10-11:20: interval for laptop PC connection.(3C3-15, 3C3-16, 3C3-17, 3C3-18, 3C3-19)
- 3C3-15 Allylation of Phenols: Synthesis of Ascofuranone against Trypanosome Alternative Oxidase (Tottori Univ.) KAMO, Masaya; TONOI, Takayuki; TAMURA, Sayuri; TAKAHASHI, Yuki; HAGA, Yasushi; YAMAMOTO, Masaichi; IFUKU, Shinsuke; MORIMOTO, Minoru; SAIMOTO, Hiroyuki
- 3C3-16 Synthesis of cyclobakuchiols via anti S<sub>N</sub>2' substitution of allylic picolinate with copper reagent (Department of Biomolecular Engineering; Tokyo Institute of Technology) KANEKO, Yuki; KOBAYASHI, Yuichi
- 3C3-17 Asymmetric Allylation Reaction Catalyzed by Bisformamide (Dept. Appl. Chem., Nat. Def. Acad.) TANIMURA, Yuya; ISHIMARU, Kaori
- **3C3-18** Catalytic Enantioselective Addition of Aryltitanium Reagents to Aldehydes (Kyoto Institute of Technology) UENISHI, Ami; NAKAGAWA, Yuya; HARADA, Toshiro
- 3C3-19 Catalytic Enantioselective Addition of Heteroaryltitanium Reagents to Aldehydes (Kyoto Institute of Technology) NAKAGAWA, Yuya; HARADA, Toshiro

#### Monday, March 28, PM

- Chair: MIYAMURA, Hiroyuki (14:30~15:30)
- \* 14:20-14:30: interval for laptop PC connection.(3C3-34, 3C3-35, 3C3-36, 3C3-37, 3C3-38, 3C3-39)
- 3C3-34 Synthetic application of enynes with a trifluoromethyl group (Graduate School of Engineering, Tokyo Univ. of Agriculture and Technology) YAMAZAKI, Takashi; NAKA, Motoki; TAKASUKA (KAWASAKI). Tomoko
- 3C3-35 Stereoselective Synthesis of Fluorinated enamides from HCFC-124 (Graduate School of Engineering, Tokyo Univ. of Agriculture and Technology) OTA, Shin; TAKASUKA(KAWASAKI), Tomoko; YAMAZAKI, Takashi
- **3C3-36** Asymmetric Synthesis of Waraterpol, a phenolic Bisabolane-type Sesquiterpenoid (Graduate School of Engineering, Yokohama National Univ.) SUMIKAWA, Akira; ITO, Suguru; TAKAHASHI, Komei; HOSODA, Naoya; ASAMI, Masatoshi
- 3C3-37 Catalytic Enantioselective Alkylation of Aldehydes by Using Organozinc Halide Reagents (Kyoto Institute of Technology) KINOSHITA, Yuichiro; KANEHIRA, Shinichi; HARADA, Toshiro
- 3C3-38 Catalytic Enantioselective Arylation of Aldehydes by Using Functionalized Grignard Reagents Generated from Aryl Bromides (Kyoto Institute of Technology) ITAKURA, Daisuke; HARADA, Toshiro
- 3C3-39 Reaction of trifluoroacetaldehyde hemiacetals with various nucleophiles (Graduate School of Engineering, Tokyo Univ. of Agriculture and Technology) YAMAMOTO, Mariko; TAKASUKA(KAWASAKI), Tomoko; YAMAZAKI, Takashi
  - Chair: ASAMI, Masatoshi (15:40 $\sim$ 16:30)
- \* 15:30-15:40: interval for laptop PC connection.(3C3-41, 3C3-44)
- **3C3-41** Young Scholar Lectures of CSJ Asymmetric syntheses using heteroarenesulfonyl group and thier applications (Nagoya Inst. of Tech.) NAKAMURA, Shuichi
- **3C3-44\*** Synthesis of α-Amino Acid Derivatives with the Iminium Salts Generated from Enolate Equivalents. (Mie Univ.) HATA, Shingo; SHIMIZU, Makoto
  - Chair: YAMAZAKI, Takashi (16:40 $\sim$ 17:40)
- \* 16:30-16:40: interval for laptop PC connection.(3C3-47, 3C3-49, 3C3-50, 3C3-51, 3C3-52)
- 3C3-47\* Catalytic Enantioselective Alkyl Addition with Grignard Reagents to Aldehydes and Ketones: A Concise Synthesis of (+)-Ginnol (Nagoya Univ., CREST) MIZUNO, Tomokazu; HATANO, Manabu; ISHIHARA, Kazuaki
- 3C3-49 Chiral Zinc(II)-Catalyzed Enantioselective Arylation to Ketones with Arylboronic Acids as Aryl Sources (SEKISUI MEDICAL, Nagoya Univ., CREST) GOUZU, Riku; HATANO, Manabu; ISHIHARA, Kazuaki
- **3C3-50** Inexpensive, Stable, and Low-Toxic Lanthanum(III) Nitrate-Catalyzed Transesterification (Nagoya Univ., CREST) KAMIYA, Sho; HATANO, Manabu; ISHIHARA, Kazuaki
- 3C3-51# Aerobic Oxidation Reactions of 1,3-Dicarbonyl Compounds Cata-

- lyzed by Polymer Incarcerated Metal Nanocluster Catalysts (Graduate School of Science, The Univ. of Tokyo: Graduate School of Pharmaceutical Sciences, The Univ. of Tokyo) MIYAMURA, Hiroyuki; KOBAYASHI, Shu
- 3C3-52# Highly reactive polisilane immobilized Pd nano-cluster catalysts for Suzuki-Miyaura cross coupling (Graduate School of Science, The Univ. of Tokyo: Graduate School of Pharmaceutical Sciences, The Univ. of Tokyo) MAEHATA, Kanako; MIYAMURA, Hiroyuki; KOBAYASHI, Shu

## Room C4

Bldg. 8 8-21

## Organic Chemistry -Reaction and Synthesis-**Heteroatom Compounds** Saturday, March 26, AM

Chair: MATSUKAWA, Shiro  $(9:00\sim10:00)$ 

- \* 8:50-9:00: interval for laptop PC connection.(1C4-01, 1C4-02, 1C4-03, 1C4-04, 1C4-05, 1C4-06)
- 1C4-01 Synthetic Study of Twisted DPCB Derivatives (Graduate School of Science and Engineering, Tokyo Institute of Technology) NANKO, Masaki; MIKAMI, Koichi; ITO, Shigekazu
- **1C4-02** Synthesis of Benzo[c]  $\lambda^5$ -phosphinine and Benzo[c]  $\lambda^5$ -dihydorophosphinine oxide via Intramolecular Enyne-Phosphaethene Cyclization (Osaka City Univ.) MINAMI, Tatsuya; YAMASE, Seiji; TAKATANI, Ryosuke; HATANAKA, Yasuo
- 1C4-03 Synthesis and properties of the first stable triphospha[3]radialene (Institute for Chemical Research, Kyoto Univ.) MIYAKE, Hideaki; SASAMORI, Takahiro; TOKITOH, Norihiro
- 1C4-04 Synthesis of Chiral Phosphine with Multi-Coordination Site and Its Phosphine-Stabilized Metal Nanoparticles (Kinki Univ. Faculty of Science and Engineering) YAMADA, Shota; NISHIMURA, Ryo; YASUTAKE, Rvo: NAKAHODO, Tsukasa: FUJIHARA, Hisashi
- 1C4-05 Isolation and Skeletal Inversion of Stereoisomers of Dithienodiphosphorine (Sch. Sci., Kitasato Univ.) UCHIYAMA, Yosuke; KAWAGUCHI, Toshifumi; KURODA, Koichi
- 1C4-06 Syntheses and reactivity of 2-phosphanaphthalenes (Faculty of Science, Fukuoka Univ.) NAGAHORA, Noriyoshi; WASANO, Tatsuya; SHIOJI, Kosei: OKUMA, Kentaro

Chair: SHIOJI, Kosei (10:10~11:10)

- \* 10:00-10:10: interval for laptop PC connection.(1C4-08, 1C4-10, 1C4-11,
- 1C4-12, 1C4-13)

  1C4-08\* Selective C-P, P-P and P-O-P Bond Formations via Copper-Catalyzed Aerobic Oxidative Dehydrogenative Couplings of H-Phosphonates (AIST) HAN, Li-biao; ZHOU, Yongbo
- 1C4-10 Synthesis and Reactivity of Pyridylidene (Graduate School of Science, Nagoya Univ.) HATA, Kazuhiro; SEGAWA, Yasutomo; ITAMI,
- 1C4-11 Synthesis and Characterization of Diferrocenyl Derivatives Bridged by Oligopyrrole Spacer (Fac. Eng., Iwate Univ.) MURAOKA, Hiroki; OZAWA, Kouhei; OGAWA, Satoshi
- 1C4-12 Synthesis and Properties of Linear Type Oligomers of Stable P-Heterocyclic Biradicals (Graduate school of Science and Engineering, Tokyo Institute of Technology) KOBAYASHI, Makoto; MIKAMI, Koichi; ITO,
- 1C4-13 The <sup>121</sup>Sb Moessbauer spectroscopic study on the electronic states of antimony(V) tetraarylporphyrin complexes (Toho Univ.) TAKAHASHI, Masashi; MATSUKAWA, Shiro; TOINAGA, Makoto

Chair: ITO, Shigekazu (11:20~12:20)

- \* 11:10-11:20: interval for laptop PC connection.(1C4-15, 1C4-17, 1C4-19)
- 1C4-15\* Generation of Organotellurium(II) Cations Bearing a Bulky Substituent. (Institute for Chemical Research, Kyoto Univ.) SUGAMATA, Koh: SASAMORI, Takahiro: TOKITOH, Norihiro
- 1C4-17\* Synthesis of novel chiral phosphacrowns and their transition metal complexes (Graduate School of Engineering, Kyoto Univ.) IMOTO, Hiroaki: MORISAKI, Yasuhiro: CHUJO, Yoshiki
- 1C4-19\* Versatile Syntheses of Tertiary Phosphines by Selective Cleavage of Carbon-Phosphorus Bond of Phosphonium Salts (International Research Center for Elements Science, Institute for Chemical Research, Kyoto Univ.) NAKAGAWA, Naohisa; HATAKEYAMA, Takuji; NAKAMURA, Masaharu

#### Saturday, March 26, PM

Chair: TAKEDA, Nobuhiro (13:30 $\sim$ 14:30)

- \* 13:20-13:30: interval for laptop PC connection.(1C4-28, 1C4-30, 1C4-31,
- 1C4-28\* Synthesis of Pi-conjugated Molecules Having Phosphorus Ring Junctions via Tandem Phospha-Friedel-Crafts Reaction (International

- Research Center for Elements Science, Institute for Chemical Research, Kyoto Univ.) HASHIMOTO, Sigma; OBA, Tsuyoshi; HATAKEYAMA, Takuii: NAKAMURA, Masaharu
- 1C4-30 Synthesis of Ring-fused Azaborine Derivatives via Tandem Bora-Friedel-Crafts Reaction (International Research Center for Elements Science, Institute for Chemical Research, Kvoto Univ.) HASHIMOTO, Sigma: HATAKEYAMA, Takuji; NAKAMURA, Masaharu
- 1C4-31\* Organotelluriums as coupling partners in Sonogashira reaction (Uppsala Univ.) KAWAGUCHI, Shin-ichi; OGAWA, Akiya; ENGMAN, Lars
- 1C4-33 Highly Selective Transition-Metal-Catalyzed Cyanochalcogenation of Alkynes with Chalcogenocyanates and Its Mechanistic Aspects (Osaka Prefecture Univ.) OZAKI, Toshiya; NOMOTO, Akihiro; OGAWA, Akiya

Chair: KIMURA, Takeshi (14:40 $\sim$ 15:40)

- \* 14:30-14:40: interval for laptop PC connection.(1C4-35, 1C4-36, 1C4-37, 1C4-38, 1C4-39, 1C4-40)
- 1C4-35 Synthetic Transformations via the Reaction of Terminal Alkynes with Organometallic Reagents and Utilization of the Feature of Selenium (Kanazawa Univ.) SHINTAKU, Kazuki; MAEDA, Hajime; SEGI,
- 1C4-36 Synthesis and reactivity of hydrido(selenolato) Pt(II) complex having a 2,4,6-tri--t-butylphenylgroup on the selenium atom. (Saitama Univ.) KAMON, Hitomi; NAKATA, Norio; ISHII, Akihiko
- 1C4-37 Synthesis and properties of alkyl aryl chalcogenide containing different three chalcogen atoms (Graduate School of Science and Engineering, Tokyo Metropolitan Univ.) FUKUKAWA, Tomoyuki; HIRABAYASHI, Kazunori; SHIMIZU, Toshio
- 1C4-38 Synthesis of Five-Membered Ring Seleno Sugar Derivatives via Cycloaddition Reaction of Selenoaldehydes and Ring Contraction Reaction (Kanazawa Univ.) TORIHATA, Makoto; MAEDA, Hajime; SEGI, Masahito
- 1C4-39 Synthesis and Characterization of a Novel Cd<sub>10</sub>S<sub>5</sub>Se<sub>11</sub> Molecular Cluster Dendrimer (Graduate School of Environmental Science, Okavama Univ.) SATO, Hirokazu; YAMAGUCHI, Yukie; TAJIMA, Tomoyuki; TAKAGUCHI, Yutaka
- 1C4-40 Synthesis and Redox Behavior of Novel Multi-substituted Arvlselenobenzenes (Department of Chemistry, Graduate School of Science and Engineering, Saitama Universitiy) KANATOMI, Yoshihiko; SAITO, Masaichi

Chair: NAKATA, Norio (15:50~16:50)

- \* 15:40-15:50: interval for laptop PC connection.(1C4-42, 1C4-43, 1C4-44, 1C4-45 1C4-46 1C4-47)
- 1C4-42 Synthesis of Silicon-containing Porphyrins for Highly Durable and Effective Dye-sensitized Solar Cells (Grad. Sch. Eng., Gunma Univ.) ABE, Takurou; TAKEDA, Nobuhiro; UNNO, Masafumi

1C4-43 Withdrawn

- 1C4-44 Synthesis of Silanol Substituted Azulenes (Grad. Sch. Eng., Gunma Univ.) TAKAHASHI, Takuya; MASUYAMA, Manabu; TAKEDA, Nobuhiro; UNNO, Masafumi
- 1C4-45 Preparation of multi-substituted arylallylsilanes acting as sol-gel precursors (Nara National College of Technology; CREST) KITAZATO, Shingo; SASAOKA, Takahiro; KAMEI, Toshiyuki; SHIMADA, Toyoshi
- 1C4-46 B(C<sub>6</sub>F<sub>5</sub>)<sub>3</sub>-Catalyzed Hydrooligosilanylation of Unsaturated Hydrocarbons (Chemical Resources Laboratory, Tokyo Institute of Technology) TSUKUI, Tomoya; SANJI, Takanobu; TANAKA, Masato
- 1C4-47 Modification of Silicon and Alumina Gate Insulators by Selfassembled Monolayers (Fac. Eng., Iwate Univ.) OGAWA, Satoshi; FUJITA, Yuki; RAIHANA, BINTI YAAKOB; NISHIKAWA, Takao; MURAOKA, Hiroki: SHIMADA, Kazuaki

Chair: TAJIMA, Tomoyuki (17:00∼17:50)

- \* 16:50-17:00: interval for laptop PC connection.(1C4-49, 1C4-50, 1C4-51, 1C4-52, 1C4-53)
- 1C4-49 Preparation and electrochemical property of phthalocyanine complexes coordinated with benzendichalcogenol (Iwate Univ.) KIMURA, Takeshi; AMANO, Kaori; YAMAMOTO, Arata; NAMAUO, Toshiharu
- 1C4-50 Preparation and electrochemical and optical properties of thienotetraazaporphyrins with 4-methylpyridine as axial ligands (Iwate Univ.) KIMURA, Takeshi; MURAKAMI, Naoko; NAMAUO, Toshiharu
- 1C4-51 Preparation and optical and electrochemical properties of phthalocvanines with the TTF unit (Iwate Univ.) KIMURA, Takeshi: NAMAUO. Toshiharu; TAKAHASHI, Nobuhiro; TAKAGUCHI, Yutaka; KOBAYASHI, Nagao
- **1C4–52** Synthesis and Reactivity of *N*-alkylimino-*S*-fluoroiminosulfonium salt (Univ. of Toyama) YOSHIMURA, Toshiaki; NOTO, Akiyuki; HIGASHIDANI, Kazuyoshi; FUKUROI, Hironobu
- 1C4-53 Dichalcogenoacetalization of Aldehydes by using Adamantyl Organochalcogenides (Tokyo Metropolitan Univ.) SUGISAWA, Yoshinobu; HIRABAYASHI, Kazunori; SHIMIZU, Toshio

#### Sunday, March 27, AM

Chair: NOMOTO, Akihiro  $(9:00 \sim 10:00)$ 

- \* 8:50-9:00: interval for laptop PC connection.(2C4-01, 2C4-02, 2C4-03, 2C4-04, 2C4-05, 2C4-06)
- 2C4-01 Synthesis of Six-Membered Cyclic Phosphine Selenides and Evaluation as Selenating Reagents (Kanazawa Univ.) SAKATA, Kouhei; MAEDA, Hajime; SEGI, Masahito
- 2C4-02 Selenation of carbonyl compounds with elemental selenium (Dept. Chem., Fac. Eng., Gifu Univ.) KUBOTA, Saki; SHIBAHARA, Fumitoshi; MURAI, Toshiaki
- 2C4-03<sup>†</sup> Reactions of bis(dibenzobarrelenyl) dichalcogenides with palladium(0) complex (Saitama Univ.) YAMAGUCHI, Yuki; NAKATA, Norio; ISHII, Akihiko
- 2C4-04 Study of catalytic reactions using α-methly-DL-selenocysteine derivatives (Tokai Univ.) MIYAZAKI, Izumo; IWAOKA, Michio
- 2C4-05 Synthesis of selenopeptides and evaluation of the antioxidative catalytic activity. (Tokai Univ.) URABE, Yoshiko; KOMATSU, Itsuki; ARAI, Kenta; IWAOKA, Michio
- 2C4-06 Synthesis, Structuers and Properties of Bridged [7]Heterohelicenes with Methoxy Subtituents on Outer Rims. (Fac. Sys. Eng., Wakayama Univ.) INUI, Yasutaka; OSUGA, Hideji; SAKAMOTO, Hidefumi

Chair: MIZUHATA, Yoshiyuki (10:10~11:10)

- \* 10:00-10:10: interval for laptop PC connection.(2C4-08, 2C4-09, 2C4-10, 2C4-11, 2C4-12, 2C4-13)
- 2C4-08 Synthesis and luminescent characteristics of aromatic cyclic boron complexes having N-B-N bond (Department of Chemistry, Faculty of Science and Engineering, Kinki Univ.) SAKAMOTO, Satoshi; KATAYAMA, Kazunori; YAMAGUCHI, Yoshihiro; MATSUBARA, Yoshio; YOSHIDA, Zen-ichi
- 2C4-09 Synthesis of Pyridine-Coordinated, Singly Hydrogen-Bridged Diborane(4) Compounds and Their Unique Electronic Property (RIKEN ASI) SHOJI, Yoshiaki; MATSUO, Tsukasa; HASHIZUME, Daisuke; FUENO, Hiroyuki; TANAKA, Kazuyoshi; TAMAO, Kohei
- **2C4-10** Properties of Fluorescent Azobenzenes Bearing a Water-Soluble Functional Group at 4' Position and Their Application (The Univ. of Tokyo) ITOI, Hiroaki; KAMBE, Tetsuya; KANO, Naokazu; KAWASHIMA, Takayuki
- 2C4-11 Withdrawn
- 2C4-12 Synthesis and Reactions of Dichloroborane Having a Pincer Ligand (Department of Chemistry, Graduate School of Science and Engineering, Saitama Univ.) MATSUMOTO, Kaori; SAITO, Masaichi
- **2C4-13** Synthesis and Reactivity of a Lithium boryltrihydroborate (The Univ. of Tokyo; Univ. of Pittsburg; UPMC Univ Paris 06) ARAMAKI, Yoshitaka; YAMASHITA, Makoto; UENG, Shau-ha; MALACRIA, Max; LACOTE, Emmanuel; CURRAN, Dennis P.; NOZAKI, Kyoko

Chair: MINOURA, Mao (11:20 $\sim$ 12:20)

- \* 11:10-11:20: interval for laptop PC connection.(2C4-15, 2C4-17, 2C4-18, 2C4-19)
- 2C4-15\* Asymmetric hydrolysis of enolesters catalyzed by phase transfer catalyst (Dept. of Chemistry, Kyushu Univ.) YAMAMOTO, Eiji; NAGAI, Ayano; HAMASAKI, Akiyuki; TOKUNAGA, Makoto
- 2C4-17 Dynamic Kinetic Resolution of azlactones by base hydrolysis reaction with ChiralPhase Transfer Catalysts. (Dept. of Chemistry, Kyushu Univ.; Catalysis Organic Chemistry Lab.) NAKAMURA, Ryouta; YAMAMOTO, Eizi; HAMASAKI, Akiyuki; TOKUNAGA, Makoto
- 2C4-18<sup>†</sup> Novel Synthesis of N-Heterocycles Based on Photochemical Reaction of o-Vinylaryl Isocyanides with Disulfides in the Presence of Ditelluride (Osaka Prefecture Univ.) MITAMURA, Takenori; OGAWA, Akiya
- 2C4-19\* Development of Vanadium Catalyst System for Oxidation Reaction with Molecular Oxygen Using Water as Solvent (Osaka Prefecture Univ.) KODAMA, Shintaro; HASHIDATE, Suguru; NOMOTO, Akihiro; YANO, Shigenobu; UESHIMA, Michio; OGAWA, Akiya

## Sunday, March 27, PM

Chair: KANO, Naokazu (13:30 $\sim$ 14:30)

- \* 13:20-13:30: interval for laptop PC connection.(2C4-28, 2C4-30, 2C4-32)
- 2C4-28\* A novel preparation of pyrrolostannolane via radical cyclization (Yamaguchi Univ., Ehime Univ.) ISHIKAWA, Shingo; NOGUCHI, Fumiaki; UNO, Hidemitsu; KAMIMURA, Akio
- 2C4-30\* Asymmetric synthesis of gem-chlorofluoro compounds with Lewis acid catalystand their stereospecific delivatization (Toyohashi Tech.) NARAYAMA, Akira; SOGA, Yoshinori; SHIBATOMI, Kazutaka; IWASA, Seiji
- 2C4-32\* One-Pot Synthesis of Amino Acids from Imines via Carbon Dioxide Incorporation (Faculty of Pharmaceutical Sciences, Hokkaido Univ.) MITA, Tsuyoshi; CHEN, Jianyang; SUGAWARA, Masumi; SATO, Yoshihiro

Chair: SASAMORI, Takahiro (14:40~15:30)

\* 14:30-14:40: interval for laptop PC connection.(2C4-35, 2C4-36, 2C4-37, 2C4-38, 2C4-39)

- **2C4-35** Kinetic Investigation for the Self-Condensation Reaction Using *trans*Decalin-9-Sulfenic acid under General Base catalysis (Univ. of Toyama;
  Graduate School of Science and Engineering) YOSHIMURA, Toshiaki;
  KAIGAWA, Takanori; KUROSAKI, Yuuta; HAMADA, Kazuhiro
- 2C4-36 Kinetic Studies of Condensation Using 1-Anthraquinonesulfenic Acid under General Acidic and Basic Conditions (Univ. of Toyama;Graduate School of Science and Engineering) YOSHIMURA, Toshiaki; KUROSAKI, Yuuta; INOUE, Kenta; YOSHIKAWA, Masanori
- 2C4-37 Structures in Arylseleno and Aryltelluro Compounds of Planar and Perpendicular Orientations Together with Contributions of Standard NMR Chemical Shifts for the Orientations (Wakayama Univ.) NISHINO, Mitsuhiro; HAYASHI, Satoko; NAKANISHI, Waro
- **2C4-38** Analysis of NMR Chemical Shifts for Chalcogenobenzoic Acid Derivatives, PhCZZ' and PhCZZ'Me (Z,Z' = O, S, Se) (Wakayama Univ.) SANUKI, Hideaki; HAYASHI, Satoko; NAKANISHI, Warou; NISHI, Daisuke; NONOYAMA, Takamasa; MURAI, Toshiaki
- 2C4-39 Analysis of NMR Spin-spin Coupling Constants in Chalcogenoben-zoic Acid Derivatives, PhCZZ<sup>\*\*</sup> and PhCZZ<sup>\*\*</sup>Me (Z,Z<sup>\*</sup> = O, S, Se) (Wakayama Univ.) FURUYA, Kenta; HAYASHI, Satoko; NAKANISHI, Waro; NISHI, Daisuke; NONOYAMA, Takamasa; MURAI, Toshiaki

Chair: HAYASHI, Satoko (15:40~16:30)

- \* 15:30-15:40: interval for laptop PC connection.(2C4-41, 2C4-43, 2C4-44, 2C4-45)
- **2C4-41\***<sup>†</sup> N-Formylation and α-Oxygenation of Amine Catalyzed by Gold Nanocluster (Institute for Molecular Science, Chulalongkorn Univ.) PREEDASURIYACHAI, Patcharee; KITAHARA, Hiroaki; CHAVASIRI, Wrinthon; SAKURAI, Hidehiro
- **2C4-43** The synthesis of trifluorolactate bearing pyrene structure (Okayama Univ.) FUKUDA, Akira; KATAOKA, Keisuke; KATAGIRI, Toshimasa
- **2C4-44** A New Route to 3,3',6,6'-tetrasubstituted binaphthols (Nara National College of Technology; CREST) SAKO, Makoto; KAMEI, Toshiyuki; SHIMADA, Toyoshi
- 2C4-45 Regioselective Iodosulfonylation of Olefins with Sodium Benzenesul-finateand I<sub>2</sub>in Aqueous Media (Osaka Univ.) MINAKATA, Satoshi; MITANI, Yuki; HAYAKAWA, Junpei

Chair: FUIII. Takayoshi (16:40~17:30)

- \* 16:30-16:40: interval for laptop PC connection.(2C4-47, 2C4-48, 2C4-49, 2C4-50, 2C4-51)
- 2C4-47 Synthesis and properties of novel organic semiconductor molecules (Fac. Eng., Iwate Univ.) ITO, Hiroki; MURAOKA, Hiroki; YOSHIMOTO, Noriyuki; SHIMADA, Kazuaki; OGAWA, Satoshi
- 2C4-48 Synthesis and Property of Chiral Polythiophene Nanotubes with Tetrathiafulvalene (Kinki Univ. Faculty of Science and Engineering) NAMBU, Shinya; NAKAHODO, Tsukasa; FUJIHARA, Hisashi
- 2C4-49 Dynamic and Static Behaviors of Multi-hydrogen Bonds Clarified by AIM Dual Functional Analysis (Wakayama Univ.) KOZAKI, Tatsuya; HAYASHI, Satoko; NAKANISHI, Waro
- 2C4-50 Dynamic and Static Behavior of O—Se-X 3c-4e and X-Se—O—Se-X 5c-6e (X = Cl, Br, I) in Anthraquinone System: Applications of AIM Dual Functional Analysis (Wakayama Univ.) MATSUIWA, Kouhei; MIZA, Hiroaki; HAYASHI, Satoko; NAKANISHI, Warou
- 2C4-51 Dynamic and Static Behaviors of Z—Z' (Z, Z' = S, Se, Te) Interactions in 1-Z-5-Z'-Cyclooctanes and the Dications: Applications of AIM Dual Functional Analysis (Wakayama Univ.) MIZA, Hiroaki; MATSUIWA, Kouhei; HAYASHI, Satoko; NAKANISHI, Waro

### Monday, March 28, AM

Chair: MAEDA, Hajime  $(9:00\sim10:00)$ 

- \* 8:50-9:00: interval for laptop PC connection.(3C4-01, 3C4-02, 3C4-03, 3C4-04, 3C4-05, 3C4-06)
- 3C4-01 Cyclization of N-thioacyl 1,2-aminoalcohols with 2-pyridyl group and application of the resulting cyclized products (Dept. Chem., Fac. Eng., Gifu Univ.) NAGAYA, Eri; SHIBAHARA, Fumitoshi; MURAI, Toshiaki
- 3C4-02 Metal triflate catalyzed synthesis of hexathiaadamantanes by the condensation of thiocarboxylic acids (Interdisciplinary Graduate School of Science and Engineering, Tokyo Institute of Technology; ChemicalResources Laboratory, Tokyo Institute of Technology) TAKAHASHI, Hiroshi; MAKIOKA, Yoshikazu; TANIGUCHI, Yuki
- 3C4-03 Functionalization on Methyl Group in Tetramethylhexathiaadamantane (Tokyo Metropolitan Univ.) OGAWA, Keisuke; FUSE, Hironori; SATO. Soichi
- 3C4-04 Synthesis and properties of π-extended thiophene-condensed dithiin derivatives (Fac. Eng., Iwate Univ.) OGAWA, Satoshi; WATANABE, Daichi; MURAOKA, Hiroki; YAMAMOTO, Tatuya; SHIMADA, Kazuaki
- 3C4-05 Intramolecular Cycloaddition of(Z)-1,4-Diaryl-1-(1-napthylchalcogeno)-1-buten-3-ynes and Fluorescence Properties of Cycloadducts (Saitama Univ.) ANNAKA, Tatsuro; NAKATA, Norio; ISHII, Akihiko
- 3C4-06 Synthesis and property of thiophene fused 3-methylene-2,3-dihydrothiophene derivatives (Saitama Univ.) KOBAYASHI, Shota; NAKATA, Norio; ISHII, Akihiko

- Chair: YAMASHITA, Makoto (10:10~11:10)
- \* 10:00-10:10: interval for laptop PC connection.(3C4-08, 3C4-10, 3C4-11, 3C4-12, 3C4-13)
- **3C4-08\***# Planar-Constrained Triarylboranes (1): Synthesis, Structures, and Properties (Department of Chemistry, Graduate School of Science, Nagoya Univ.; Institute for Chemical Research, Kyoto Univ.; CREST, Japan Science and Technology Agency) ZHOU, Zhiguo; KUSHIDA, Tomokatsu; WAKAMIYA, Atsushi; YAMAGUCHI, Shigehiro
- 3C4-10 Planar-Constrained Triarylboranes (2): Reactions with Nucleophiles (Department of Chemistry, Graduate School of Science, Nagoya Univ.; Institute for Chemical Research, Kyoto Univ.; CREST, Japan Science and Technology Agency) KUSHIDA, Tomokatsu; SHUTO, Ayumi; ZHOU, Zhiguo; WAKAMIYA, Atsushi; YAMAGUCHI, Shigehiro
- **3C4-11** Synthesis of Dihaloborane Bearing a Bulky Amino Substituent and Its Reduction (Institute for Chemical Research, Kyoto Univ.) SHIMIZU, Tomohiro; MIZUHATA, Yoshiyuki; TOKITOU, Norihiro
- **3C4-12** Synthesis of Pyridine-Borane Complexes through Electrophilic Borylation of 2-Pyridyl-Substituted Arenes and Alkynes (Graduate School of Engineering, Kyoto Univ.) IKEMOTO, Wataru; MORIYA, Taisaku; ISHIDA, Naoki; MURAKAMI, Masahiro
- **3C4-13** Synthesis and Properties of Dithienobenzocarborane (Graduate School of Engineering, Kyoto Univ.) TOMINAGA, Masato; MORISAKI, Yasuhiro; CHUJO, Yoshiki
  - Chair: HATAKEYAMA, Takuji (11:20~12:20)
- \* 11:10-11:20: interval for laptop PC connection.(3C4-15, 3C4-16, 3C4-17, 3C4-18, 3C4-19, 3C4-20)
- 3C4-15 Synthesis of epoxides bearing amide group via oxidation of acrylamides with sodium hypochlorite (Yamagata Univ.) AKUTSU, Ryo; OCHIAI, Bungo
- 3C4-16 Vapochromism and temperature responsive property of platinum(II) complexes with organoarsenic ligand. (Kyoto Institute of Technology) KATO, Takuji; NAKA, Kensuke
- 3C4-17 Synthesis and Properties of a 1,2-Bis(ferrocenyl)diphosphene Derivative Bearing Bulky Ferrocenyl Units (Institute for Chemical Research, Kyoto Univ.) SAKAGAMI, Michiyasu; NIWA, Masatoshi; SASAMORI, Takahiro; TOKITOH, Norihiro
- 3C4-18 Synthetic Application of β-Ketophosphonates to Natural Products (4) (Kinki Univ.) OKADA, Yoshiharu; TAMURA, Shin-ichi; YONEYA, Kei-ichiro; NOMURA, Masato
- 3C4-19 Synthesis of pyridine derivatives using a palladium catalytic intramolecular cyclization (Tokyo Univ. of Agriculture and Technology) KOHNO, Kazufumi; NOJIMA, Yusuke; TOYOTA, Akinori
- 3C4-20 Isomerization mechanism of hypervalent pentacoordinate antimony compounds by Turnstile Rotation (Hiroshima Univ.) IMADA, Yasuyuki; YAMAMICHI, Hideaki; MATSUKAWA, Shiro; ANDO, Kaori; YAMAMOTO, Yohsuke

## Monday, March 28, PM

- Chair: SHIBAHARA, Fumitoshi (13:30∼14:30)
- \* 13:20-13:30: interval for laptop PC connection.(3C4-28, 3C4-29, 3C4-30, 3C4-31, 3C4-32, 3C4-33)
- **3C4–28** Oxidation Reaction of Bis(2,2'-biphenylylene)tellurane (Tokyo Metropolitan Univ.) AIHOSHI, Mitsushi; SATO, Soichi
- **3C4-29** Synthesis and Properties of Hypercoordinated Tellurium Compounds having 3,3'-Disubstituted biaryl Ligands (Tokyo Metropolitan Univ.) MIZUKAMI, Mayumi; SATO, Soichi
- **3C4-30** Air Oxidation of Thiols Catalyzed by Diaryl Telluride (Department of Materials Chemistry, Tokai Univ.; National Institute of Advanced Industrial Science and Technology (AIST)) TANAKA, Kazuhito; OBA, Makoto; NISHIYAMA, Kozaburo; ANDO, Wataru
- 3C4-31 Reaction of Pentaphenyltellurium Cation with Nucleophiles (Dept. Chem., Sch. Sci., Kitasato Univ.) KOBAYASHI, Sho; MINOURA, Mao; MAZAKI, Yasuhiro
- **3C4–32** Formation and Characterization of Phase Change Material Using Reactive Tellurium Compounds (Air Liquide Laboratories; Dept. Chem., Sch. Sci., Kitasato Univ.) ISHII, Hana; GATINEAU, Julien; MINOURA, Mao
- 3C4-33 Synthesis and Properties of Unsaturated Benzothiacrown Ethers (Tokyo Metropolitan Univ.) NARA, Hiromi; HIRABAYASHI, Kazunori; SHIMIZU, Toshio
  - Chair: HIRABAYASHI, Kazunori (16:50∼17:50)
- \* 16:40-16:50: interval for laptop PC connection.(3C4-48, 3C4-49, 3C4-50, 3C4-51, 3C4-52, 3C4-53)
- **3C4-48** Synthesis, Structures and Luminescence Properties of Pt(II) Complexes with Disulfanenitrile Ligand (Coll. Ind. Tech., Nihon Univ.) HONDA, Hiroya; FUJII, Takayoshi
- 3C4-49 Synthesis and characterization of tetra(arylthienyl)thiophene derivatives (Fac. Eng., Iwate Univ.) MURAOKA, Hiroki; TANIFUJI, Takanori; OGAWA, Satoshi
- **3C4-50** Synthesis and Property of Metal Nanoparticle-Polythiophene Chiral Hybrid Nanotubes (Kinki Univ. Faculty of Science and Engineering) IWAMOTO, Kenji; NAKAHODO, Tsukasa; FUJIHARA, Hisashi
- 3C4-51 Reactions of 2-Hydroxybenzyl Sulfide Derivatives with Pd(0) Com-

- plexes (Saitama Univ.) FURUKAWA, Noriyuki; NAKATA, Norio; ISHII, Akihiko
- **3C4-52** Elucidation of the Reactivities of an *N*-Hydroxysulfenamide by Taking Advantage of a Bowl-Shaped Steric Protection Group (Tokyo Institute of Technology) ISHIHARA, Michihiro; YOSHIKAWA, Shuhei; SASE, Shohei; GOTO, Kei
- **3C4-53** A Theoretical Study on the Homolytic Substitution Reaction of Heavier Heteroatom Compounds with Polymer-end Mimetic Radicals (Institute for Chemical Reseach, Kyoto Univ.) SAIKI, Kotaro; KAYAHARA, Eiichi; YAMAGO, Shigeru; LUNG WA, Chung; MOROKUMA, Keiji

#### Tuesday, March 29, AM

- Chair: NAGAHORA, Noriyoshi (9:00 ∼10:00)
- \* 8:50-9:00: interval for laptop PC connection.(4C4-01, 4C4-02, 4C4-03, 4C4-04, 4C4-05, 4C4-06)
- 4C4-01 The Stereomutation of Anti-apicophilic phosphoranes and Their Hexacoordinated Derivatives (Hiroshima Univ.) TOYA, Yuya; JIANG, Xindong; KOJIMA, Satoshi; YAMAMOTO, Yohsuke
- **4C4-02** Synthesis of  $\pi$ -Conjugated Phosphaalkenes Using Horner-Wadsworth-Emmons Olefination of Secondary (2-Phosphonated Ethenyl)phosphine (Osaka City Univ.) MINAMI, Tatsuya; SASA, Yuusuke; TAKATANI, Ryosuke; HATANAKA, Yasuo
- 4C4-03<sup>#</sup> Studies on the Syntheses and reactivities of non-symmetrical "active ester" cross-linkers (Univ. of Toyama, Graduate School of Science and Engineering) MORITA, Hiroyuki; YOSHIMURA, Toshiaki; SHEIKH, Md. Chanmiya; TAKAGI, Shunsuke; SAKAI, Megumi
- 4C4-04 Synthesis, Properties, and Reactions of an Isolable Neutral Dialkyl-phosphinyl Radical (Graduate School of Science, Tohoku Univ.) HIRAKAWA, Fumiya; ISHIDA, Shintaro; IWAMOTO, Takeaki
- 4C4-05 A new method for the synthesis of 2,5-diarylphosphole derivatives (Kyoto Univ.; iCeMS) KON, Yusuke; MATANO, Yoshihiro; SAITO, Arihiro: IMAHORI, Hiroshi
- **4C4-06** Synthesis and Properties of Acenaphtho[c]phospholes Bearing π-Conjugated Substituents at .alpfa. Positions (Department of Molecular Engineering, Graduate School of Engineering, Kyoto Univ.) SAITO, Arihiro: MATANO, Yoshihiro: IMAHORI, Hiroshi

#### Chair: MURAOKA, Hiroki (10:10~11:10)

- \* 10:00-10:10: interval for laptop PC connection.(4C4-08, 4C4-09, 4C4-10, 4C4-11, 4C4-12, 4C4-13)
- 4C4-08 Synthesis and Redox Behavior of Multiselenide-Substituted Oligothiophene (Kinki Univ. Faculty of Science and Engineering) TAKAHASHI, Hayato; NAKAHODO, Tsukasa; FUJIHARA, Hisashi
- 4C4-09 Synthesis of Chiral Oligothiophene with Binaphthyl Unit and Its Photo-function (Kinki Univ. Faculty of Science and Engineering) SATO, Shinya; NAGATA, Keisuke; NAKAHODO, Tsukasa; FUJIHARA, Hisashi
- 4C4-10 Synthesis of macrocyclic alkanedisulfides using a solid phase reaction (Tokyo Tech) TADA, Yukihiro; YAMAMOTO, Takuya; TEZUKA, Yasuyuki; KAWAMOTO, Tadashi; MORI, Takehiko
- 4C4-11 Reactions of Cyclic Alkenes with Methoxycarbonylsulfenyl Chloride (Saitama Univ.) SATO, Miho; SUGIHARA, Yoshiaki
- **4C4–12** Elucidation of Reactivities of S-Nitrosothiols by Taking Advantage of Bowl-Shaped Aliphatic and Aromatic Substituents (Tokyo Institute of Technology) ABE, Noriaki; SASE, Shohei; GOTO, Kei
- **4C4-13** A Synthetic Study of *p*-Thiobenzoquinones by Taking Advantage of a Cavity-Shaped Molecular Framework (Tokyo Institute of Technology) NAKAMURA, Masaki; SASE, Shohei; GOTO, Kei

## Chair: SASE, Shohei (11:20~12:20)

- \*11:10-11:20: interval for laptop PC connection.(4C4-15, 4C4-16, 4C4-17, 4C4-18, 4C4-19, 4C4-20)
- 4C4-15 Synthesis of Tautomerizable Thioketones Having Bulky Substituents (Dept. Chem., Sch. Sci., Kitasato Univ.) NAGASAWA, Takuya; MINOURA, Mao; MAZAKI, Yasuhiro; YAMAMOTO, Gaku
- 4C4-16 Development of New Synthetic Procedure of Poly(phenylene sulfide) (Fac. Eng., Iwate Univ.) OGAWA, Satoshi; NAKAYA, Yasutaka; MURAOKA, Hiroki; SHIMADA, Kazuaki
- 4C4-17 Construction of 'Linked Ethynylthienylarene System' Containing Sequence-controlled Side Chains and an Axis Corresponding to Effective Thickness of Hydrocarbon Core of Cell Membrane (Graduate School of Science, Tohoku Univ.) KATSUTA, Hiroshi; NAKAMURA, Kazuhiro; TANIMOTO, Daiki; MUTOH, Hirotaka; IWAMOTO, Takeaki; TOYOTA, Koro
- 4C4-18 Synthesis and reaction of cyclic polysulfides with norbornane skeleton (Faculty of Science, Fukuoka Univ.) MUNAKATA, Kazunori; NAGAHORA, Noriyoshi; SHIOJI, Kosei; OKUMA, Kentaro
- **4C4-19** Synthesis and Reactions of *trans*-Cyclooctane-1,2-Dithiolato Pt(II) Complexes bearing an (S)-BINAP Ligand (Saitama Univ.) KOMATSUBARA, Chizuru; NAKATA, Norio; ISHII, Akihiko
- 4C4-20 Synthesis of titanocene dithiolene complex possessing terthiophene unit by reaction of butadiyne with titanocenepentasulfide (Tokyo Metropolitan Univ.) HAYASHI, Hideyuki; HIRABAYASHI, Kazunori; SHIMIZU, Toshio

## Room C5

Bldg. 8 8-22

## Organic Chemistry -Reaction and Synthesis-Organic Photochemistry

## Saturday, March 26, PM

Chair: IKEDA, Hiroshi (13:30∼14:30)

- \* 13:20-13:30: interval for laptop PC connection.(1C5-28, 1C5-29, 1C5-30, 1C5-32, 1C5-33)
- 1C5-28 Bio-Supramolecular Complexation and Photocyclodimerization of 2-Anthracenecarboxylate with Insulin Amyloid Fibrils (Grad. School of Eng. and CASI, Osaka Univ.) TANAKA, Hidekazu; NISHIJIMA, Masaki; MORI, Tadashi; YANG, Cheng; FUKUHARA, Gaku; DZWOLAK, Wojciech; INOUE, Yoshihisa
- 1C5-29 Effects of Binding Inhibitors on Bio-Supramolecular Photochirogenesis of 2-Anthracenecarboxylate Mediated by Serum Albumins (Grad. School of Eng. and CASI, Osaka Univ.) KATO, Hanako; NISHIJIMA, Masaki; FUKUHARA, Gaku; YANG, Cheng; MORI, Tadashi; BOHNE, Cornelia; INOUE, Yoshihisa
- 105-30\* Bio-Supramolecular Photochirogenesis of 2-Anthracenecarboxylate Mediated by Porcine and Canine Serum Albumins (CASI and Grad. School of Eng., Osaka Univ. and IMRAM, Tohoku Univ.) NISHIJIMA, Masaki; KATO, Hanako; FUJIKAWA, Mayu; MORI, Tadashi; WADA, Takehiko; INOUE, Yoshihisa
- **1C5-32** Reaction Behavior of Tetraene Intermediates formed in [3+2]-Photocycloadditions of Methyl Substituted 1,4-Dicyanonaphthaleneswith Styrene (Faculty of Science and Engineering, Shimane Univ.) NOGAMI, Yuki; SHIRATORI, Hideo; KUBO, Yasuo
- 1C5-33 Photo-induced CO<sub>2</sub> reduction sensitized by rhenium bipyridine complex: Identification of the key intermediates (Department of Applied Chemistry, Graduate School of Urban Environmental Science, Tokyo Metropolitan Univ.; SORST(JST)) KOU, Youki; SHIMADA Tetsuya, Tetsuya; MASUI, Dai; TAKAGI, Shinsuke; TACHIBANA, Hiroshi; INOUE, Haruo

Chair: KAWAI, Kiyohiko (14:40 $\sim$ 15:40)

- \* 14:30-14:40: interval for laptop PC connection.(1C5-35, 1C5-37, 1C5-38, 1C5-39, 1C5-40)
- 1C5-35\* Contrasting Intermolecular and Intramolecular Exciplex Formation of a 1,4-dicyanonaphthalene-benzene Dyads (Seika Corp.; Grad. Sch. of Eng., Osaka Pref. Univ.; Res. Inst. Mol. Elect. Dev., Osaka Pref. Univ.; Wakayama Seika Kogyo Co., Ltd.) IMOTO, Mitsutaka; IKEDA, Hiroshi; MATSUI, Yasunori; TANIGUCHI, Hisaji; TAMAKI, Akihiro; TAKEDA, Motonori; MIZUNO, Kazuhiko
- 1C5-37 Highly Enantioselective Photoreaction in SupercriticalCarbon Dioxide using Entrainer Effect (NAIST; IMRAM, Tohoku Univ.; Dept. Appl. Chem., Osaka Univ.) NISHIYAMA, Yasuhiro; WADA, Takehiko; INOUE, Yoshihisa; KAKIUCHI, Kiyomi
- 1C5-38 Mechanism of [3+2]-Photocycloaddition of Dimethyl 1,4-Naphthale-nedicarboxylate with Styrene (Faculty of Science and Engineering, Shimane Univ.) HAYASHI, Yuki; SHIRATORI, Hideo; KUBO, Yasuo
- 105-39 Development of photochemical oxygenation system sensitized by aluminum porphyrins (Tokyo Metropolitan Univ.) GOMI, Yuki; KIYOOKA, Ryuuichi; NABETANI, Yuu; SHIMADA, Tetsuya; TACHIBANA, Hirishi; INOUE, Haruo
- 1C5-40 Enantiodifferentiating Photocyclodimerization of 2-Anthracenecarboxylic Acid Using (S)-Prolinol Derivatives As Chiral Hydrogen-Bonding Templates (Graduated School of Engineering, Osaka Univ.) KATSUMATA, Shinya; KAWANAMI, Yuko; FUKUHARA, Gaku; NISHIJIMA, Masaki; YANG, Cheng; MORI, Tadashi; INOUE, Yoshihisa

Chair: TAKAGI, Shinsuke  $(15:50\sim16:50)$ 

- \* 15:40-15:50: interval for laptop PC connection.(1C5-42, 1C5-44, 1C5-45, 1C5-46, 1C5-47) **1C5-42\*** Single molecule level measurement of charge recombination dynamics
- 1C5-42\* Single molecule level measurement of charge recombination dynamics in DNA (The Institute of Scientific and Industrial Research, Osaka Univ.; Institute for Materials Chemistry and Engineering, Kyushu Univ.) KAWAI, Kiyohiko; MATSUTANI, Eri; MARUYAMA, Atsushi; MAJIMA, Tetsuro
- 1C5-44 Mechanistic Study on the Regio and Stereoselectivity in a [2+2] Photocycloaddition Reaction of Fran with Cyclic Enones (Dept. Chem., Hiroshima Univ. / JST) KOSAKA, Ami; HIRAGA, Yoshikazu; ABE, Manabu
- 1C5-45<sup>#</sup> Effects of Gaseous Additives on the Supramolecular Enantiodifferentiating Photoisomerization of Cyclooctene Included and Sensitized by Modified b-Cyclodextrins (Graduate School of Engineering, Osaka Univ.)
  LIANG, Wenting; YANG, Cheng; FUKUHARA, Gaku; MORI, Tadashi; INOUE, Yoshihisa
- 105-46 Synthesis and Structural Change of [3.3](1,3)Pyrenophanes (Kanazawa Univ.; Osaka Pref. Univ.) HIRONISHI, Masato; MAEDA,

Hajime; SEGI, Masahito; ISHIBASHI, Rikiya; MIZUNO, Kazuhiko

1C5-47 Excitation Wavelength Effect on Supramolecular Photocyclodimerization of 2-Anthracenecarboxylate Mediated by gamma-Cyclodextrin Derivatives (Graduate School of Engineering, Osaka Univ.) WANG, Qian; YANG, Cheng; MORI, Tadashi; FUKUHARA, Gaku; INOUE, Yoshihisa

Chair: SHIRATORI, Hideo (17:00~18:00)

- \* 16:50-17:00: interval for laptop PC connection.(1C5-49, 1C5-51, 1C5-52, 1C5-54)
- 1C5-49\* Mechanistic Elucidation on the Excitation-Wavelength Dependence of Enantiodifferentiating Photosensitized Isomerization of (Z)-Cyclooctene. (Graduate School of Engineering, Osaka Univ.) YONEDA, Daisuke; SAITO, Hirosuke; FUKUHARA, Gaku; YANG, Cheng; MORI, Tadashi; WADA, Takehiko; INOUE, Yoshihisa
- 1C5-51 Studies on the Photoinduced Release of Nitric Oxide from 10-Nitro-9anthracenecarboxylic Acid and Its Derivatives (Grad. Sch. Sci., Kitasato Univ.) MORIKAWA, Miki; INUI, Hiroshi; OISHI, Shigero
- 1C5-52\* Reconsideration of Molecular Geometry and Through-space and -bond Interaction of 1,4-Diarylbutane-1,4-diyl Radical Cation (Grad. Sch. of Eng., Osaka Pref. Univ.; Res. Inst. Mol. Elect. Dev., Osaka Pref. Univ.) IKEDA, Hiroshi; UMEMOTO, Naoki; KANEI, Takahiro; KATO, Nobuyuki; MIZUNO, Kazuhiko
- 1C5-54 Intramolecular Charge-Transfer-Induced Decomposition Promoted by an Aprotic Polar Solvent for Bicyclic Dioxetanes Bearing a 4-(Benzothiazol-2-yl)-3-hydroxyphenyl Moiety (Kanagawa Univ. Dept. of Chemistry) TANIMURA, Masatoshi; WATANABE, Nobuko; IJUIN, Hisako; MATSUMOTO, Masakatsu

#### Sunday, March 27, AM

Chair: MAEDA, Hajime  $(9:20\sim10:00)$ 

- \* 9:10-9:20: interval for laptop PC connection.(2C5-03, 2C5-04, 2C5-05, 2C5-06)
- **2C5-03** Crystallochromy of Organoboron Complexes (Grad. Sch. of Eng., Osaka Pref. Univ.; Res. Inst. Mol. Elect. Dev., Osaka Pref. Univ) IKEDA, Hiroshi; YOSHIMOTO, Yuichi; SAKAI, Atsushi; MIZUNO, Kazuhiko
- 2C5-04 Synthesis and photochemical property of tripod compound containing ethynylpyrene (ISIR, Osaka Univ.) OTABE, Takahiro; NAKAGAWA, Hiroki; HONG, Changfeng; DOHNO, Chikara; NAKATANI, Kazuhiko
- 2C5-05 Modulation of the Luminescent Properties of Fluorescent Dyes Based on Cypridina Bioluminescence (The Univ. of Electro-Communications) NAKAGAWA, Tatsuki; MAKI, Shojiro; NIWA, Haruki; HIRANO, Takashi
- 2C5-06 Photochemical Characteristics of Amphiphilic Stilbene Dendrimers (Univ. of Tsukuba) KATAOKA, Kayoko; ARAI, Tatsuo

Chair: WAKAMATSU, Kan (10:10∼11:10)

- \* 10:00-10:10: interval for laptop PC connection.(2C5-08, 2C5-09, 2C5-10, 2C5-11, 2C5-12, 2C5-13)
- 2C5-08 Design and Synthesis of Intramolecular Parallel Structures of Two Pyrenes Directing toward Selective Excimer Emission (Kanazawa Univ.) MATSUNO, Yu; MAEDA, Hajime; SEGI, Masahito
- 2C5-09 Synthesis and Spectroscopic Properties of Multicolor Fluorescent Dyes Based on Firefly Bioluminescence (Univ. of Electro Communications) YAMASHITA, Reiko; MAKI, Shojiro; NIWA, Haruki; HIRANO, Takashi
- 2C5-10 Stabilities and Reactivities of Triplet (Aryl)(1,4-diphenyl-1H-1,2,3-triazol-5-yl)carbenes (Mie Univ.; Aichi Inst. of Tech.; Nagoya Ind. Sci. Res. Inst.) YAMAGUCHI, Masao; HIRAI, Katsuyuki; KITAGAWA, Toshikazu; TOMIOKA, Hideo
- 2C5-11 Synthesis and Photochemistry of New Nitrofluorenyl Caging Groups (Univ. of Tsukuba) TANAKA, Yuji; MOMOTAKE, Atsuya; ARAI, Tatsuo
- 2C5-12 Chemiluminescence Properties of Phenyl-conjugated Imidazopyrazinone Derivatives (Univ. of Electro Communications) KOBAYASHI, Hirokazu; FUJIO, Shunsuke; MAKI, Shojiro; NIWA, Haruki; HIRANO, Takashi
- 2C5-13 Development of rhodamine-cored multichromophoric dendrimersand evaluation of energy transfer properties within the dendritic frameworks (Faculty of Engineering, Shizuoka Univ.; Life Science Research Center, Gifu Univ.) TAKAHASHI, Masaki; YAMAMOTO, Ayato; AKIBA, Yoshiki; NUMATA, Yuuki; INUZUKA, Toshiyasu; SENGOKU, Tetsuya; YODA, Hidemi

Chair: TAKAHASHI, Masaki (11:20 $\sim$ 12:00)

- \* 11:10-11:20: interval for laptop PC connection.(2C5-15, 2C5-16, 2C5-17, 2C5-18)
- 2C5-15 Studies on synthesis and photoisomerization of a giant cyclic oligopyrrole, containing azobenzene components (Graduate School of Science, Kobe Univ.) LIU, Guanfan; SETSUNE, Jun-ichiro; TSUDA, Akibiko
- 2C5-16 Synthesis of a Coupling Molecule of Indoline Dye with Viologen and its Immobilization on Substrate (Dept of Appl. Chem., Waseda Univ.) FURUTA, Takefumi; NAKAJIMA, Satoshi; OYAIZU, Kenichi; NISHIDE, Hiroyuki
- 2C5-17 Study for the reaction of gold nanoparticles carrying light absorbing functional group. (Okayama Univ. of Sci.) WAKAMATSU, Kan;

MATSUMORI, Youhei; YAMADA, Haruo

2C5-18 Distance control between dyes on the synthesized clay (Tokyo Metropolitan Univ.) IWASE, Yoshitaka; MASUI, Dai; TAKAGI, Shinsuke

#### Sunday, March 27, PM

Chair: MOMOTAKE, Atsuya (13:10∼14:10)

- \* 13:00-13:10: interval for laptop PC connection.(2C5-26, 2C5-27, 2C5-28, 2C5-29, 2C5-30, 2C5-31)
- 2C5-26 Enantiodifferentiating Photocyclodimerization of 2-Anthracenecar-boxylate Mediated by Native and Dimeric β-Cyclodextrins (Graduate School of Engineering, Osaka Univ.) MATSUSHITA, Ryohei; YANG, Cheng; MORI, Tadashi; FUKUHARA, Gaku; INOUE, Yoshihisa
- 2C5-27 Enantiodifferentiating Supramolecular Asymmetric [2+2] Photocycloaddition of Ethylene to Cyclic Enones (Graduate School of Materials Science, Nara Institute of Science and Technology (NAIST)) YANAGISAWA, Yuuki; NISHIYAMA, Yasuhiro; KAKIUCHI, Kiyomi
- 2C5-28 Generation of Chirality by Photo-racemization and Preferential Crystallization (Graduate School of Eng., Chiba Univ.) SAKAMOTO, Masami; YAGISHITA, Fumitoshi; MINO, Takashi; FUJITA, Tsutomu
- 2C5-29 Diastereodifferentiating Photocyclodimerization of 2-Anthracenecar-boxylate Tethered to Cyclic Tetrasaccharide Scaffold (Graduated School of Engineering, Osaka Univ.) NAKAMURA, Tomohiro; FUKUHARA, Gaku; YANG, Cheng; MORI, Tadashi; HIRAMATSU, Hiroyuki; DAN-OH, Yasufumi; TSUJIMOTO, Kazuo; INOUE, Yoshihisa
- 2C5-30 Development of the Asymmetric Reactions Using Reversible Control of Axial Chirality (Graduate School of Eng., Chiba Univ.) SAKAMOTO, Masami; YASUIKE, Nobuo; SUNAOSHI, Kazushi; MINO, Takashi; FUJITA, Tsutomu
- 2C5-31 Enantiodifferentiating Cross-Photocyclodimerization of Anthracene and 2-Anthracenecarboxylic Acid with Chiral Hosts (Graduated School of Engineering, Osaka Univ.) UMEHARA, Hiroaki; FUKUHARA, Gaku; YANG, Cheng; NISHIJIMA, Masaki; MORI, Tadashi; INOUE, Yoshihisa

Chair: MAEDA, Hajime (14:20~15:20)

- \* 14:10-14:20: interval for laptop PC connection.(2C5-33, 2C5-34, 2C5-35, 2C5-36, 2C5-37, 2C5-38)
- 2C5-33 [4+4] Photodimerization of benzoquinolines through cation-pi interactions (Ochanomizu Univ) KAWAMURA, Chiaki; YAMADA, Shinji
- 2C5-34 Enantiodifferentiating Photoisomerization of (Z,Z)-1,3-Cyclooctadiene Included and Sensitized by Naphthoyl-curdlan (Graduated School of Engineering, Osaka Univ.) IMAI, Mami; FUKUHARA, Gaku; YANG, Cheng; MORI, Tadashi; INOUE, Yoshihisa
- 2C5-35 Development of Photoinduced electron transfer-based caged glutamates (Univ. of Tsukuba) MORIYAMA, Haruka; MOMOTAKE, Atsuya; ARAI, Tatsuo
- 2C5-36 Supramolecular Enantiodifferentiating Photocyclodimerization of 2-Anthracenecarboxylate with Phage Display Technique 2 (IMRAM, Tohoku Univ.) MIYACHI, Ayumi; SUGAWARA, Yui; SAKAMOTO, Seiji; NAKAKIDO, Makoto; UI, Mihoko; ARAKI, Yasuyuki; NISHIJIMA, Masaki; TSUMOTO, Kouhei; KINBARA, Kazushi; INOUE, Yoshihisa; WADA, Takehiko
- 2C5-37 Development of new caging groups for releasing carboxylic acids.

  (Univ. of Tsukuba) HONDA, Takuya; MOMOTAKE, Atsuya; ARAI,
- 2C5-38 Construction of hydrogen evolving system with simultaneous water oxidation and oxygenation of substrates by metallo-porphyrins (Department of Applied Chemistry, Graduate School of Urban Environmental Science, Tokyo Metropolitan Univ.; SORST(JST)) KURIMOTO, Kazunori; NABETANI, Yu; SHIMADA Tetsuya, Tetsuya; TACHIBANA, Hiroshi; INOUE, Haruo

Chair: FUKUHARA, Gaku (15:30 $\sim$ 16:30)

- \* 15:20-15:30: interval for laptop PC connection.(2C5-40, 2C5-41, 2C5-42, 2C5-43, 2C5-44, 2C5-45)
- 2C5-40 Radical cyclization via photochemical dehalogenation with hydroxide ion as electron donor (Univ. of Fukui) OHTA, Yasushi; YOSHIMI, Yasuharu; NISHIKAWA, Keisuke; HATANAKA, Minoru; ITOU, Tatsuya; OKADA, Yutaka
- 2C5-41\* Synthesis of New Thiochromone-type Photolabile Protecting Group Having Diazomethyl Group and Application to Phosphate Derivatives (Graduate School of Materials Science, Nara Institute of Science and Technology (NAIST)) ZHANG, Youlai; TANIMOTO, Hiroki; NISHIYAMA, Yasuhiro; MORIMOTO, Tsumoru; KAKIUCHI. Kiyomi
- 2C5-42 Nucleophilic addition with anion via photochemical decarboxylation (Univ. of Fukui) NAOE, Takashi; YOSHIMI, Yasuharu; NISHIKAWA, Keisuke; HATANAKA, Minoru; ITOU, Tatsuya; OKADA, Yutaka
- 2C5-43 Photoreactions of 2-Benzyloxycarbonyl-2-azabicyclo[3.2.1]octa-3,6-diene (The Univ. of Shiga Prefecture) KOJIMA, Masaaki; TSUKISATO, Chikara; KUMAGAI, Tsutomu
- 2C5-44 Photochemical decarboxylation of aminomalonates (Univ. of Fukui) HUNG, Nguyen; YOSHIMI, Yasuharu; NISHIKAWA, Keisuke; HATANAKA, Minoru; ITOU, Tatsuya; OKADA, Yutaka
- 2C5-45 Reaction of Triplet Diphenylcarbene Protected by Four Iodine Groups (Mie Univ.; Aichi Inst. of Tech.; Nagoya Ind. Sci. Res. Inst.)

TSUJITA, Kosaku; BESSHO, Kana; HIRAI, Katsuyuki; KITAGAWA, Toshikazu: TOMIOKA. Hideo

Chair: HIRAI, Katsuyuki (16:40∼17:30)

- \* 16:30-16:40: interval for laptop PC connection.(2C5-47, 2C5-48, 2C5-49, 2C5-50, 2C5-51)
- 2C5-47 Synthesis of Midium-sized Ketoester by Photochemical Decarboxylation (Univ. of Fukui) ANDO, Tomoki; YOSHIMI, Yasuharu; NISHIKAWA, Keisuke; HATANAKA, Minoru; ITOU, Tatsuya; OKADA, Yutaka
- 2C5-48 Formation of Homoallylamine by Three Component Photoreaction of Carbonyl Compounds with Allylsilicon Reagents in the Presence of Amines (Shimane Univ.) MATSUOKA, Daisuke; NISHIGAICHI, Yutaka
- **2C5–49** Synthetic Application of Photochemically Generated α-Hydroxy-o-quinodimethane (Hiroshima Univ.) FUJII, Toshifumi; YONEMITU, Housei; FUJIWARA, Makoto; KOMEYAMA, Kimihiro; TAKAKI, Ken
- 2C5-50 Synthesis of Macrocyclic Lactam and Ketone by Intramolecular Radical Cyclization via Photochemical Decarboxylation (Univ. of Fukui) NISHIKAWA, Keisuke; YOSHIMI, Yasuharu; HATANAKA, Minoru; ITOU, Tatsuya; OKADA, Yutaka
- 2C5-51 Regioselectivity in the Paterno-Buchi reaction of geraniol derivatives (Dept. Chem., Hiroshima Univ. / JST) HISAMOTO, Ken; HIRAGA, Yoshikazu; ABE, Manabu

# Asian International Symposium -Photo Chemistry-

Monday, March 28, PM
Chair: MIZUNO, Kazuhiko (13:00~13:40)

**3C5-25**\* Plenary Lecture Chemoselectivity of SET-photocyclization reactions of acceptor phthalimide-polydonor systems and their synthetic applications (Pusan National Univ., Korea) YOON, Ung Chan (13:00∼13:40)

Chair: NAUMOV, Pance (13:40~14:20)

- 3C5-29\* Invited Lecture Molecular design of mechanofluorochromic dyes and their solid-state fluorescence properties (Hiroshima Univ.) OOYAMA, Yousuke (13:40~14:00)
- 3C5-31\* Invited Lecture Photophysical properties of various shaped multi-porphyrin arrays (Kyoto Univ. and PRESTO, JST) ARATANI, Naoki (14:00~14:20)

Chair: OELGEMoeLLER, Michael (14:30~15:20)

- **3C5-34**\* Keynote Lecture Ultrafast bond twisting dynamics in amyloid fibril sensor (Bhabha Atomic Res Centre, India) NATH, Sukhendu (14:30 ~15:00)
- 3C5-37<sup>#</sup> Invited Lecture New Insights into Molecular Mechanism of Photoinduced and Thermalty Induced Effects in Crystals (Osaka Univ.) NAUMOV, Pance (15:00∼15:20)

Chair: NATH, Sukhendu (15:30~16:20)

- **3C5-40**<sup>#</sup> Keynote Lecture Controllable solid state characteristics of conjugated polymers (Univ of Melbourne, Australia) HAO, Xiaotao (15:30∼ 16:00)
- 3C5-43<sup>#</sup> Invited Lecture Lanthanide luminescence: Future perspective with polarized emission phenomena (Aoyama Gakuin Univ.) HASEGAWA, Miki (16:00∼16:20)

Chair: HAO, Xiaotao (16:30 $\sim$ 17:20)

- **3C5-46**<sup>#</sup> Keynote Lecture Photochemistry in microstructured reactors (Microphotochemistry) The photochemistry of the future? (James Cook Univ., Australia) OELGEMoeLLER, Michael (16:30∼17:00)
- 3C5-49<sup>#</sup> Invited Lecture Selective photocatalytic oxygenation with molecular oxygen using electron-transfer photocatalysts (Osaka Univ.) OHKUBO, Kei (17:00∼17:20)

 $(17:20\sim17:30)$ 

**3C5-51**<sup>#</sup> Closing Remarks (Pusan National Univ., Korea) YOON, Ung Chan (17:20~17:30)

## Organic Chemistry -Reaction and Synthesis-Metallo-organic Chemistry

Tuesday, March 29, AM

Li

Chair: ONODERA, Gen (9:10  $\sim$ 10:10)

- \* 9:00-9:10: interval for laptop PC connection.(4C5-02, 4C5-03, 4C5-04, 4C5-05, 4C5-06, 4C5-07)
- **4C5-02** Halogen-Lithium Exchange Reaction of Perfluoroalkylhalides using Flow Microreactor Systems (Kyoto Univ.) NAGAKI, Aiichiro; TOKUOKA, Shinya; TOMIDA, Yutaka; OSHIRO, Kojun; AMII, Hideki; YOSHIDA, Jun-ichi
- 4C5-03 Organolithium Compounds Bearing Ketone Carbonyl Groups. A Flow Microreactor Approach to Protecting-Group-Free Synthesis (Kyoto

- Univ.) NAGAKI, Aiichiro; KIM, Heejin; YOSHIDA, Jun-ichi
- 4C5-04 Synthesis of Disubstituted Pyridines by Space Integration of Organolithium Reaction Using Flow Microreactor Systems (Kyoto Univ.) YAMADA, Shigeyuki; NAGAKI, Aiichiro; DOI, Masatomo; TOMIDA, Yutaka: TAKABAYASHI, Naofumi; YOSHIDA, Jun-ichi
- 4C5-05 Construction of New Planar-Chiral Paracyclophane Skeletons by Enantioselective ortho-Lithiation (Waseda Univ.) KANDA, Kazumasa; ENDO, Kohei: SHIBATA, Takanori

#### Ma

4C5-06 Transition Metal-Free Coupling of Grignard Reagents with Aryl Halides (Graduate School of Science, Kyoto Univ.) SHIRAKAWA, Eiji; HAYASHI, Yumi; ITOH, Ken-ichi; HAYASHI, Tamio

#### ΑI

**4C5-07** Diisobutylaluminum Hydride-promoted Cyclodimerization of Silylated 1,3-Enynes via Skeletal Rearrangement (Saitama Univ.) KINOSHITA, Hidenori; MIURA, Katsukiyo

#### Ba

Chair: SHIRAKAWA, Eiji (10:20~11:20)

- \* 10:10-10:20: interval for laptop PC connection.(4C5-09, 4C5-10, 4C5-11, 4C5-13, 4C5-14)
- 4C5-09 Selective allylation of azo compounds using reactive barium. (Chiba Univ.) JITSUKAWA, Takuya; YOSHIDA, Kazuhiro; YANAGISAWA, Akira
- 4C5-10 Synthesis of Propargylic Hydrazines using Barium Reagents, and Their Transformation to Propargylic Amines by E1cB Eliminative Cleavage of N-N Bond (Graduate School of Science, Chiba Univ.) KOIDE, Takanori; YOSHIDA, Kazuhiro; YANAGISAWA, Akira

#### Sc

4C5-11\* Rare earth metal-catalyzed regioselective C-H functionalization of anisoles (RIKEN) OYAMADA, Juzo; NISHIURA, Masayoshi; HOU, Zhaomin

#### La

4C5-13 Lanthanum Compound-Catalyzed Reaction of Epoxides with Carbon Dioxide (Faculty of Chemistry, Materials and Bioengineering, Kansai Univ.) KOMAKI, Yuya; UMEDA, Rui; NISHIYAMA, Yutaka

#### lr

**4C5-14** Catalytic transfer deuterogenation in D2O as deuterium source via rapid H/D exchange using iridium catalysts (Natl. Inst. of Advanced Industrial Science and Technology) HIMEDA, Yuichiro

Chair: ENDOU, Kouhei  $(11:30\sim12:30)$ 

- \* 11:20-11:30: interval for laptop PC connection.(4C5-16, 4C5-17, 4C5-19, 4C5-20)
- 4C5-16<sup>†</sup> Regioselective Functionalization of Alkanes by Sequential Dehydrogenation-Hydrozirconation (Okayama Univ.) YAMAMOTO, Shun-ichi; URESHINO, Tomonari; KUNINOBU, Yoichiro; TAKAI, Kazuhiko
- 4C5-17\* Catalytic hydrogenation of carbon dioxide using Ir-PNPcomplexes: experimental and theoretical studies on the reaction mechanism (The Univ. of Tokyo) TANAKA, Ryo; YAMASHITA, Makoto; CHUNG, Lung Wa; MOROKUMA, Keiji; NOZAKI, Kyoko
- 4C5-19 Catalytic interconversion between carbon dioxide-dihydrogen and formic acid using Ir-PNP complex (The Univ. of Tokyo) TANAKA, Ryo; YAMASHITA, Makoto; NOZAKI, Kyoko
- 4C5-20\* Development of Iridium-Catalyzed Addition and Annulation of Carbonyl Chlorides with Alkynes (Graduate School of Engineering, Kyoto Univ.) IWAI, Tomohiro; FUJIHARA, Tetsuaki; TERAO, Jun; TSUJI, Yasushi

#### Tuesday, March 29, PM

#### lr

Chair: FUJITA, Ken-Ichi (13:40 $\sim$ 14:40)

- \* 13:30-13:40: interval for laptop PC connection.(4C5-29, 4C5-30, 4C5-31, 4C5-32, 4C5-33, 4C5-34)
- **4C5-29** Iridium-Catalyzed Regioselective Cycloaddition of Unsymmetrical Diyne with Nitrile (Aoyama Gakuin Univ.) ONODERA, Gen; KOBAYASHI, Junya; KIMURA, Jun-na; TAKEUCHI, Ryo
- 4C5-30 Highly Efficient Synthetic Method for Oligoheteroarens Using Iridium-Catalyzed Cycloaddition of Diyens with Nitriles (Aoyama Gakuin Univ.) ONODERA, Gen; EBIHARA, Yukiko; TAKEUCHI, Ryo
- 4C5-31 Enantioselective Synthesis of Silole-Containing Helicenes Using Interand Intramolecular [2+2+2] Cycloadditions (Waseda Univ.) UCHIYAMA,

- Toshifumi; YOSHINAMI, Yusuke; TUCHIKAMA, Kyoji; ENDO, Kohei; SHIBATA, Takanori
- **4C5-32** Synthesis of Benzoheteroles by Cyclodehydration Using Cationic Iridium Catalyst (Waseda Univ.) HASHIMOTO, Yu-ki; TUCHIKAMA, Kyoji; ENDO, Kohei; SHIBATA, Takanori
- 4C5-33 Construction of Indole Skeleton Initiated by Secondary C-H Bond Activation Using Cationic Iridium Catalyst (Waseda Univ.) HIRASHIMA, Hiroyuki; KASAGAWA, Mitsugu; TSUCHIKAMA, Kyoji; ENDO, Kohei; SHIBATA. Takanori
- 4C5-34 Iridium/Chiral Diene-Catalyzed Asymmetric 1,6-Addition of Arylboroxines to δ-Arylated, α, β, γ, δ-Unsaturated Carbonyl Compounds (Graduate School of Science, Kyoto Univ.) NISHIMURA, Takahiro; NOISHIKI, Akira; HAYASHI, Tamio

Chair: OHMURA, Toshimichi (14:50 $\sim$ 15:50)

- \* 14:40-14:50: interval for laptop PC connection.(4C5-36, 4C5-37, 4C5-38, 4C5-39, 4C5-40, 4C5-41)
- 4C5-36 Iridium-catalyzed reaction of alcohols with enones leading to 1,3-diketones (Faculty of Chemistry, Materials and Bioengineering, Kansai Univ.) NAKAMURA, Kazuhiro; HATANAKA, Shintaro; OBORA, Yasushi
- 4C5-37 Anionic tethered N-heterocyclic carbene: NHC-Ir complex for stereoselective reduction of ketone (Kansai Univ.) CHIYOJIMA, Hiroyuki; SAKAGUCHI, Satoshi
- 4C5-38 Preparation of group 9 transition metal complex bearing functionalized N-heterocyclic carbene for stereoselective hydrosilylation of ketone (Kansai Univ.) KAWABATA, Syun; TOKURA, Hiromu; SAKAGUCHI, Satoshi
- **4C5-39** Iridium Complex-Catalyzed α-alkylation of Acetonitrile with Alcohols (Faculty of Chemistry, Materials and Bioengineering, Kansai Univ.) SAWAGUCHI, Takuya; OBORA, Yasushi
- 4C5-40 Iridium complex-catalyzed α-alkylation of alkylamides with alcohols (Faculty of Chemistry, Materials and Bioengineering, Kansai Univ.) KIMUMOTO, Syota; SAWAGUCHI, Takuya; IUCHI, Yosuke; OBORA, Yasushi
- 4C5-41 Iridium-catalyzed reaction of alcohols leading to tetralin derivatives and highly branched polyols (Faculty of Chemistry, Materials and Bioengineering, Kansai Univ.; ORDIST, Kansai Univ.) ISHIBASHI, Yu; ANNO, Yuka: OBORA, Yasushi: ISHII, Yasutaka

Chair: ENDOU, Kouhei (16:00~17:00)

- \* 15:50-16:00: interval for laptop PC connection.(4C5-43, 4C5-44, 4C5-45, 4C5-46, 4C5-47, 4C5-48)
- 4C5-43 Stereoselective synthesis of azlactone and oxazolinone derivatives in the iridium-catalyzed allylic alkylation (Tottori Univ.) TSUJI, Hiroaki; KAWATURA, Motoi; ITOH, Toshiyuki
- 4C5-44 Iridium-catalyzed reaction of imidazoles with isocyanatesin the presence of a hydrosilane leading to imidazole 2-carboxamide (Faculty of Engineering, Osaka Univ.) FUKUMOTO, Yoshiya; SHIRATANI, Motohiro; CHATANI, Naoto
- 4C5-45 Synthesis of 1,3-Dialkynylisoindoles via Catalytic Dehydrogenation of Isoindolines (Kyoto Univ.) OHMURA, Toshimichi; KIJIMA, Akihito; KOMORI, Yusuke; SUGINOME, Michinori
- **4C5–46** Iridium-Catalyzed Synthesis of Benzocyclobutenes via Dehydrogenation of Isoindolines Followed by Ring Contraction (Kyoto Univ.) OHMURA, Toshimichi; KOMORI, Yusuke; SUGINOME, Michinori
- 4C5-47 Synthesis of Novel Cp\*Ir Complexes Having Functional Bipyridine Ligands and Their Catalytic Activities in Dehydrogenation of Nitrogen Heterocycles (Kyoto Univ.) TANAKA, Yui; FUJITA, Ken-ichi; YAMAGUCHI, Ryohei
- 4C5-48 Dehydrogenative Oxidation of Alcohols in Aqueous Media Catalyzed by Novel Water-Soluble Cp\* Iridium Complexes (Kyoto Univ.) KAWAHARA, Ryoko; FUJITA, Ken-ichi; YAMAGUCHI, Ryohei

# Room C6

Bldg. 8 8-23

## Organic Chemistry -Reaction and Synthesis-Aromatic Compounds

### Saturday, March 26, AM

Chair: FUCHIBE, Kohei (10:20~11:00)

- \* 10:10-10:20: interval for laptop PC connection.(1C6-09, 1C6-10, 1C6-11, 1C6-12)
- 1C6-09 Enhanced Clickability of Doubly Sterically-Hindered Aryl Azides (Tokyo Med. & Dent. Univ.; Tokyo Inst. Tech.; Chisso Petrochem. Co.) KANNO, Kimiyuki; YOSHIDA, Suguru; SHIRAISHI, Akira; MATSUSHITA, Takeshi; UEKUSA, Hidehiro; HOSOYA, Takamitsu
- 106-10 Theoretical Study on Enhanced Clickability of Doubly Sterically-Hindered Aryl Azides (Tokyo Med. & Dent. Univ.; Tokyo Inst. Tech.; Chisso Petrochem. Co.) YOSHIDA, Suguru; SHIRAISHI, Akira; KANNO,

- Kimiyuki; MATSUSHITA, Takeshi; UEKUSA, Hidehiro; HOSOYA, Takamitsu
- 106-11 Effect of bulky substituents in 1,3-dipolar cycloaddition of aromatic nitrile oxide and nitrone (Tokyo Med. & Dent. Univ.; Tokyo Inst. Tech.; Chisso Petrochem. Co.) OKADA, Kensuke; YOSHIDA, Suguru; MATSUSHITA, Takeshi; UEKUSA, Hidehiro; HOSOYA, Takamitsu
- 1C6-12 Strain-promoted Double-click Reaction: A Novel Chemical Modification Method of Azido-Biomolecules (Tokyo Med. & Dent. Univ.; Tokyo Inst. Tech.; Chisso Petrochem. Co.; Kyoto Univ.) HOSOYA, Takamitsu; KII, Isao; SHIRAISHI, Akira; HIRAMATSU, Toshiyuki; MATSUSHITA, Takeshi; UEKUSA, Hidehiro; YOSHIDA, Suguru; YAMAMOTO, Makoto; KUDO, Akira; HAGIWARA, Masatoshi

#### Chair: TAKAYA, Jun (11:10~12:10)

- \* 11:00-11:10: interval for laptop PC connection.(1C6-14, 1C6-15, 1C6-16, 1C6-17, 1C6-18)
- 1C6-14 Palladium(II)-Catalyzed Electrophilic Cyclization of 1,1-Difluoro-1alkenes (1): Construction of Fluorine-Substituted Phenanthrene Framework (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) MORIKAWA, Toshiyuki; UEDA, Ryu; FUCHIBE, Kohei; ICHIKAWA, Junji
- 1C6-15 Palladium(II)-Catalyzed Electrophilic Cyclization of 1,1-Difluoro-lalkenes (2): Synthesis of Fluorine-Substituted Polycyclic Aromatic Hydrocarbons (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) MORIKAWA, Toshiyuki; UEDA, Ryu; FUCHIBE, Kohei; ICHIKAWA, Junji
- **1C6-16** Synthesis of Polycyclic Aromatic Hydrocarbons (PAHs) by the Domino Friedel-Crafts-type Cyclization of 1,1-Difluoro-1-alkenes (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) TAKAHASHI, Hiroki; FUCHIBE, Kohei; ICHIKAWA, Junji
- 1C6-17 Aromatic Trifluoromethylation with Trifluoromethylboron Reagents (Sagami Chemical Research Institute; Graduate School of Engineering, Tokai Univ.) KINOSHITA, Yuki; ARAKI, Keisuke; INOUE, Munenori
- 1C6-18\* General, Copper-Mediated Trifluoromethylation of Aryl Iodides Under Mild Conditions (Univ. of Illinois at Urbana-Champaign) MORIMOTO, Hiroyuki; TSUBOGO, Tetsu; LITVINAS, Nichole D.; HARTWIG, John F.

#### Saturday, March 26, PM

Chair: SUZUKI, Takeyuki (13:20∼14:20)

- \* 13:10-13:20: interval for laptop PC connection.(1C6-27, 1C6-28, 1C6-29, 1C6-30, 1C6-31)
- 1C6-27 Iron-mediated functionalization of phenols (Grad. Sch. Eng., Hiroshima Univ.) KOMEYAMA, Kimihiro; KASHIHARA, Tetsuya; TAKAKI Ken
- 1C6-28 Synthetic Application of 2,3-Bis(diethylphosphono)-1,3-butadiene (3) (Kinki Univ.) OKADA, Yoshiharu; KATO, Ryuichi; SUGISHITA, Kazuki; NOMURA, Masato
- 106-29 Geminal bond participation in the Carroll rearrangements (Gifu Univ.) NARUSE, Yuji; SHIOMI, Miyu; TODO, Yasuhiro
- 1C6-30 Birch-Type Silylation Reaction of Polycyclic Aromatic Compounds (Grad. Sch. Eng., Gunma Univ.) KANNO, Ken-ichiro; MAEMURA, Yumika; KYUSHIN, Soichiro
- 1C6-31\* Microwave-Assisted Highly Efficient Synthesis of 9,10-Disilatriptycene and Its Functional Group Transformation (Grad. Sch. Eng., Gunma Univ.) KURIBARA, Takayoshi; ISHIDA, Shintaro; KYUSHIN, Soichiro; KUDO, Takako

### Chair: KUNINOBU, Yoichiro (14:30 $\sim$ 15:20)

- \* 14:20-14:30: interval for laptop PC connection.(1C6-34, 1C6-35, 1C6-36, 1C6-37, 1C6-38)
- 1C6-34 Asymmetric Synthesis of Optically Active Biaryl Compounds via Chiral Phosphoric Acid-Catalyzed Enantioselective Bromination (Fac. Sci., Gakushuin Univ.) ICHIKAWA, Yuki; MORI, Keiji; AKIYAMA, Takahiko
- 1C6-35 Development of enantioselective MBH reaction promoted by acid-base organocatalyst (ISIR, Osaka Univ.) MURAKAMI, Shinya; TAKIZAWA. Shinobu: SASAI, Hiroaki
- 106-36 Development of Acid-Base Organocatalyst Bearing Chiral Spiro Backbone (Osaka Univ. ISIR) KIRIYAMA, Kimiko; IEKI, Kenta; TAKIZAWA, Shinobu; SASAI, Hiroaki
- 106-37 Development of recyclable acid-base organocatalyst (ISIR, Osaka Univ.) HIRATA, Shuichi.; INOUE, Naohito; TAKIZAWA, Shinobu; SASAI, Hiroaki
- **1C6-38** Ni-Al catalyzed hydrogenation reaction of aromatic compounds in water (Grad. Sch. Sci. Eng., Saga Univ.) KWON, Hyeokmi; MIYAMOTO, Shinpei; YAMATO, Takehiko

#### Chair: KANNO, Ken-Ichiro (15:30~16:20)

- \* 15:20-15:30: interval for laptop PC connection.(1C6-40, 1C6-42, 1C6-43, 1C6-44)
- 1C6-40\* Introduction of benzoyl group to naphthalene derivative via electrophilic aromatic substitution alkylation by trihalomethylbenzene and influence of acidic mediators to the regioselectivity (Tokyo Univ. of Agriculture and Technology) OKAMOTO, Akiko; SEKIZUKA, Tatsuya; YONEZAWA, Noriyuki
- 1C6-42 Lewis Acid-Catalyzed Synthesis of Polycyclic Aromatic Compounds

- via Intramolecular Electrophilic Reaction (Okayama Univ.) TATSUZAKI, Tomohiro; MATSUKI, Takashi; KUNINOBU, Yoichiro; TAKAI, Kazuhiko
- 1C6-43 Regioselective Friedel-Crafts Type Allylation with Arylboronic Acid (Graduate School of Science, Osaka Prefecture Univ.) KASHIMA, Ryo; UEDA, Mitsuhiro; RYU, Ilhyong
- **106-44** Influence of Lewis acid mediator on electrophilic aromatic aroylation behaviour of α-aroylnaphthalene compounds (Tokyo Universty of Agriculture and Technology) ZHANG, Peng; HIJIKATA, Daichi; MITSUI, Ryosuke; OKAMOTO, Akiko; YONEZAWA, Noriyuki

#### Sunday, March 27, AM

Chair: NISHINAGA, Tohru (10:10~11:00)

- \* 10:00-10:10: interval for laptop PC connection.(2C6-08, 2C6-09, 2C6-10, 2C6-11, 2C6-12)
- 2C6-08 Synthesis and Double-helix Formation of Ethynylhelicene Oligomers Possessing Branched Alkyloxycarbonyl Side Chain (Graduate School of Farmaceutical Sciences, Tohoku Univ.) SAITO, Nozomi; SHIGENO, Masanori; YAMAGUCHI, Masahiko
- 2C6-09 Synthesis of Enantiomeric Amidohelicene Oligomers and Chiral Recognition in the Homo-helix-dimer Formation (Graduate school of Pharmaceutical Sciences, Tohoku Univ.) ICHINOSE, Wataru; ITO, Jun; SHIGENO, Masanori; YAMAGUCHI, Masahiko
- 2C6-10 Synthesis and Aggregation of (P)-Amido/(M)-Ethynyl/(P)-Amidohelicene Triblock Compound (Department school of Pharmaceutical Sciences, Tohoku Univ.) ICHINOSE, Wataru; ITO, Jun; SHIGENO, Masanori; YAMAGUCHI, Masahiko
- 2C6-11# Halogenation of Substituted Acenes (Catalysis Research Center, Hokkaido Univ.) ZHANG, Sicheng; SONG, Zhiyi; NAKAJIMA, Kiyohiko; TAKAHASHI, Tamotsu
- 2C6-12<sup>#</sup> Preparation and Properties of Substituted Acene Derivatives (Catalysis Research Center, Hokkaido Univ.) WANG, Yunhua; SONG, Zhiyi; TAKAHASHI, Tamotsu

#### Chair: SHIGENO, Masanori (11:10 $\sim$ 12:00)

- \* 11:00-11:10: interval for laptop PC connection.(2C6-14, 2C6-16, 2C6-17, 2C6-18)
- **2C6-14\*** Metal triflate catalyzed one pot synthesis of acenesfrom *ο*-dicarbonylbenzenes (Okayama Univ.) NISHINA, Yuta; URESHINO, Tomonari
- 2C6-16 Synthesis of Unsymmetrical 5,14-Disubstituted Pentacenes from Isobenzofurans via C-H Bond Activation (Okayama Univ.) SEIKI, Takayuki; KANAMARU, Shunsuke; NISHINA, Yuta; KUNINOBU, Yoichiro; TAKAI, Kazuhiko
- 2C6-17 Efficient Synthesis of Substituted Polyacene Derivatives by Successive Cycloaddition of Isozenzofurans (Department of Chemistry, School of Science and Technology, Kwansei Gakuin Univ., PRESTO) KAWANISHI, Kazuki; KAKIHARA, Daisuke; HAMURA, Toshiyuki
- **2C6-18** Synthesis of Dihemisalen Bearing Hexaarylbenzene. (Osaka Univ.) AMAYA, Toru; MIYASAKA, Akihiro; HIRAO, Toshikazu

# Sunday, March 27, PM

Chair: AMAYA, Toru (13:10~14:00)

- \* 13:00-13:10: interval for laptop PC connection.(2C6-26, 2C6-27, 2C6-28, 2C6-29, 2C6-30)
- 2C6-26 Synthesis of triphyrin analogues that have thiophene skeleton (Ehime Univ.) SAKAKIBARA, Yuka; KUZUHARA, Daiki; YAMADA, Hiroko; MORI, Shigeki; OKUJIMA, Tetsuo; UNO, Hidemitsu
- 2C6-27 Synthesis of Directly Linked Pyrrole Oligomers (Institute of Science and Engineering, Ritsumeikan Univ.; PRESTO, JST) MAEDA, Hiromitsu; KAWASAKI, Yuto
- 2C6-28 Electronic Structures of Tetrathiaporphyrins (Graduate School of Sciences, Kyushu Univ.,; Institute for Materials Chemistry and Engineering (IMCE), Kyushu Univ.) KON-NO, Masaru; SHINMYOZU, Teruo
- 2C6-29 Synthesis and Properties of Thiophene-Pyrrol Oligomer having Benzodithiophene unit (Graduate School of Science and Engineering, Tokyo Metropolitan Univ.) UNEME, Shunsuke; TAKASE, Masayoshi; IYODA, Masahiko; NISHINAGA, Tohru
- 2C6-30 Synthesis of Ditheno[a,c]anthracenes via Bergman Cyclization (Tokyo Metropolitan Univ.) HASEYAMA, Kahori; TAKASE, Masayosi; NISHINAGA, Tohru; IYODA, Masahiko

Chair: OTANI, Hiroyuki (14:10 $\sim$ 15:00)

- \* 14:00-14:10: interval for laptop PC connection.(2C6-32, 2C6-34, 2C6-35, 2C6-36)
- 2C6-32\* Quantitative Synthesis of m-Phenyleneimine Macrocycles Based on Dynamic Covalent Chemistry and π-Stacking (Tokyo Polytechnic Univ.) MATSUMOTO, Toshihiko; SUGAYA, Saori; HASEGAWA, Sho
- 2C6-34 Synthesis and property of segregated donor-acceptor cyclophanes (Tokyo Metropolitan Univ.) INABE, Ayumi; TAKASE, Masayoshi; NISHINAGA, Tohru; NOMURA, Kotohiro
- 2C6-35 Reactions between [60]Fullerene and Various Dibenzylethylenediamines (Gunma Univ.) SAITO, Yuichiro; KATO, Shin-ichiro; NAKAMURA, Yosuke
- 2C6-36 Synthesis and Structure of Novel Oxacalixarenes (Graduate School

of Engineering, Tottori Univ.) OHMICHI, Taira; YASUKAWA, Yusuke; KOBAYASHI, Kazuhiro; KONISHI, Hisatoshi

Chair: KATO, Shin-ichiro (15:10~16:00)

- \* 15:00-15:10: interval for laptop PC connection.(2C6-38, 2C6-40, 2C6-41, 2C6-42)
- 2C6-38\* Synthesis and Emission Properties of Hexasubstituted Benzodithiophene Derivatives: Application to Unusual White Organic Light Emitting Diodes. (Fac. Sys. Eng., Wakayama Univ.) OSUGA, Hideji; HINATSU, Masako; TSUZUKI, Sayaka; AKIMOTO, Ikuko; SAKAMOTO, Hidefumi
- 2C6-40 Synthesis and Properties of 1,8-Bis[(2-Nalkylaminotoropon-5-yl)ethy-nyl]-10-dodecylanthracene (Yokohama National Univ.) INUI, Chie; TAKASHIMA, Hiroaki; OTANI, Hiroyuki
- 2C6-41 Synthesis and Optical Properties of Bitroponoid Molecules Extended of 2,5-Dialkyloxybenzene Ring (Yokohama National Univ.) MATSUURA, Miho; BUSHIDA, Mitsuru; NAGAO, Nozomi; OTANI, Hiroyuki
- 2C6-42 Synthesis and light-emitting characteristics of donor/acceptor type oligo(phenyleneethnylene)s having acceptor unit at the both molecular end (Department of Chemistry, Faculty of Science and Engineering, Kinki Univ.) FUKAKUSA, Miwa; YAMAGUCHI, Yoshihiro; MATSUBARA, Yoshio; YOSHIDA, Zen-ichi

Chair: OSUGA, Hideji (16:10~16:50)

- \* 16:00-16:10: interval for laptop PC connection.(2C6-44, 2C6-45, 2C6-46, 2C6-47)
- 2C6-44 Synthesis of Fluoro-substituted Phenyleneethynylenes and Their Optical and Electrochemical Properties (Okayama Univ. of Sci.) ORITA, Akihiro; SUZUMA, Yoshinori; MATSUO, Daisuke; YANG, Xin; OTERA, Junzo
- 2C6-45 Synthesis of Extended π-Conjugated Systems via Multiple Cycloadditions of Triphenylene Derivatives (Department of Chemistry, School of Science and Technology, Kwansei Gakuin Univ., PRESTO) KAKUDA, Takamasa; HAMURA, Toshiyuki
- 2C6-46 Reaction of Benzanthrone with Organometallic Reagents: Selective Synthesis of 6-Ary and 6-Ethynyl Substituted Benzanthrones (Faculty of Chemistry, Materials and Bioengineering, Kansai Univ.) NAMBA, Teruaki; UMEDA, Rui; NISHIYAMA, Yutaka
- **2C6-47** Synthesis of stable [\$^3C\_6\$]-vanillin and its analogues (Waseda Univ.) TAINAKA, Rieko; SUEKI, Shunsuke; SHIMIZU, Isao

# Organic Chemistry -Reaction and Synthesis-Organic Electron Transfer Chemistry

# Monday, March 28, AM

Chair: ATOBE, Mahito  $(9:00\sim 10:00)$ 

- \* 8:50-9:00: interval for laptop PC connection.(3C6-01, 3C6-02, 3C6-03, 3C6-04, 3C6-05, 3C6-06)
- 3C6-01 Development of Recyclable Triarylamine Mediators and Their Appilications to Electrocatalytic Reactions in Ionic Liquid (Tokyo Institute of Technology) TAKAHASHI, Kohta; FURUSAWA, Takashi; INAGI, Shinsuke; FUCHIGAMI, Toshio
- 3C6-02 Synthesis of Novel Conjugated Polymer Containing Triarylamine Moiety and Its Application to Polymer Mediator System (Tokyo Institute of Technology) KAIHATSU, Noriyuki; HAYASHI, Shotaro; KOSEKI, Kazuya; INAGI, Shinsuke; FUCHIGAMI, Toshio
- **3C6-03** Integrated Oxidation Reactions Based on Anodically Generated Triflate Pools (Graduate School of Engineering, Kyoto Univ.) ASHIKARI, Yosuke; NOKAMI, Toshiki; YOSHIDA, Junichi
- 3C6-04 Generation and Reaction of Alkoxycarbenium Ions by Indirect Cation Flow Method and Applications to Glycosylation (Kyoto Univ.) SAITO, Kodai; NOKAMI, Toshiki; YOSHIDA, Jun-ichi
- **3C6-05** Stereoselective Addition of Organometallic Reagents to Cyclic *N*-Acyliminium Ions Having a Piperidine Skeleton (Graduate School of Natural Science and Technology, Okayama Univ.) YAMASHITA, Atsuhiro; ICHIHASHI, Kazuki; MITSUDO, Koichi; SUGA, Seiji
- **3C6-06** Stereoselectivities in the Reaction of Cyclic *N*-Acyliminium Ions Having a Piperidine Skeleton (Graduate School of Natural Science and Technology, Okayama Univ.) ICHIHASHI, Kazuki; YAMASHITA, Atsuhiro; MITSUDO, Koichi; SUGA, Seiji

Chair: SUGA, Seiji (10:10∼11:10)

- \* 10:00-10:10: interval for laptop PC connection.(3C6-08, 3C6-09, 3C6-10, 3C6-12)
- 3C6-08 Generation and Reactions of Dendritic Diarylcarbenium Ions Bearing Terminal Functional Groups. (Univ. of Kyoto) MUSYA, Naoki; MOROFUJI, Tatsuya; NOKAMI, Toshiki; YOSHIDA, Jun-ichi
- **3C6-09** Electrochemical Synthesis of Dendronized Polymers Bearing Peripheral Functional Groups. (Kyoto Univ.) MOROFUJI, Tatsuya; MUSYA, Naoki; NOKAMI, Toshiki; YOSHIDA, Jun-ichi
- **3C6-10\*** Development of Near-infrared Emission System Based on Firefly Bioluminescence (Department of Chemistry, Keio Univ.) SAITO, Tsuyoshi; IWANO, Satoshi; NIWA, Haruki; MAKI, Shojiro; NISHIYAMA, Shigeru
- **3C6-12\***<sup>†</sup> Electrochemical Patterning of Conducting Polymer by Using Bipolar Electrode (Tokyo Institute of Technology) ISHIGURO, Yutaka; INAGI,

Shinsuke; FUCHIGAMI, Toshio

Chair: MITSUDO, Koichi (11:20~12:20)

- \* 11:10-11:20: interval for laptop PC connection.(3C6-15, 3C6-17, 3C6-19)
- **3C6-15\***<sup>†</sup>Application of o-carborane to cathodic mediator (Fuchigami laboratory, Tokyo Institute of Technology) HOSOI, Kohei; INAGI, Shinsuke: FUCHIGAMI, Toshio
- 3C6-17\* Sequential two-step reactions using electrochemical microreactor -Electrosynthesis of o-quinone and its subsequent nucleophilic reaction-(Tokyo Tech; Yokohama National Univ.) KASHIWAGI, Tsuneo; AMEMIYA, Fumihiro; FUCHIGAMI, Toshio; ATOBE, Mahito
- **3C6-19\*** Preparation of transparent nano-emulsion using tandem acoustic emulsification and its application to electropolymerization (Tokyo Tech; Yokohama National Univ.; NIPPON CHEMI-CON Corp.) NAKABAYASHI, Koji; MACHIDA, Kenji; TAKEDA, Sekihiro; TAMAMITHU, Kenji; FUCHIGAMI, Toshio; ATOBE, Mahito

#### Monday, March 28, PM

Chair: SENBOKU, Hisanori (13:30∼14:30)

- \* 13:20-13:30: interval for laptop PC connection.(3C6-28, 3C6-29, 3C6-30, 3C6-31, 3C6-32, 3C6-33)
- 3C6-28 Generation and accumulation of the reactive species by the electrochemical oxidation of diarylamines (Kyoto Univ.) SUEHIRO, Takafumi; NOKAMI, Toshiki; YOSHIDA, Jun-ichi
- 3C6-29 Synthesis and Redox Properties of Pyrenetetraones (Kyoto Univ.) MATSUO, Takahiro; KOMAE, Kazutomo; NOKAMI, Toshiki; YOSHIDA, Iun-ichi
- 3C6-30 Electrochemical Synthesis of Amino Sugar-containing Oligosaccharides. (Kyoto Univ.) SAIGUSA, Yoshihiro; NOKAMI, Toshiki; YOSHIDA, Jun-ichi
- 3C6-31 Preparation of Triphenylphosphine by Electroreduction of Heterosubstituted Triphenylphosphonium Salts (Okayama Univ.) TANAKA, Motofumi; YANO, Tomotake; KUROBOSHI, Manabu; TANAKA, Hideo
- 3C6-32 Me<sub>3</sub>SiCl-promoted electroreduction of triphenylphosphine oxideto triphenylphosphine (Okayama Univ.) KOBAYASHI, Kazuma; YANO, Tomotake; KUROBOSHI, Manabu; TANAKA, Hideo; KAWAKUBO, Hiromu
- 3C6-33 Anodic oxidation of carbamates in the presence of solid-supported acids (Shibaura Institute of Technology) TAJIMA, Toshiki

#### Tuesday, March 29, AM

Chair: INAGI, Shinsuke  $(9:00\sim10:00)$ 

- \* 8:50-9:00: interval for laptop PC connection.(4C6-01, 4C6-02, 4C6-03, 4C6-04, 4C6-05, 4C6-06)
- 4C6-01 Modification of Thermoresponsive Polymers Bearing TEMPO Units on the Anodically Oxidized Carbon by Living Radical Graft-Polymerization (Kinki Univ.) HIOKI, Tomoya; ISHIFUNE, Manabu
- 4C6-02 Preparation of pyrrole group-terminated optically active thermoresponsive polymers and their electropolymerization (Kinki Univ.) SAZANAMI, Daisuke; ISHIFUNE, Manabu
- **4C6-03** Preparation of the palladium pincer complex-fixed graphite and its catalytic activity in Heck reactions (Kinki Univ.) WATANABE, Maki; ISHIFUNE, Manabu
- 4C6-04<sup>†</sup> Synthesis of ethyl 2,2-difluoro-2-(trimethylsilyl)acetate via reductive defluorination using Mg/TMSCl (Fac. Eng., Okayama Univ.) UTSUMI, Shinva: KATAGIRI. Toshimasa
- 4C6-05 Synthesis and ability of hydrogen evolution of imine-oxime type cobalt binuclear complex (Kyushu Univ.) TAKAHASHI, Masahiro; SHIMAKOSHI, Hisashi; ABE, Masaaki; HISAEDA, Yoshio
- 4C6-06 Electron transfer reaction of homoallyl alcohol derivatives by in-situ generated amine radical cation (Niigata Univ., Faculty of Science, Graduate School of Science and Technology) HASEGAWA, Eietsu; KOMATA, Shota; NEGISHI, Yuta

Chair: ISHIFUNE, Manabu  $(10:10{\sim}11:10)$ 

- \* 10:00-10:10: interval for laptop PC connection.(4C6-08, 4C6-09, 4C6-10, 4C6-11, 4C6-12, 4C6-13)
- 4C6-08 Synthesis of 4-Chloroazetidinones by Oxidative Desulfo-chlorination of 4-Dithioazetidinones (Okayama Univ.) SATO, Shun; KUROBOSHI, Manabu; TANAKA, Hideo
- 4C6-09 Electrooxidation of Catechols and Phenols in Sulfuric Acid (Graduate School of Natural Science and Technology, Okayama Univ.) FUJIWARA, Takashi: MUROBOSHI, Manabu: TANAKA, Hideo
- 4C6-10<sup>#</sup> Synthesis of 2-trifluoromethylfuran derivatives by Mg-promoted reductive trifluoroacetylation (Nagaoka Univ. of Tech.) XIE, Chunchao; MURAKAMI, Taro; MAEKAWA, Hirofumi
- 4C6-11 Mg promoted regioselective cross-coupling reaction of azulene and ethyl trifluoroacetate (Nagaoka Univ. of Tech.) SASAKI, Ken; MAEKAWA, Hirohumi
- 4C6-12 Electro-reductive Halogen-deuterium Exchange of Aryl Halides in CD<sub>3</sub>CN (Graduate School of Natural Science and Technology, Okayama Univ.) OKADA, Takahiro; SHIMOHARA, Shuichi; MITSUDO, Koichi; SUGA, Seiji

4C6-13 Mukaiyama Aldol Reaction Catalyzed by Redox Switchable Catalysts (Graduate School of Natural Science and Technology, Okayama Univ.) TAKASUKA, Yuki; KAWAKAMI, Mai; MITSUDO, Koichi; SUGA, Seiji

Chair: MITSUDO, Koichi (11:20~12:10)

- \* 11:10-11:20: interval for laptop PC connection.(4C6-15, 4C6-16, 4C6-17, 4C6-18, 4C6-19)
- **4C6-15** Synthesis of 2,3-Dihydrobenzofuran-3-acetic acids by Electrochemical Radical Cyclization-Carboxylation (Graduate School of Engineering, Hokkaido Univ.) SENBOKU, Hisanori; MICHINISHI, Jun-ya; HARA, Shoji
- 4C6-16 One electron oxidation of sterically crowded triarylphosphines bearing electron donors (Graduate School of Science, Tohoku Univ.) SASAKI, Shigeru; SASAKI, Kohiji, IZAWA, Masatoshi; MURAKAMI, Midori; SUTOH, Katsuhide; MURAKAMI, Fumiki; YOSHIFUJI, Masaaki; MORITA, Noboru
- 4C6-17 Developement of facile method for preparation ofmonocyclic and bicyclic beta-amino acids (Nagasaki Univ.) KAMOGAWA, Satoshi; ONOMURA, Osamu; KURIYAMA, Masami; MURAMATSU, Wataru
- 4C6-18 Selective Anodic Fluorination of Dithioacetals Having Various Substituents at the Alpha-position (Tokyo Institute of Technology) MOROZUMI, Shunya; YIN, Bin; INAGI, Shinsuke; FUCHIGAMI, Toshio
- **4C6-19** Syntheses of new organofluorine compounds using electrochemical and click reactions (Tokyo Institute of Technology) KURIBAYASHI, Shunsuke; INAGI, Shinsuke; FUCHIGAMI, Toshio

# Room C7

Bldg. 8 8-33

# Organic Chemistry -Reaction and Synthesis-Metallo-organic Chemistry

Saturday, March 26, AM

### Ti, Zr, V

Chair: MORI, Keiji (9:50 ∼11:00)

- \* 9:40-9:50: interval for laptop PC connection.(1C7-06, 1C7-07, 1C7-08, 1C7-09, 1C7-10, 1C7-11, 1C7-12)
- 1C7-06 Stereochemistry of the Addition of Allyltitanocenes to Cyclic Ketones (Tokyo Univ. of Agric. and Tech.) TAKEDA, Takeshi; YOSHIDA, Satoshi; TAJIMA, Yuki; NISHIMURA, Takuya; TSUBOUCHI, Akira
- **1C7-07** Stereoselective Preparation of 1,4-Dienes by the Titanocene(II)-promoted Reaction of(*Z*)-Alkenyl Sulfones with Heteroatom-substituted Allenes (Tokyo Univ. of Agric. and Tech.) OISHI, Shigeki; HATANO, Keisuke; TSUBOUCHI, Akira; TAKEDA, Takeshi
- 1C7-08 Synthesis of new tetravalent metal complexes with a trianionic ligand and their application to the copolymerization of epoxides with CO<sub>2</sub> (The Univ. of Tokyo, Graduate School of Engineering) KOBAYASHI, Kazuki; NAKANO, Koji; NOZAKI, Kyoko
- 1C7-09 Sequential Zirconacycle Formation/Ring-Closing Metathesis of Alkynylboronates (Graduate School of Natural Science and Technology, Okayama Univ.) NISHIHARA, Yasushi; SAITO, Daisuke; CHANG, Ninghui; TAKAGI, Kentaro
- 1C7-10 Development of Novel Perfluoroalkylation via Titanium and Zirconium Reagents (Tokyo Institute of Technology.) FUJIU, Motohiro; ITO, Shigekazu; MIKAMI, Koichi
- 1C7-11 Development of Indium-Mediated Novel Trifluoromethylation (Tokyo Institute of Technology.) FUJIU, Motohiro; ITO, Shigekazu; MIKAMI, Koichi
- **107–12** V(V)-Induced Oxidative Coupling Reaction via Hydroboration of  $\alpha$ ,  $\beta$ -Unsaturated Carbonyl Compounds (Osaka Univ.) AMAYA, Toru; MASUDA, Takaya; HIRAO, Toshikazu

# Nb, Cr, Se

Chair: NISHIHARA, Yasushi (11:10 $\sim$ 12:20)

- \* 11:00-11:10: interval for laptop PC connection.(1C7-14, 1C7-15, 1C7-16, 1C7-17, 1C7-18, 1C7-19, 1C7-20)
- 1C7-14 Cycloaddition reactions catalyzed by NbCl<sub>5</sub>/hydrosilane system (Faculty of Chemistry, Materials and Bioengineering, Kansai Univ.) SATOH, Yasushi; OBORA, Yasushi
- 1C7-15 Preparation of low-valent niobium from niobium pentachloride and their use in catalysis (Faculty of Chemistry, Materials and Bioengineering, Kansai Univ.) OZAKI, Makoto; SATOH, Yasushi; OBORA, Yasushi
- 1C7-16 Low-valent Niobium-catalyzed Synthesis of Indenes via activation of carbon-fluorine bond and carbon-hydrogen bond (Fac. Sci., Gakushuin Univ.) ATOBE, Kohei; FUCHIBE, Kohei; MORI, Keiji; AKIYAMA, Takahiko
- **107–17** Cr(CO)<sub>5</sub>(L)- Catalyzed Tandem Cyclization of α, β-Unsaturated Thioimidate Derivatives Containing an Enyne Moiety. (Tokyo Institute of

- Technology) KARIBE, Yusuke; KUSAMA, Hiroyuki; IWASAWA, Nobuharu
- 1C7-18 Anti-Markovnikov Selective Alkoxylation of Styrene-Cr Complexes (Waseda Univ.) OTSUKA, Maiko; ENDO, Kohei; SHIBATA, Takanori
- 1C7-19# Kinetic Resolution of Planar-Chiral (Arene)chromium Complexesby Mo-Catalyzed Asymmetric Ring-Closing Metathesis (Osaka Prefecture Univ.; Catalysis Research Center, Hokkaido Univ.) OGASAWARA, Masamichi; WU, Wei-yi; KAMIKAWA, Ken; WATANABE, Susumu; ARAE, Sachie; TAKAHASHI. Tamotsu
- 1C7-20 Synthesis and X-ray crystallography of optically active cyclohexene (Grad. Sch. Sci., Eng., Yamagata Univ.) KATO, Akane; MURAKAMI, Satoshi; KATAGIRI, Hiroshi; MATSUMOTO, Takatoshi; WATANABE, Masataka; SATO, Ei-ichi; KIJIMA, Tatsuro

### Saturday, March 26, PM

Chair: SAWAMURA, Masaya (13:30∼14:30)

- \* 13:20-13:30: interval for laptop PC connection.(1C7-28, 1C7-31)
- 1C7-28 CSJ Award for Young Chemists Development of Novel and Highly Efficient Methods to Construct Carbon-Carbon Bonds Using Group 7 Transiton Metal Catalysts (Grad. Sch. Nat. Sci. and Technol., Okayama Univ.) KUNINUBU, Yoichiro
- 1C7-31 Young Scholar Lectures of CSJ pi-acidic metal-catalyzed reactions via cleavage of sigma bonds between main elements in body (Grad. Sch. Sci., Tohoku Univ.) NAKAMURA, Itaru

#### Cu

Chair: AIKAWA, Kohsuke (14:40~15:40)

- \* 14:30-14:40: interval for laptop PC connection.(1C7-35, 1C7-36, 1C7-38, 1C7-39)
- 1C7-35 Copper-Catalyzed Hydrocarboxylation of Alkynes Utilizing Carbon Dioxide and Hydrosilanes (Graduate School of Engineering, Kyoto Univ.) FUJIHARA, Fujihara; XU, Tinghua; SEMBA, Kazuhiko; TERAO, Jun; TSUJI. Yasushi
- 1C7-36\* Copper-Catalyzed Semihydrogenation and Regioselective Hydroboration of Alkynes (Graduate School of Engineering, Kyoto Univ.) SEMBA, Kazuhiko: FUJIHARA. Tetsuaki: TERAO. Jun: TSUJI. Yasushi
- 1C7-38 Copper-Catalyzed Regioselective Hydroboration of 1,3-Dienes: Control of the Regioselectivity Utilizing Different Active Species (Graduate School of Engineering, Kyoto Univ.) SHINOMIYA, Masataka; SEMBA, Kazuhiko; FUJIHARA, Tetsuaki; TERAO, Jun; TSUJI, Yasushi
- 1C7-39\*\* Copper-catalyzed direct carboxylation of C-H bonds with carbon dioxide (RIKEN) ZHANG, Liang; CHENG, Jianhua; HOU, Zhaomin

Chair: FUJIHARA, Tetsuaki (15:50 $\sim$ 16:50)

- \* 15:40-15:50: interval for laptop PC connection.(1C7-42, 1C7-43, 1C7-44, 1C7-45, 1C7-46, 1C7-47)
- 107-42 Copper-Catalyzed Conjugate Additions of Alkylboranes (Department of Chemistry, Faculty of Science, Hokkaido Univ.) YOSHIDA, Mika; OHMIYA, Hirohisa; SAWAMURA, Masaya
- 1C7-43 Copper-Catalyzed Reactions of Alkylboranes to Carbon Dioxide (Department of Chemistry, Faculty of Science, Hokkaido Univ.) TANABE, Masahito; OHMIYA, Hirohisa; SAWAMURA, Masaya
- 1C7-44 Copper-Catalyzed Asymmetric 1,4-Addition of Organoboronates to Alkylidenecyanoacetates (Graduate School of Science, Kyoto Univ.) SHINTANI, Ryo; TAKATSU, Keishi; HAYASHI, Tamio
- **107-45** Conjugate Reduction of α, β-Unsaturated Carbonyl Compounds with Hydrosilanes Catalyzed by a Silica-Supported Phosphine-Copper Complex (Department of Chemistry, Faculty of Science, Hokkaido Univ.) YAMAZAKI, Kenji; KAWAMORITA, Soichiro; OHMIYA, Hirohisa; SAWAMURA, Masaya
- 1C7-46 Enantioselective Addition Reaction of Terminal Alkynes to Aldehydes Catalyzed by Chiral Copper Complexes with a Bronsted Acid Site (Department of Chemistry, Faculty of Science, Hokkaido Univ.) ISHII, Takaoki; MORIYA, Toshimitsu; OHMIYA, Hirohisa; SAWAMURA, Masava
- 1C7-47 Enantioselective Synthesis of 1-Silyl-2-borylcyclobutanes though Copper(I)-Catalyzed Reaction (Graduate School of Engineering and Faculty of Science, Hokkaido Univ.; PRESTO, JST) KUNII, Shun; SAWAMURA, Masava: ITO, Haiime

Chair: SHINTANI, Ryo (17:00 $\sim$ 18:00)

- \* 16:50-17:00: interval for laptop PC connection.(1C7-49, 1C7-50, 1C7-51, 1C7-52, 1C7-53, 1C7-54)
- 1C7-49 Asymmetric O-H Carbenoid Insertion with a Chiral Copper Complex (Institute for Molecular Science) OSAKO, Takao; PANICHAKUL, Duanghathai; UOZUMI, Yasuhiro
- 1C7-50 Synthesis of Copper Complexes bearing abnormal Triazole NHC ligand and application to azide-alkyne cycloaddition reaction (Institute of Science and Engineering, Chuo Univ.) NAKAMURA, Tatsuhito; TERASHIMA, Takahiro; OGATA, Kenichi; FUKUZAWA, Shin-ichi
- 1C7-51\* Nanoporous copper materials in Click Chemistry: Heterogeneous catalytic cycloaddition of terminal alkynes with azides (Graduate School of Science, Tohoku Univ.) YAN, Mei; JIN, Tienan; YAMAMOTO, Yoshinori

- 1C7-52 Asymmetric Synthesis of Polycyclic Indoles through Intramolecular Friedel-Crafts Alkylation by DNA-Based Hybrid Catalyst (Graduate School of Science, Kyoto Univ.) WATABE, Ryo; PARK, Soyoung; SUGIYAMA, Hiroshi
- 1C7-53 Mechanistic Investigation of DNA-Based Asymmetric Catalysis: How Does DNA Induced Enantioselectivity of Target Compounds? (Graduate School of Science, Kyoto Univ.) PARK, Soyoung; WATABE, Ryo; SUGIYAMA. Hiroshi
- 1C7-54 Stereocontrol of All-Carbon Quaternary Center via Asymetric Desymmetrization with Cu Catalyst (Graduate School of Science and Engineering, Tokyo Institute of Technology) OKAMOTO, Tatsuya; AIKAWA, Kohsuke; MIKAMI, Koichi

### Sunday, March 27, PM

#### Zn

Chair: TERADA, Masahiro (13:30~14:30)

- \* 13:20-13:30: interval for laptop PC connection.(2C7-28, 2C7-29, 2C7-30, 2C7-32, 2C7-33)
- **2C7-28** Zinc-Catalyzed Direct Cyanation of Indoles: Use of Nitromethane as a Source of a Cyano Group (School of Science and Technology, Meiji Univ.) TSUCHIMOTO, Teruhisa; SUGIYAMA, Tetsuya
- 2C7-29 Chiral Zn(II)-bisamidine catalyzed asymmetric Mukaiyama aldol reaction of α-ketoesters (Rikkyo Univ.) GOTO, Ryo; YAMANAKA, Masahiro
- 2C7-30\* Zn(II)-promoted Intramolecular Hydrogen-Trapping Cross- Dehydrogenative Coupling (CDC) of Propargylic Amines and Alkynes (Fac. Sci., Gakushuin Univ.) SUGIISHI, Tsuyuka; NAKAMURA, Hiroyuki
- 2C7-32 Facile Synthesis of 1,1-Difluoro-1-alkenes by Cross-Coupling Reaction with Difluorovinylzinc-Diamine Complex (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ICHITSUKA, Tomohiro; TAKANOHASHI, Tsuyoshi; ICHIKAWA, Junji

#### Cu

**2C7-33** Copper-Catalyzed Synthesis of Alkenyl Sulfones Using Alkenes and Sulfinic Acid Salts (Fukushima Medical Univ.) TANIGUCHI, Nobukazu

Chair: ITO, Hajime (14:40~15:40)

- \* 14:30-14:40: interval for laptop PC connection.(2C7-35, 2C7-36, 2C7-37, 2C7-38, 2C7-39, 2C7-40)
- 2C7-35 gamma-Selective Addition of Organocopper Reagents to 1,1-Difluor-oallenes (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) FUCHIBE, Kohei; UEDA, Mikiko; ICHIKAWA, Junji
- 2C7-36 Synthesis of large-membered cyclic olefin bearing bisbenzimidazole moiety (Kobe Univ.) NISHIO, Shotaro; SOMETE, Takashi; KOBAYASHI, Toru; YAITA, Takeshi; MORI, Atsunori
- 2C7-37 Copper-Catalyzed Construction of Oxiranyl Imines via N-O bond-Cleavage (Graduate School of Science, Tohoku Univ.) IWATA, Tomoki; NAKAMURA, Itaru; TERADA, Masahiro
- **2C7-38** Copper-Catalyzed Tandem 2,3-Rearrangement and 6 π-3-Azatrien Electrocyclization in (*E*)-*O*-Propargylic α, β-Unsaturated Oximes (Graduate School of Science, Tohoku Univ.) ZHANG, Dong; NAKAMURA, Itaru; TERADA, Masahiro
- 2C7-39 Development of Metal-Linked Multinuclear Complex Based on SPINOL in the Cu-Catalyzed Asymmetric Conjugate Addition of Organometallic Reagents (Waseda Univ.) HAMADA, Daisuke; ENDO, Kohei; SHIBATA, Takanori
- 2C7-40 Development of Multinuclear Catalyst Based on BINOL-PHOS Ligands in Copper-Catalyzed Asymmetric Conjugate Addition of Organometallic Reagents (Waseda Univ.) YAKEISHI, Sayuri; HAMADA, Daisuke; ENDO, Kohei; SHIBATA, Takanori

Chair: NISHIBAYASHI, Yoshiaki (15:50~16:50)

- \* 15:40-15:50: interval for laptop PC connection.(2C7-42, 2C7-43, 2C7-44, 2C7-45, 2C7-46, 2C7-47)
- 2C7-42<sup>#</sup> Copper-Catalyzed γ-Selective and Stereospecific Allylic Alkylation of Ketene Silyl Acetal (Department of Chemistry, Faculty of Science, Hokkaido Univ.) LI, Dong; OHMIYA, Hirohisa; SAWAMURA, Masaya
- 2C7-43 Modification of Copper(I)-catalyzed Borylation (Graduate School of Engineering and Faculty of Science, Hokkaido Univ.; PRESTO, JST) MIYA, Takanori; SAWAMURA, Masaya; ITO, Hajime
- 2C7-44\* Construction of Cyclopentenyl-substituted Carbon Unit by Using Substitution of Allylic Picolinates (Department of Biomolecular Engineering; Tokyo Institute of Technology) FENG, Chao; KOBAYASHI, Yuichi
- 2C7-45<sup>#</sup> Allylic Substitution of Cyclic Allylic Picolinate with Alkynylcopper Reagents and Application to Synthesis of PGE<sub>2</sub> (Department of Biomolecular Engineering; Tokyo Institute of Technology) WANG, Qian; KOBAYASHI, Yuichi
- **2C7-46** Development of α selective propargylic substitution by using arylcopper reagents (Department of Biomolecular Engineering; Tokyo Institute of Technology) HIROTSU, Takayuki; KOBAYASHI, Yuichi
- 2C7-47 Cu-catalyzed stereoselective hydroallylation of alkynes (Nagoya Univ.) WATANABE, Takaaki; YAMAMOTO, Yoshihiko; NISHIYAMA,

Hisao

Chair: KOBAYASHI, Yuichi (17:00∼18:00)

- \* 16:50-17:00: interval for laptop PC connection.(2C7-49, 2C7-50, 2C7-51, 2C7-52, 2C7-53, 2C7-54)
- 2C7-49 Copper-Catalyzed Enantioselective Propargylic Amination of Propargylic Esters with Amines (School of Engineering, The Univ. of Tokyo) YOSHIDA, Akiko; HATTORI, Gaku; MIYAKE, Yoshihiro; NISHIBAYASHI, Yoshiaki
- 2C7-50 Cooperative Catalytic Reactions Using Transition Metal Catalysts: Copper- and Ruthenium-Catalyzed Enantioselective Propargylic Alkylation (The Univ. of Tokyo) IKEDA, Masahiro; MIYAKE, Yoshihiro; NISHIBAYASHI, Yoshiaki
- 2C7-51<sup>#</sup> Copper-Catalyzed Deacetylative Coupling of Propargylic Amines (Gakushuin Univ.) KIM, Yongeun; SUGIISHI, Tsuyuka; NAKAMURA, Hiroyuki
- 2C7-52 Copper-Catalyzed Stereospecific Direct Allylation of Polyfluoroarenes with Allyl Phosphates (Faculty of Engineering, Osaka Univ.) YAO, Tomoyuki; HIRANO, Koji; SATOH, Tetsuya; MIURA, Masahiro
- 2C7-53 Copper-Catalyzed γ-Selective and Stereospecific Allyl-Alkyl Coupling between Allylic Phosphates and Alkylboranes (Department of Chemistry, Faculty of Science, Hokkaido Univ.) NAGAO, Kazunori; YOKOBORI, Umi; MAKIDA, Yusuke; OHMIYA, Hirohisa; SAWAMURA, Masaya
- 2C7-54 Stereoselective Synthesis of Allenes through Copper-Catalyzed γ-Selective Coupling between Propargylic Phosphates and Alkylboranes (Department of Chemistry, Faculty of Science, Hokkaido Univ.) YOKOBORI, Umi; MAKIDA, Yusuke; OHMIYA, Hirohisa; SAWAMURA, Masaya

# Asian International Symposium -Organic Chemistry-Monday, March 28, PM

(12:50~13:00)

\* 12:40-12:50: interval for laptop PC connection.(3C7-24, 3C7-25, 3C7-28, 3C7-30)

**3C7-24**<sup>#</sup> Introductory talk (Okayama Univ.) TAKAI, Kazuhiko (12:50∼ 13:00)

Chair: TANINO, Keiji (13:00~14:10)

- **3C7-25**<sup>#</sup> **Keynote Lecture** Total synthesis of bioactive natural products A personal perspective (Institute of Chemical and Engineering Sciences, Biopolis, Singapore) CHEN, David Yu-Kai (13:00∼13:30)
- 3C7-28<sup>#</sup> Invited Lecture Concise synthesis and structural diversification of natural product analogs (Hokkaido Univ.) OGURI, Hiroki (13:30∼ 13:50)
- **3C7-30<sup>#</sup> Invited Lecture** Total synthesis and biological assessment of (-)-exiguolide and analogues (Tohoku Univ.) FUWA, Haruhiko (13:50∼ 14:10)

Chair: SAWAMURA, Masaya  $(14:20{\sim}15:10)$ 

- \* 14:10-14:20: interval for laptop PC connection.(3C7-33, 3C7-36, 3C7-38, 3C7-40, 3C7-42)
- **3C7-33** Keynote Lecture Economization of organic transformations (Pecking Univ., P. R. China) JIAO, Ning (14:20∼14:50)
- 3C7-36<sup>#</sup> Invited Lecture Homogeneous transition metal catalysts possessing a multidentate ligand towards petrochemistry (The Univ. of Tokyo) YAMASHITA, Makoto; TAKAHASHI, Kohei; TANAKA, Ryo; NOZAKI, Kyoko (14:50∼15:10)

Chair: YANAGISAWA, Akira (15:10 $\sim$ 16:10)

- **3C7-38<sup>#</sup> Invited Lecture** Synthesis of multisubstituted arenes by C-C bond cleavage reactions using arynes (Hiroshima Univ.) YOSHIDA, Hiroto (15:10∼15:30)
- **3C7-40**<sup>#</sup> Invited Lecture Development of highly selective organic reactions catalyzed by designed amine organocatalysts (Kyoto Univ.) KANO, Taichi (15:30∼15:50)
- 3C7-42# Invited Lecture Transition-metal-catalyzed oxidative coupling of aromatic substrates with alkynes through regioselective C-H bond cleavage (Osaka Univ.) SATOH, Tetsuya (15:50~16:10)

Chair: MURAKAMI, Masahiro (16:20 $\sim$ 17:10)

- \* 16:10-16:20: interval for laptop PC connection.(3C7-45, 3C7-48)
- **3C7-45** Keynote Lecture Oxidative coupling, chemistry between two nucleophiles (Wuhan Univ., P. R. China) LEI, Aiwen (16:20∼16:50)
- 3C7-48<sup>#</sup> Invited Lecture Acid-base cooperative catalysis for activation of alcohol as electrophile (Nagoya Univ.) SAITO, Susumu (16:50∼17:10)

# Organic Chemistry -Reaction and Synthesis-Metallo-organic Chemistry

Tuesday, March 29, AM

#### Αa

Chair: OBORA, Yasushi (9:10 ~10:10)

- \* 9:00-9:10: interval for laptop PC connection.(4C7-02, 4C7-03, 4C7-04, 4C7-05, 4C7-06)
- 4C7-02 Asymmetric alpha-Amination Reaction and Mannich Reaction of Iminoesters catalyzed by a ClickFerrophos/Silver complex (Institute of Science and Engineering, Chuo Univ.) IMAE, Kazumi; OGATA, Kenichi; FUKUZAWA. Sin-ichi

### Au

- 4C7-03 Gold-Catalyzed Interamolecular Allylation of Allylsilanes to Ynones forthe Development of Ketone-Ketone Cross Aldol Surrogate Reaction (Univ. of Toyama) NAKASHIMA, Yuichi; HORINO, Yoshikazu; KURODA, Shigeyasu
- 4C7-04 7-Exo-dig Cyclization of Acetylenic Silyl Enol Ethers Catalyzed by a Semihollow-Shaped Triethynylphosphine-Gold(I) Complex (Department of Chemistry, Faculty of Science, Hokkaido Univ.) ITO, Hideto; OHMIYA, Hirohisa; SAWAMURA, Masaya
- 4C7-05 Intramolecular additions of sufonamides to alkynes catalyzed by a semihollow-shaped triethynylphosphine-gold(I) complex (Department of Chemistry, Faculty of Science, Hokkaido Univ.) HARADA, Tomoya; ITO, Hideto; OHMIYA, Hirohisa; SAWAMURA, Masaya
- **4C7-06\***# The Dual Nature of the Matrix for the Homo-Coupling of Arylboronic Acid Catalyzed by Gold Nanoclusters (SOKENDAI; Institute for Molecular Science) DHITAL, Raghu Nath; ARUMUGAM, Murugadoss; SAKURAI, Hidehiro

Chair: KUWANO, Ryoichi (10:20~11:20)

- \* 10:10-10:20: interval for laptop PC connection.(4C7-09, 4C7-10, 4C7-11, 4C7-13, 4C7-14)
- 4C7-09<sup>†</sup> Development of Enantioselective Addition Reaction to Imines Catalyzed by Gold Complexes Bearing Tropos Ligands (Tokyo Institute of Technology) KOJIMA, Masafumi; AIKAWA, Kohsuke; MIKAMI, Koichi
- 4C7-10 Enantioselective Tandem Reaction Triggered by Metathesis-type Reaction Catalyzed by Chiral Au Complex (Graduate School of Science and Engineering, Tokyo Institute of Technology) SHIBUYA, Satoru; AIKAWA, Kohsuke; MIKAMI, Koichi
- **4C7–11\*** Mechanistic Study on the Gold-Catalyzed C-S Bond Formation of  $\alpha$ -Thioallenes to Form 2,5-Dihydrothiophenes (Gifu Univ.) ANDO, Kaori

# Ru

- **4C7-13** Synthesis of Indoles and Benzothiophenes Using Ruthenium-Catalyzed Ring-Closing Metathesis (Chiba Univ.) HAYASHI, Kazushi; YOSHIDA, Kazuhiro; YANAGISAWA, Akira
- 4C7-14 Ring-Size-Selective Ring-Closing Olefin Metathesis: Taking Advantage of Deleterious Effect of Ethylene Gas (Chiba Univ.) KANO, Yuto; TAKAHASHI, Hidetoshi; YOSHIDA, Kazuhiro; YANAGISAWA, Akira

Chair: YOSHIDA, Kazuhiro (11:30~12:30)

- \* 11:20-11:30: interval for laptop PC connection.(4C7-16, 4C7-17, 4C7-19, 4C7-20, 4C7-21)
- 4C7-16<sup>†</sup> Ruthenium-Catalyzed Transformation of Aryl Triflates to Aryl Halides (Graduate School of Science, Kyoto Univ.) SHIRAKAWA, Eiji; IMAZAKI, Yusuke; HAYASHI, Tamio
- 4C7-17\* Syntheses of 1,3-dienes and conjugated enones from alkynes by Ru/CeO<sub>2</sub> catalyst (Kyoto Univ.) MIURA, Hiroki; WADA, Kenji; HOSOKAWA, Saburo; INOUE, Masashi
- **4C7-19** Control of the Product Selectivity for Ruthenium-Catalyzed Intermolecular Pauson-Khand-Type Reaction (Kyoto Univ.) KONDO, Teruyuki; TANIGUCHI, Ryosuke; YOSHIDA, Yuki; KIMURA, Yu; TOSHIMITSU, Akio
- 4C7-20 Novel Catalytic Intermolecular [2+2+1] Cocycloaddition of Carbodiimides, Alkynes and Carbon Monoxide (Kyoto Univ.) TAMAI, Wataru; YOSHIDA, Yuki; KIMURA, Yu; TOSHIMITSU, Akio; KONDO, Teruyuki
- 4C7-21 Novel [RhCl(cod)]<sub>2</sub>/xantphos-catalyzed rapid synthesis of rhodanines from ketenes and isothiocyanates (Kyoto Univ.) YOSHIDA, Yuki; TOKORO, Yukiko; KIMURA, Yu; URA, Yasuyuki; WADA, Kenji; MITSUDO, Take-aki; TOSHIMITSU, Akio; KONDO, Teruyuki

### Tuesday, March 29, PM

#### Ru

Chair: SAITO, Susumu (13:40∼14:40)

\* 13:30-13:40: interval for laptop PC connection.(4C7-29, 4C7-30, 4C7-31, 4C7-33, 4C7-34)

- **4C7-29** Ortho-Selective Direct Homocoupling Reaction of Arylpyridines Catalyzed by Ruthenium Complexes (Graduate School of Engineering and Environment Conservation Research Institute, Tohoku Univ.) YAMANE, Hironori; SATO, Tetsuo; OI, Shuichi
- 4C7-30 Synthesis of Polysubstituted Arenes Using Anthranilamide as Protecting Group/Ortho-Directing Group for Arylboronic Acids (Kyoto Univ.) KOYANAGI, Masashi; IHARA, Hideki; SUGINOME, Michinori
- **4C7-31\***<sup>†</sup> Synthesis of Dibenz[*a,h*]anthracenes and Picenes Using Ruthenium-Catalyzed (Keio Univ.; Osaka Univ.) KITAZAWA, Kentaroh; KOCHI, Takuya; NITANI, Masashi; IE, Yutaka; ASO, Yoshio; KAKIUCHI, Fumitoshi
- **4C7-33** Synthesis of Multi-Substituted Acenes Using Ruthenium-Catalyzed Functionalizations of Aromatic Carbon-Hydrogen and Carbon-Oxygen Bonds (Keio Univ.) MATSUMURA, Daiki; KITAZAWA, Kentaroh; KOCHI, Takuya; KAKIUCHI, Fumitoshi
- **4C7-34** Ruthenium-Catalyzed Regioselective C-H Functionalization Using Alkenes Bearing Oxygen Leaving Groups and Mechanistic Insights (Keio Univ) OGIWARA, Yohei; TAMURA, Masaru; KOCHI, Takuya; KAKIUCHI, Fumitoshi

Chair: FUKUMOTO, Yoshiya (14:50~15:50)

- \* 14:40-14:50: interval for laptop PC connection.(4C7-36, 4C7-37, 4C7-38, 4C7-39, 4C7-40, 4C7-41)
- 4C7-36 Ruthenium-Catalyzed Asymmetric Hydrogenation of Oxazoles (Kyushu Univ.) KAMEYAMA, Nao; KUWANO, Ryoichi
- 4C7-37 Catalytic Hydrogenation of Carboxamides (Grad. Sch. Sci., Nagoya Univ.) MIURA, Takashi; HELD, Ingmar; NOYORI, Ryoji; SAITO, Susumu
- 4C7-38 Hydrogenation of Esters Catalyzed by Ruthenium Complex and its Synthetic Application (Grad. Sch. Sci., Nagoya Univ.) SUZUKI, Megumi; HELD, Ingmar; NOYORI, Ryoji; SAITO, Susumu
- **4C7-39** Modular Synthesis of Optically Active Lactones by Ruthenium-Catalyzed Asymmetric Allylic Carboxylation and Ring-Closing Olefin Metathesis (Grad. Sch. Sci., Osaka Univ.) TAKII, Koichiro; KANBAYASHI, Naoya; ONITSUKA, Kiyotaka
- 4C7-40 Enantioselective Sythesis of Allylic Amide via Asymmetric Allylic Substitution Catalyzed by Planar-Chiral Cyclopentadienyl-Ruthenium Complex (Grad. Sch. Sci., Osaka Univ.) KAMBAYASHI, Naoya; ONITSUKA, Kivotaka
- **4C7-41** Efficient Catalytic  $S_N$ Ar Reaction of Nonactivated Fluoroarenes with Cyclic Amines Using  $\eta$  <sup>6</sup>-Benzene Ruthenium(II) Complex (Waseda Univ.) YOKOYAMA, Hiroya; OTSUKA, Maiko; ENDO, Kohei; SHIBATA, Takanori

Chair: KOCHI, Takuya (16:00~16:50)

- \* 15:50-16:00: interval for laptop PC connection.(4C7-43, 4C7-44, 4C7-45, 4C7-46, 4C7-47)
- **4C7-43** Ruthenium-catalyzed carbonylation of inactivated C(sp³)-H bonds. (Faculty of Engineering, Osaka Univ.) HASEGAWA, Nao; CHARRA, Valentine; INOUE, Satoshi; FUKUMOTO, Yoshiya; CHATANI, Naoto
- 4C7-44 Ruthenium-catalyzed reaction of propargyl hydrazines leading to beta-aminonitriles (Faculty of Engineering, Osaka Univ.) FUKUMOTO, Yoshiya; TSURUTA, Takuya; CHATANI, Naoto
- 4C7-45 Mixed Valent Diruthenium Complex-Catalyzed Cycloisomerization of Enynes. (Faculty of Engineering, Osaka Univ.) NAKAE, Takahiro; YASUNAGA, Tomohiko; CHATANI, Naoto
- 4C7-46 Ruthenium-Catalyzed Intramolecular Cyclization of Allene and Alkyne Accompanied by Addition of Alcohol (Faculty of Pharmaceutical Sciences, Hokkaido Univ.) KOHYAMA, Yuh; TANAKA, Yuki; SAITO, Nozomi; SATO, Yoshihiro
- 4C7-47 Ruthenium-Catalyzed Cyclization of Allenyne and Multiple Bonds: Stereoselective Synthesis of Polycyclic Compounds (Faculty of Pharmaceutical Sciences, Hokkaido Univ.) ICHIMARU, Taisuke; SAITO, Nozomi; SATO, Yoshihiro

# Room C8

Bldg. 8 8-34

# Organic Chemistry -Reaction and Synthesis-Metallo-organic Chemistry

Saturday, March 26, AM

#### Rh

Chair: HATA, Takeshi  $(9:20\sim 10:20)$ 

- \* 9:10-9:20: interval for laptop PC connection.(1C8-03, 1C8-04, 1C8-05, 1C8-06, 1C8-07, 1C8-08)
- 1C8-03 Construction of 1,1'-Spirobiindane Skeletons by Rhodium-Catalyzed Arylation (Tokyo Univ. of Science) SUDA, Yuya; TAKAHASHI, Akira; MATSUDA, Takanori
- 1C8-04 Enantioselective Synthesis of Planar-Chiral [7]-[9]Paracyclophanes by

- Rhodium-Catalyzed [2+2+2] Cycloaddition and X-Ray Crystallographic Analysis of Dioxa[7]paracyclophane (Tokyo Univ. of Agriculture and Technology, Faculty of Engineering, Department of Applied Chemistry) ARAKI, Tatsuya; HOJO, Daiki; TANAKA, Ken
- 1C8-05 Synthesis of Functionalized Polyolefins by Iterative Alternating Nucleophilic Allylation/Hydroformylation (The Univ. of Tokyo, Graduate School of Engineering) NOGUCHI, Masaki; ITO, Shingo; NOZAKI, Kyoko
- 1C8-06 Rhodium-Catalyzed Oxidative Coupling of Benzylamines with Internal Alkynes (Faculty of Engineering, Osaka Univ.) MORIMOTO, Keisuke; HIRANO, Koji; SATOH, Tetsuya; MIURA, Masahiro
- 1C8-07 Rapid Screening for Asymmetric Catalysts: Efficient Connection of the Rhodium-Catalyzed Addition and the Zinc-Catalyzed Addition. (Chiba Univ.) AKASHI, Naohisa; YOSHIDA, Kazuhiro; YANAGISAWA, Akira
- **1C8-08** Rhodium-Catalyzed Asymmetric Cyclization of 1,6-Enynes with Aldehydes (Department of Applied Chemistry, Graduate school of Engineering, Tokyo Univ. of Agriculture and Technology) ISHIDA, Mana; SHIBATA, Yu; TANAKA, Ken
  - Chair: ITO, Shingo  $(10:30\sim11:20)$
- \* 10:20-10:30: interval for laptop PC connection.(1C8-10, 1C8-11, 1C8-12, 1C8-14)
- 1C8-10 Optically Active Rhodium Catalyst-Mediated Asymmetric Cyclization of Haloenynes to Halocyclobutenes (Tokyo Institute of Technology) SENDA, Kousuke; WATANABE, Yu; HATA, Takeshi; URABE, Hirokazu
- 1C8-11 Rh-Catalyzed Intramolecular Cyclization of Haloacetylene and Aromatic Ring and Its Application (Tokyo Institute of Technology) SENOO, Masato; SENDA, Kosuke; HATA, Takeshi; URABE, Hirokazu
- 1C8-12\* Preparation of Chiral Phosphine Ligand BenzP\* and Its Use in Asymmetric Hydrogenations (Nippon Chemical Industrial Co. Ltd; Chiba Univ.) TAMURA, Ken; SUGIYA, Masashi; YOSHIDA, Kazuhiro; YANAGISAWA, Akira; IMAMOTO, Tsuneo
- **1C8-14** Chain-Growth Cycloaddition Polymerization via Catalytic Alkyne [2 + 2 + 2] Cyclotrimerization (Kanagawa Univ.) SUGIYAMA, Yu-ki; SAKURADA, Tetsuya; KATO, Rei; OKAMOTO, Sentaro
  - Chair: SATOH, Tetsuya (11:30~12:20)
- \* 11:20-11:30: interval for laptop PC connection.(1C8-16, 1C8-17, 1C8-19, 1C8-20)
- 1C8-16<sup>#</sup> Cobalt-Catalyzed Direct Alkylation of Benzamide Derivatives with Alkyl Chlorides (Univ. of Tokyo) CHEN, Quan; ILIES, Laurean; NAKAMURA. Eiichi
- 1C8-17\* Cobalt-Catalyzed, Room-Temperature Addition of Aromatic Imines to Alkynes via Directed C-H Bond Activation (Nanyang Technological Univ.) FUJITA, Takeshi; LEE, Pin Sheng; YOSHIKAI, Naohiko
- 1C8-19<sup>#</sup> Cobalt catalyzed hydroalkylation of [60]fullerene with active alkyl bromides (Graduate School of Science, Tohoku Univ.) LU, Shirong; JIN, Tienan; YAMAMOTO, Yoshinori
- 1C8-20 Alkoxycarbonylation of Epoxides Utilizing Cobalt Oxide-supported Gold Nanoparticles (Dept. of Chemistry, Kyushu Univ.) MUTO, Akiko; HAMASAKI, Akiyuki; LIU, Xiao hao; TOKUNAGA, Makoto

### Saturday, March 26, PM

- Chair: TAKAYA, Jun (13:30~14:30)
- \* 13:20-13:30: interval for laptop PC connection.(1C8-28, 1C8-29, 1C8-30, 1C8-31, 1C8-32, 1C8-33)
- 1C8-28 Rhodium-Catalyzed Three-Component Coupling of Aryl Stannanes, Enones, and Aldehydes (Graduate School of Engineering and Environment Conservation Research Institute, Tohoku Univ.) KANNO, Ryo; SATO, Tetsuo; OI, Shuichi
- 1C8-29 Intramolecular trans-Bis-Silylation of Alkynes Catalyzed by Rhodium Complexes (Tokyo Univ. of Science) ICHIOKA, Yoichiro; MATSUDA, Takanori
- 1C8-30 Asymmetric hydrosilylation of olefins catalyzed by chiral bis(oxazolynyl)phenyl-rhodium complexes (Nagoya Univ.) NAITO, Tatsuo; NISHIYAMA. Hisao
- 1C8-31 Rhodium-catalyzed metathesis reaction of N-sulfenyl amides and acid fluorides (Faculty of Pharmaceutical Sciences, Graduate School ofTohoku Univ.) ARISAWA, Mieko; LI, Guangzhe; YAMAGUCHI, Masahiko
- 1C8-32 Rhodium catalyzed p- thiolation reaction of substituted pentafluor-obenzenes (Graduate school of pharmaceutical science, tohoku univ. Department of organometallic chemistry.) ARISAWA, Mieko; ICHIKAWA, Takuya; SUZUKI, Takaaki; YAMAGUCHI, Masahiko
- 1C8-33 Rhodium-catalyzed α-arylation reaction of ketones using aromatic fluorides (Tohoku Univ.) ARISAWA, Mieko; NAKANE, Soichiro; YAMAGUCHI, Masahiko
  - Chair: MATSUDA, Takanori (14:40 $\sim$ 15:40)
- \* 14:30-14:40: interval for laptop PC connection.(1C8-35, 1C8-36, 1C8-37, 1C8-38, 1C8-39, 1C8-40)
- 1C8-35 Rhodium-Catalyzed Carboxylation Reaction of Arylboronic Esters:
  Development of Highly Reactive Catalystand Mechanistic Study (Tokyo Institute of Technology) YAMAMOTO, Hiroki; TAKAYA, Jun; IWASAWA, Nobuharu
- 1C8-36 Rhodium-Catalyzed Asymmetric Conjugate Alkynylation of Nitroalk-

- enes (Graduate School of Science, Kyoto Univ.) NISHIMURA, Takahiro; SAWANO, Takahiro; HAYASHI, Tamio
- 1C8-37 Synthesis of Dihydrobenzofuran Derivatives via Rhodium-Catalyzed Olefin Isomerization/Asymmetric Intramolecular Alder-Ene Reaction Cascade (Department of Applied Chemistry, Graduate school of Engineering, Tokyo Univ. of Agriculture and Technology) OKAMOTO, Ryuichi; OKAZAKI, Eri: TANAKA. Ken
- **1C8-38** Rhodium-Catalyzed Asymmetric 1,4-Addition of Arylboroxines to β-Alkoxyacrylate Esters (Graduate School of Science, Kyoto Univ.) NISHIMURA, Takahiro; KASAI, Atsuyuki; HAYASHI, Tamio
- 1C8-39 Rhodium-Catalyzed Asymmetric Cyclization of Heteroatom-Linked 5-Alkynals with Acylphosphonates (Tokyo Univ. of Agriculture and Technology, Faculty of Technology, Department of Applied Chemistry) MASUDA, Kengo; SAKIYAMA, Norifumi; TANAKA, Rie; TANAKA, Ken
- 1C8-40 Rhodium/Chiral Diene-Catalyzed Asymmetric Conjugate Addition of Terminal Alkynes to Cyclic Enones (Graduate School of Science, Kyoto Univ.) NISHIMURA, Takahiro; NAGAOSA, Makoto; HAYASHI, Tamio
  - Chair: NISHIMURA, Takahiro (15:50~16:50)
- \* 15:40-15:50: interval for laptop PC connection.(1C8-42, 1C8-44, 1C8-45, 1C8-46, 1C8-47)
- 1C8-42\* Asymmetric synthesis of aryl glycine derivertives by rhodium/BIPAM-catalyzed addition of arylboronic acids to imines. (Graduate School of Engineering, Hokkaido Univ.) TAKAHASHI, Yoshinori; KURIHARA, Kazunori; YAMAMOTO, Yasunori; MIYAURA, Norio
- 1C8-44 Rh(I)-catalyzed Asymmetric Synthesis of 3-Substituted Isoindolinones Based on CO Gas-Free Aminocarbonylative Cyclization (Nara Institute of Science and Technology(NAIST)) MORIMOTO, Tsumoru; TSUMAGARI, Takayuki; FUJIOKA, Masahiko; KAKIUCHI, Kiyomi
- 1C8-45 Rhodium-Catalyzed Synthesis of Asymmetric Spirosilabifluorenes (Okayama Univ.) TAMURA, Naoya; KUNINOBU, Yoichiro; TAKAI, Kazuhiko
- 1C8-46<sup>†</sup> Rh(I)-Catalyzed Cyclocarbonylation of Enynes Using Glyceraldehyde as a Carbonyl Source (Nara Institute of Scinece and Technology (NAIST)) MORIMOTO, Tsumoru; IKEDA, Keiichi; TSUMAGARI, Takayuki; KAKIUCHI, Kiyomi
- 1C8-47 Rhodium-Catalyzed Complete Intermolecular Cotrimerization of Aryl Ethynyl Ethers and Carbonyl Compounds (Department of Applied Chemistry, Graduate school of Engineering, Tokyo Univ. of Agriculture and Technology) MIYAUCHI, Yuta; KOBAYASHI, Masayuki; TANAKA, Ken
  - Chair: YAMAMOTO, Yasunori (17:00~18:00)
- \* 16:50-17:00: interval for laptop PC connection.(1C8-49, 1C8-50, 1C8-51, 1C8-52, 1C8-53, 1C8-54)
- 1C8-49 Rhodium catalyzed interconversion between acid fluorides and thioesters controlled using heteroatom acceptors (Tohoku Univ.) ARISAWA, Mieko; YAMAGUCHI, Masahiko
- 1C8-50 Rhodium-catalyzed 1-arylthiolation reaction of nitroalkanes (Tohoku Univ.) ARISAWA, Mieko; NIHEI, Yuri; YAMAGUCHI,
- 1C8-51 Rhodium-Catalyzed Phenylthiolation Reaction of Heteroaromatic Compounds (Tohoku Univ.) ARISAWA, Mieko; TORIYAMA, Fumihiko; YAMAGUCHI, Masahiko
- 1C8-52 Rhodium-Catalyzed Selective Arylation of Acridine at the 9-Position Using Organozinc Reagents (Osaka Univ.) TOBISU, Mamoru; HYODO, Isao; CHATANI, Naoto
- 1C8-53 Rhodium-Catalyzed Asymmetric Hydroformylation of Styrenes with Formaldehyde (Nara Institute of Science and Technology (NAIST)) MORIMOTO, Tsumoru; MIYOSHI, Kota; MAKADO, Gouki; KAKIUCHI, Kiyomi
- 1C8-54 Enantioselective synthesis of chiral flavanone by using rhodium catalyst bearing chiral electron-poor diphosphine (Okayama Univ.) KORENAGA, Toshinobu; HAYASHI, Keigo; EMA, Tadashi; SAKAI, Takashi

### Sunday, March 27, PM

#### Re

- Chair: ENDOU, Kouhei  $(13:30{\sim}14:30)$
- \* 13:20-13:30: interval for laptop PC connection.(2C8-28, 2C8-29, 2C8-30, 2C8-31, 2C8-32, 2C8-33)
- 2C8-28<sup>†</sup> Rhenium-Catalyzed Insertion of Alkynes into a C-C Single Bond of β-Keto Sulfones (Okayama Univ.) MATSUZAKI, Hironori; NISHI, Mitsumi: KUNINOBU, Yoichiro: TAKAI, Kazuhiko
- 2C8-29 Selective Synthesis of 1,2-Disubstituted Naphthalenes by the Rhenium-Catalyzed Reaction of Phenylacetaldehyde Equivalents with Alkynes (Faculty of Chemistry, Materials and Bioengineering, Kansai Univ.) NISHI, Satoru; KOJIMA, Aya; UMEDA, Rui; NISHIYAMA, Yutaka
- 2C8-30 Rhenium-Catalyzed Insertion of Alkenes via C-H Bond Activaton of the Aromatic Imines and Successive Reduction of Imines (Okayama Univ.) NAKAHARA, Takahiro; YU, Peng; KUNINOBU, Yoichiro; TAKAI, Kazuhiko
- 2C8-31 Rhenium-Catalyzed Synthesis of Esters by the Reaction of Ethers with Acid Halides (Faculty of Chemistry, Materials and Bioengineering, Kansai

- Univ.) KAIBA, Kenta; NISHIMURA, Takashi; TANAKA, Toshimasa; UMEDA, Rui; NISHIYAMA, Yutaka
- **2C8-32** Rhenium-Catalyzed Reaction of Terminal Alkynes with Imines to Give Allylamine Derivatives (Faculty of Engineering, Osaka Univ.) HUKUMOTO, Yoshiya; DAIJO, Masato; CHATANI, Naoto
- 2C8-33 Rhenium Catalyzed Synthesis of Ketones by the Reaction of Vinyl Acetates with Alcohols. (Faculty of Chemistry, Materials and Bioenginnering, Kansai Univ.) TAKAHASHI, Yuuki; UMEDA, Rui; NISHIYAMA, Yutaka

Chair: ONODERA, Gen (14:40~15:40)

- \* 14:30-14:40: interval for laptop PC connection.(2C8-35, 2C8-36, 2C8-37, 2C8-38, 2C8-39)
- 2C8-35 Rhenium Catalyzed Synthesis and Physical Properties of Highly Elaborated Polycyclic Aromatic Compounds (Faculty of Chemistry, Materials and Bioengineering, Kansai Univ.) MORISHITA, Shigeru; KAIBA, Kenta; UMEDA, Rui; NISHIYAMA, Yutaka; TOBE, Yoshito

#### Mn

2C8-36 Manganese(III)-Mediated Synthesis of Phenanthridines by the Reaction of Phenyl Isocyanides Bearing an ortho Aryl Group with Arylboronic Acids (Faculty of Engineering, Osaka Univ.) TOBISU, Mamoru; KOH, Keika; CHATANI, Naoto

#### В

- 2C8-37 Palladium-catalyzed tandem cross-coupling/carbopalladation/cross-coupling of 1,2-diboryl compounds with 1-alkynyl-2-(2,2-dibromoethenyl) arenes (Grad. Sch. Eng., Kyoto Univ.) KADOWAKI, Tsugumi; NAGAO, Ikuhiro; SHIMIZU, Masaki
- 2C8-38 Stereoselective Synthesis of Multisubstituted Allylsilanes via 1,1-Diboryl-2-silylalkanes (Waseda Univ.) SAKAMOTO, Akira; OHKUBO, Takahiro; ENDO, Kohei; SHIBATA, Takanori

#### Rh

**2C8-39\***<sup>†</sup> *anti-* Markovnikov Addition of Secondary Amines to Terminal Alkynes Using 8-Quinolinolato Rhodium Catalysts (Keio Univ.) SAKAI, Kazunori; KOCHI, Takuya; KAKIUCHI, Fumitoshi

Chair: SHIMIZU, Masaki (15:50~16:50)

- \* 15:40-15:50: interval for laptop PC connection.(2C8-42, 2C8-43, 2C8-44, 2C8-45, 2C8-46)
- 2C8-42 Rhodium-Catalyzed Borylation of Nitriles through the Cleavage of Carbon-Cyano Bonds (Faculty of Engineering, Osaka Univ.) TOBISU, Mamoru; KINUTA, Hirotaka; KITA, Yusuke; CHATANI, Naoto
- **2C8-43** Rhodium-Catalyzed Asymmetric Synthesis of Siloles: Construction of a Silicon Stereogenic Center via the Enantioselective Activation of a Carbon-Silicon Bond (Faculty of Engineering, Osaka Univ.) TOBISU, Mamoru; ONOE, Masahiro; CHATANI, Naoto
- 2C8-44 Rhodium-catalyzed synthesis of germoles via carbon-germanium bond cleavage (Faculty of Engineering, Osaka Univ.) TOBISU, Mamoru; BABA, Katsuaki; CHATANI, Naoto
- 2C8-45 Synthesis of Substituted Dihydropentalenes by Rhodium-Catalyzed Cotrimerization of Propargyl Esters and Arylacetylenes (Department of Applied Chemistry, Graduate school of Engineering, Tokyo Univ. of Agriculture and Technology) SHIBATA, Yu; TANAKA, Ken
- 2C8-46\* Rhodium(I)-Catalyzed Direct Carboxylation of sp<sup>2</sup> C-H Bond with CO<sub>2</sub> via Chelation-Assisted C-H Bond Activation (Tokyo Institute of Technology) MIZUNO, Hajime; TAKAYA, Jun; IWASAWA, Nobuharu

Chair: KOCHI, Takuya (17:00~18:00)

- \* 16:50-17:00: interval for laptop PC connection.(2C8-49, 2C8-50, 2C8-51, 2C8-52, 2C8-53, 2C8-54)
- 2C8-49 Rhodium-Catalyzed Asymmetric Arylation of N-Tosyl Ketimines (Graduate School of Science, Kyoto Univ.) SHINTANI, Ryo; TAKEDA, Momotaro; TSUJI, Takaoki; HAYASHI, Tamio
- 2C8-50 Construction of Hexaphenylene Framework by Consecutive Interand Intramolecular [2+2+2] Cycloadditions (Waseda Univ.) FUJIMOTO, Masako; HIRASHIMA, Hiroyuki; CHIBA, Tatsuya; ENDO, Kohei; SHIBATA, Takanori
- 2C8-51 Synthesis of cross-conjugated trienes by a rhodium-catalyzed dimerization reaction of mono-substituted allenes. (Graduate School of Engineering, Kyoto Univ.) BIYAJIMA, Tsuneaki; TOYOSHIMA, Takeharu; MIURA, Tomova; MURAKAMI, Masahiro
- **2C8-52**<sup>†</sup> Synthesis of β-Alkylidene-γ, δ -unsaturated Ketones by Rhodium-Catalyzed Reaction of Allenes with Aldehydes (Graduate School of Engineering, Kyoto Univ.) TOYOSHIMA, Takeharu; MIURA, Tomoya; MURAKAMI, Masahiro
- 2C8-53<sup>†</sup> Synthesis of New Chiral Phosphine-Olefin Ligands and Their Use in Rhodium-Catalyzed Asymmetric 1,4-Addition. (Graduate School of Science, Kyoto Univ.) SHINTANI, Ryo; NARUI, Rintaro; HAYASHI, Sayuri; TSUTSUMI, Yosuke; HAYASHI, Tamio
- 2C8-54 Highly Enantioselective Synthesis of Pyridinophanes by Intramolecular [2+2+2] Cycloaddition (Waseda Univ.) MIYOSHI, Mayu;

UCHIYAMA, Toshifumi; ENDO, Kohei; SHIBATA, Takanori

# Monday, March 28, PM

Chair: OGOSHI, Sensuke (12:40~13:40)

- \* 12:30-12:40: interval for laptop PC connection.(3C8-23, 3C8-26, 3C8-27, 3C8-28)
- 3C8-23 CSJ Award for Young Chemists Studies on Carbocyanation Reaction of Unsaturated Compounds (Grad. Sch. Eng., Kyoto Univ.) NAKAO, Yoshiaki

#### Ni

- **3C8-26** Effect of Tetraene Ligands on Cross-Coupling Reaction of Alkyl Halides with Grignard Reagents. (Graduate School of Engineering, Osaka Univ.) OMORI, Takehiro; IWASAKI, Takanori; TERAO, Jun; KUNIYASU, Hitoshi; KAMBE, Nobuaki
- 3C8-27 Ni-Catalyzed [2+3] Cycloaddition Reaction of Allyl Telluride with Alkynes (Graduate School of Engineering, Osaka Univ.; Osaka Dental Univ.) NAGAI, Hiroyuki; FUJIWARA, Shin-ichi; TSUDA, Susumu; KUNIYASU, Hitoshi; IWASAKI, Takanori; KAMBE, Nobuaki
- **3C8-28** Kinetic Studies on Nickel Catalyzed (sp³)C-(sp³)C Cross-Coupling Reaction and Their Application to Chemoselective Reaction (Graduate School of Engineering, Osaka Univ.) TSUMURA, Asako; IWASAKI, Takanori; TERAO, Jun; KUNIYASU, Hitoshi; KAMBE, Nobuaki

Chair: YAMAGUCHI, Junichiro (13:50~14:50)

- \* 13:40-13:50: interval for laptop PC connection.(3C8-30, 3C8-31, 3C8-32, 3C8-33, 3C8-34, 3C8-35)
- 3C8-30 Formation of pyridine derivatives by Ni(0)-catalyzed reaction of nitriles with 1,3-dienes (Faculty of Engineering, Osaka Univ.) TAKEDA, Ippei; IKAWA, Masashi; OHASHI, Masato; OGOSHI, Sensuke
- **3C8-31** Ni(0)-catalyzed dephenoxylative [3 + 2] cycloaddition of A, B-unsaturated phenyl esters with alkynes (Faculty of Engineering,Osaka Univ.) TANIGUCHI, Tomoaki; OHASHI, Masato; OGOSHI, Sensuke
- 3C8-32 Reactions of 1,5-Dienyne with Nickel(0) (School of Engineering, Osaka Univ.) KINOSHITA, Kazuto: OHASHI, Masato: OGOSHI, Sensuke
- 3C8-33 Nickel-Catalyzed Suzuki-Miyaura Cross Coupling of Aryl Fluorides with a Chelation Assistance (Faculty of Engineering, Osaka Univ.) TOBISU, Mamoru; XU, Tian; SHIMASAKI, Toshiaki; CHATANI, Naoto
- 3C8-34 Nickel-Catalyzed Amination of Fused N-Aromatic Heterocycles via the Cleavage of Carbon-Oxygen Bond (Faculty of Engineering, Osaka Univ.) TOBISU, Mamoru; YAMAKAWA, Ken; SHIMASAKI, Toshiaki; CHATANI, Naoto
- 3C8-35 Nickel-catalyzed oxidative cyclization reaction of aromatic amides with alkynes via the cleavage of ortho-carbon-hydrogen bond. (Faculty of Engineering, Osaka Univ.) SHIOTA, Hirotaka; FUKUMOTO, Yoshiya; CHATANI, Naoto

Chair: NAKAO, Yoshiaki (15:00~16:00)

- \* 14:50-15:00: interval for laptop PC connection.(3C8-37, 3C8-39, 3C8-40, 3C8-42)
- **3C8-37\*** Cross-coupling reaction of functionalized alkyl halides with alkyl Grignard reagents catalyzed by nickel catalyst (Graduate School of Engineering, Osaka Univ.; Graduate School of Engineering, Kyoto Univ.) IWASAKI, Takanori; SINGH, Surya P.; HO, Willbe W. S.; TERAO, Jun; KUNIYASU, Hitoshi; KAMBE, Nobuaki
- **3C8-39** Ni-Catalyzed C-H/C-X Arylation of Heteroarenes (Dept Chem, Nagoya Univ) MUTO, Kei; YAMAMOTO, Takuya; KOMIYAMA, Masato; YAMAGUCHI, Junichiro; ITAMI, Kenichiro
- **3C8–40\*** Palladium Catalyzed β-Selective C-H Bond Arylation of Thiophenes (Dept Chem, Nagoya Univ) UEDA, Kirika; KIRCHBERG, Sylvia; STUDER, Armido; YANAGISAWA, Shuichi; YAMAGUCHI, Junichiro; ITAMI, Kenichiro
- 3C8-42 Pd-Catalyzed C4-Selective C-H Arylation of Thiazoles (Dept Chem, Nagoya Univ) TANI, Satoshi; KIRCHBERG, Sylvia; STUDER, Armido; YAMAGUCHI, Junichiro; ITAMI, Kenichiro

Chair: ITAMI, Kenichiro (16:10∼17:10)

- \* 16:00-16:10: interval for laptop PC connection.(3C8-44, 3C8-46, 3C8-47, 3C8-49)
- **3C8-44\*** C-F Bond Activation of Tetrafluoroethylene on Group 10 Taransition Metals (Graduate School of Engineering, Osaka Univ.) OHASHI, Masato; KAMBARA, Tadashi; OGOSHI, Sensuke
- 3C8-46 Coupling Reactions of Tetrafluoroethylene via C-F Bond Activation (Faculty of Engineering, Osaka Univ.) SAIJO, Hiroki; KAMBARA, Tadashi; OHASHI, Masato; OGOSHI, Sensuke
- 3C8-47\* Nickel-Catalyzed Three-Component Coupling of Methylenecyclopropane or Norbornene with ArylAldehyde and Silane (Institute of Science and Engineering, Chuo Univ.) OGATA, Kenichi; ATSUUMI, Yuka; FUKUZAWA, Shin-ichi
- 3C8-49 Nickel-Catalyzed [2+2] Cycloaddition of 1,3-Enynes and Electron-Deficient Olefins (Faculty of Engineering, Osaka Univ.) NISHIMURA, Akira; OHASHI, Masato; OGOSHI, Sensuke

Chair: TOBISU, Mamoru (17:20~18:20)

- \* 17:10-17:20: interval for laptop PC connection.(3C8-51, 3C8-52, 3C8-54, 3C8-55, 3C8-56)
- 3C8-51 One-Pot Oxidation/Arylation of Alcohols through Nickel Catalysis (Graduate School of Science, Nagoya Univ.) MAEKAWA, Takehisa; SEKIZAWA, Hiromi; ITAMI, Kenichiro
- 3C8-52\* Synthesis of esters via nickel-catalyzed selective crossed dimerizarion of aldehydes (Faculty of Engineering, Osaka Univ.) HOSHIMOTO, Yoichi; OHASHI, Masato; OGOSHI, Sensuke
- 3C8-54 Highly Stereoselective Multi-component Coupling Reaction via Oxanickelacycles (Graduate School of Science and Technology, Nagasaki Univ.) MORI, Takamichi; KIMURA, Masanari
- **3C8-55** Ni-Catalyzed Coupling Reaction of Carbon Dioxide and Unsaturated Hydrocarbons (Nagasaki Univ., Faulty of Engineering) SHIRASHIGE, Ryo; MORI, Takamichi; KIMURA, Masanari
- 3C8-56 Ni-Catalyzed Efficient Synthesis of Coupling Reaction of Diketene and Alkynes (Nagasaki Univ., Faulty of Engineering) NAKAMURA, Toshiyuki; MORI, Takamichi; KIMURA, Masanari

# Tuesday, March 29, AM

#### ln

Chair: TSUCHIMOTO, Teruhisa (9:10  $\sim$ 10:10)

- \* 9:00-9:10: interval for laptop PC connection.(4C8-02, 4C8-03, 4C8-04, 4C8-06, 4C8-07)
- 4C8-02 Crossed-Claisen Condensation between Carboxylic Acids and Ketene Silyl Acetals by Using Indium Triiodide Catalyst and Trimethoxysilane (Osaka Univ.) NISHIMOTO, Yoshihiro; OKITA, Aya; YASUDA, Makoto: BABA, Akio
- 4C8-03 Indium Triiodide Catalyzed Transformation of Esters to Aldol Compounds Using Hydrosilanes and Silyl Enolates (Osaka Univ.) INAMOTO, Yoshihiro; NISHIMOTO, Yoshihiro; YASUDA, Makoto; BABA, Akio
- **4C8-04\*** Combined Lewis Acid of Indium Trichloride and Trimethylsilyl Bromide-Catalyzed α-Alkylation of Carbonyl Compounds by Direct Use of Alcohol Derivatives and Enol Acetates (Osaka Univ.) ONISHI, Yoshiharu; NISHIMOTO, Yoshihiro; YASUDA, Makoto; BABA, Akio
- 4C8-06 Indium-Catalyzed Alkylation of Pyridines with Haloalkanes (Saitama Univ.) OGAWA, Tetsuya; KINOSHITA, Hidenori; MIURA, Katsukiyo
- 4C8-07 Indium-Catalyzed Cation Cyclization-Ring Expansion of 1,1-Difluor-oallenes: Synthesis of Fluorine-Substituted Polycyclic Aromatic Hydrocarbons (F-PAHs) (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ZHAO, Nan; MAYUMI, Yuka; FUCHIBE, Kohei; ICHIKAWA, Junji

Chair: MIURA, Katsukiyo (10:20 $\sim$ 11:20)

- \* 10:10-10:20: interval for laptop PC connection.(4C8-09, 4C8-10, 4C8-11, 4C8-13, 4C8-14)
- **4C8-09** Ligand Effect on Transition Metal Catalyzed In(I) Mediated Allylation and Propargylation of Carbonyl Compounds (Graduated School of Engineering, Nagoya Institute of Technology) SUZUKI, Yuuki; HIRASHITA, Tsunehisa; ARAKI, Shuki
- **4C8-10** Convenient Synthesis of Tetraarylmethanes with a β-Pyrrolyl Group Utilizing Indium Catalysis (School of Science and Technology, Meiji Univ.) TSUCHIMOTO, Teruhisa; OGURA, Takahiro
- **4C8-11\***<sup>†</sup> Structure and Reactivity of Butenylindium Generated by Transmetalation between Cyclopropylmethylstannane and Indium Halide (Osaka Univ.) KIYOKAWA, Kensuke; YASUDA, Makoto; BABA, Akio
- 4C8-13 Cyclopropylmethylation of Iodophosphonates by Radical Coupling with Butenylindium (Osaka Univ.) KIYOKAWA, Kensuke; SUZUKI, Itaru; YASUDA, Makoto; BABA, Akio
- **4C8-14** A New Type of Carboindation of Alkenes Using Indium Tribromide and Ketene Silyl Acetals (Osaka Univ.) NISHIMOTO, Yoshihiro; UEDA, Hiroki; YASUDA, Makoto; BABA, Akio

#### Sn

Chair: YASUDA, Makoto (11:30 $\sim$ 12:30)

- \* 11:20-11:30: interval for laptop PC connection.(4C8-16, 4C8-17, 4C8-18, 4C8-19, 4C8-20, 4C8-21)
- 4C8-16 Tin-catalyzed Synthesis of Heterocycles from Lactide (Research Center for Environmental Preservation, Osaka Univ.) SHIBATA, Ikuya; OKAMURA, Aritomo; TSUNOI, Shinji
- 4C8-17 Addition-Cyclization Reaction of Methyleneaziridine Catalyzed by Tin Iodide (Research Center for Environmental Preserving, Graduate School of Engineering, Osaka Univ.) SHIBATA, Ikuya; YASUI, Seiji; TSUNOI, Shinji
- 4C8-18 Radical Reactions of Haloalkanes and alkynes with Tribenzylstannane (Saitama Univ.) YAMAKAWA, Takeshi; KINOSHITA, Hidenori; MIURA, Katsukiyo
- **4C8-19** Tin (II) Chloride-Catalyzed Reaction of 1-Substituted Propargylic Alcohols with Carbon Nucleophiles (Sophia Univ.) HAYASHI, Miki; SUZUKI, Noriyuki; MASUYAMA, Yoshiro
- 4C8-20 Asymmetric Aldol Reaction Using Chiral Tin Catalysts (Chiba

- Univ.) KUSHIHARA, Naoyuki; YOSHIDA, Kazuhiro; YANAGISAWA, Akira
- 4C8-21 Synthesis of Trifluoromethyl Compounds by Asymmetric Diels-Alder Reaction with Chiral Oxazaborolidine Catalyst (Toyohashi Tech.) SHIBATOMI, Kazutaka; KOBAYASHI, Fumito; NARAYAMA, Akira; IWASA, Seiji

#### Tuesday, March 29, PM

#### N

Chair: KUNINOBU, Yoichiro (13:40~14:40)

- \* 13:30-13:40: interval for laptop PC connection.(4C8-29, 4C8-30, 4C8-31, 4C8-32, 4C8-33, 4C8-34)
- 4C8-29 Nickel-Catalyzed Difluorocyclopropanation of Siloxydienes and Skeletal Rearrangement: Synthesis of Fluorine-Substituted Siloxycyclopentenes (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) SASAGAWA, Hisashi; FUCHIBE, Kohei; ICHIKAWA, Junji
- **4C8-30** the Relationship between Conformation and Yeild of amide-linked Dienynes by the [4+3+2] Cycloaddition (Faculty of Science, Tokyo Univ. of Science) FUJITA, Tetsushi; NAKAGAWA, Minami; YAMASAKI, Ryu; SAITO, Shinichi
- 4C8-31 Nickel-Complex-Catalyzed Addition Reactions of Dialkylphosphine Oxide to Alkynes (Chemical resources laboratory, tokyo institute of technology) KANADA, Jun; MIYAO, Atsuyoshi; KASHIWABARA, Taigo; TANAKA, Masato
- 4C8-32 Nickel / Lewis acid-catalyzed Polyfluoroarylcyanation of Alkynes (Department of Applied Chemistry, Institute of Science and Engineering, Chuo Univ.) YOSHIYASU, Hirofumi; MINAMI, Yasunori; HIYAMA, Tamejiro
- **4C8-33** Nickel-Catalyzed Transformation of 2*H*-Azirines into 2-Azadienes (Kyoto Univ.) OKAMOTO, Kazuhiro; MASHIDA, Ayano; OHE, Kouichi
- 4C8-34 Nickel-Catalyzed Carboxylation of Aryl Chlorides with CO<sub>2</sub> (Graduate School of Engineering, Kyoto Univ.) NOGI, Keisuke; XU, Tinghua; FUJIHARA, Tetuaki: TERAO, Jun: TSUJI, Yasushi

Chair: YAMASAKI, Ryu (14:50∼15:50)

- \* 14:40-14:50: interval for laptop PC connection.(4C8-36, 4C8-37, 4C8-38, 4C8-39, 4C8-40, 4C8-41)
- 4C8-36 Nickel-catalyzed decarbonylative cycloaddition of phthalic anhydrides with alkynes; study on regioselectivity of the cycloaddition (Univ. of Kyoto; Graduate School of Engineering) SHIBA, Takahiro; KURAHASHI, Takuya; MATSUBARA, Seijiro
- 4C8-37 Nickel-catalyzed cycloaddition of thiophthalic anhydrides with methylenecyclopropanes to form thiophthalides; a new utilization of methylenecyclopropane as C1 synthetic units (Univ. of Kyoto; Graduate School of Engineering) INAMI, Tasuku; KURAHASHI, Takuya; MATSUBARA, Seijiro
- 4C8-38 Nickel-catalyzed cycloaddition of dienes and alkyns to form bicyclo compounds (Univ. of Kyoto; Graduate School of Engineering) HORIE, Hiroaki; KURAHASHI, Takuya; MATSUBARA, Seijiro
- 4C8-39 Nickel(0)-Catalyzed Annulation Reaction of 2-Halobenzamides with Alkynes (Faculty of Engineering, Kyoto Univ.) HIRAGA, Kentaro; TOYOSHIMA, Takeharu; MIURA, Tomoya; MURAKAMI, Masahiro
- 4C8-40 Nickel-Catalyzed Enantioselective [2+2+2] Cycloaddition of Isocyanates and 1,1-Disubstituted Allenes (Graduate School of Engineering, Kyoto Univ.) MORIMOTO, Masao; NISHIDA, Yui; MIURA, Tomoya; MURAKAMI, Masahiro
- **4C8-41** Synthesis of Hydantoin Derivatives by Nickel-Catalyzed Cycloaddition Reaction of Isocyanates with Electron-Deficient Olefins (Graduate School of Engineering, Kyoto Univ.) MIKANO, Yusuke; MIURA, Tomoya; MURAKAMI, Masahiro

Chair: MIURA, Tomoya (16:00 $\sim$ 17:00)

- \* 15:50-16:00: interval for laptop PC connection.(4C8-43, 4C8-44, 4C8-45, 4C8-46, 4C8-47, 4C8-48)
- 4C8-43 Synthesis of head-to-tail-type polythiophene by nickel-catalyzed C-H coupling polycondensation (Kobe Univ.) TAMBA, Shunsuke; OKUBO, Youhei; TANAKA, Shota; MORI, Atsunori
- 4C8-44 Synthesis of well-defined regioregular oligothiophenes with regiocontorolled C-H coupling of 3-substituted thiophenes. (Kobe Univ.) TANAKA, Shota; TAMBA, Shunsuke; MORI, Atsunori
- 4C8-45 Nickel-catalyzed C-H coupling polycondensation of 3-alkylfuran and copolymerization of thiophene derivative. (Kobe Univ.) KOMOBUCHI, Ryo; TAMBA, Shunsuke; MORI, Atsunori
- **4C8-46** Nickel-catalyzed heteroannulations of o-haloanilines and alkynes to form indoles (Univ. of Kyoto; Graduate School of Engineering) YOSHIDA, Yuji; KURAHASHI, Takuya; MATSUBARA, Seijiro
- 4C8-47 Nickel-catalyzed cycloaddition of oximes and alkynes via activation of carbon-hydrogen bond to form isoquinolines (Univ. of Kyoto; Graduate School of Engineering) YOSHIDA, Yuji; KURAHASHI, Takuya; MATSUBARA, Seijiro
- 4C8-48 Nickel-catalyzed tandem reaction via twofold activation of carbon-carbon bonds to form coumarins (Univ. of Kyoto; Graduate School of Engineering) NAKAI, Kenichiro; KURAHASHI, Takuya; MATSUBARA,

# Room C9

Bldg. 8 8-35

# Organic Chemistry -Reaction and Synthesis-Metallo-organic Chemistry Saturday, March 26, AM

#### Pd

Chair: MATSUDA, Takanori (9:20  $\sim$ 10:20)

- \* 9:10-9:20: interval for laptop PC connection.(1C9-03, 1C9-04, 1C9-05, 1C9-06, 1C9-07, 1C9-08)
- 1C9-03 Sonogashira Reaction Using Hydrazone Ligand at Low Palladium Loadings (Chiba Univ.) MINO, Takashi; SUZUKI, Saori; HIRAI, Kiminori; SAKAMOTO, Masami; FUJITA, Tsutomu
- **109-04** Palladium-Catalyzed Mizoroki-Heck Type Reaction with Aryl Silanes Using Hydrazone Ligand (Chiba Univ.) MINO, Takashi; SHIBUYA, Masanori; HIRAI, Kiminori; SAKAMOTO, Masami; FUJITA, Tsutomu
- 1C9-05 Pd-catalyzed borylation of aryl bromides by bis(catecolate)diboron (SCRI; Catalysis Group) TAKAGI, Jun; YAMAKAWA, Tetsu
- 1C9-06 Synthesis of Palladium Complexes bearing two abnormal Triazole NHC Ligands and application to Mizoroki-Heck Reaction (Institute of Science and Engineering, Chuo Univ.) INOMATA, Sayuri; NAKAMURA, Tatsuhito; OGATA, Kenichi; FUKUZAWA, Shin-ichi
- **1C9-07** Synthesis of  $\pi$  Allyl Palladium Complexes bearing Abnormal Triazole NHC Ligand and Application to Catalytic Reaction. (Institute of Science and Engineering, Chuo Univ.) TERASHIMA, Takahiro; NAKAMURA, Tatsuhito; OGATA, Kenichi; FUKUZAWA, Shin-ichi
- 1C9-08 Sonogashira Coupling Reaction Catalyzed by a Mesoionic Carbene Palladium Complex (Graduated School of Engineering, Nagoya Institute of Technology) YAMADA, Arata; HIRASITA, Tsunehisa; ARAKI, Shuki

Chair: OGATA, Kenichi (10:30~11:20)

- \* 10:20-10:30: interval for laptop PC connection.(1C9-10, 1C9-12, 1C9-13, 1C9-14)
- 1C9-10\* Mechanistic Investigation of the Palladium-Catalyzed Decarboxylative Cyclization of γ-Methylidene-δ-valerolactones with Isocyanates (Kyoto Univ.) SHINTANI, Ryo; TSUJI, Takaoki; PARK, Soyoung; HAYASHI, Tamio
- 1C9-12 Synthesis of Dibenzophosphole Derivatives via Dehydrogenative Cyclization (Okayama Univ.) YOSHIDA, Takuya; KUNINOBU, Yoichiro: TAKAI. Kazuhiko
- **1C9-13** Carbon-Nitrogen Bond Formation at the δ-Position through Palladium-Catalyzed Dehydrogenation of β, γ-Unsaturated Carbonyl Compounds (Kyushu Univ.) KAWABUCHI, Mika; KUWANO, Ryoichi; UENO, Satoshi
- 1C9-14 Synthesis of β-Enaminonitrile via Palladium-Catalyzed Dehydrogenation of Saturated Nitriles (Kyushu Univ.) MAEDA, Ryohei; KUWANO, Ryoichi; UENO, Satoshi

Chair: MINO, Takashi (11:30~12:20)

- \* 11:20-11:30: interval for laptop PC connection.(1C9-16, 1C9-17, 1C9-18, 1C9-19, 1C9-20)
- **1C9–16**<sup>†</sup> Palladium-Catalyzed Silaboration of Pyridine (Kyoto Univ.) OSHIMA, Kazuyuki; OHMURA, Toshimichi; SUGINOME, Michinori
- 1C9-17 Disilane Formation via Double Insertion of Silylene into Carbon-Oxygen Bond in Palladium-Catalyzed Reaction of (Aminosilyl)boronic Esters (Kyoto Univ.) OHMURA, Toshimichi; TAKASE, Ichiro; SUGINOME, Michinori
- 1C9-18 Catalytic Formation of a Silylene Equivalent from (Aminosilyl) boronic Ester: [4+1] Cycloaddition with 2-Vinylbenzofurans and -benzothiophenes (Kyoto Univ.) MASUDA, Kohei; OHMURA, Toshimichi; SUGINOME, Michinori
- 1C9-19 Palladium-Catalyzed Hydrometalation and Bismetalation Reactions of Biphenylene (Tokyo Univ. of Science) MATSUDA, Takanori; KIRIKAE, Haruki
- 1C9-20 Palladium-catalyzed oxidative allylic silylation reaction of disilanes with terminal alkenes (Faculty of Chemistry, Materials and Bioengineering, Kansai Univ.) NAKAI, Syunzi; SHIMIZU, Yosuke; OBORA, Yasushi

# Saturday, March 26, PM

#### Pd

Chair: SHINTANI, Ryo (13:30 $\sim$ 14:30)

- \* 13:20-13:30: interval for laptop PC connection.(1C9-28, 1C9-29, 1C9-30, 1C9-31, 1C9-32, 1C9-33)
- 1C9-28 Synthesis of Chiral Aminophosphine with Adamantyl Group and It's

- Application to Palladium-Catalyzed Asymmetric Allylic Alkylation (Chiba Univ.) MINO, Takashi; YAMADA, Haruka; KOMATSU, Shingo; SAKAMOTO, Masami; FUJITA, Tsutomu
- 1C9-29 The development and application of chiral imidazolidine-consisting ligands (Graduate School of Science, Chiba Univ.) OKA, Ikiyo; ARAI, Takayoshi
- 1C9-30 Asymmetric Carbon-Carbon Bond Forming Reactions with Alkynes as Nucleophiles by Chiral Cationic Pd Catalysts (Graduate School of Science and Engineering, Tokyo Institute of Technology) HIOKI, Yuta; AIKAWA, Kohsuke; MIKAMI, Koichi
- 1C9-31 Development of chiral cationic Pd-catalyzed enantioselective 1,4-Addition and Diels-Alder reactions (Graduate School of Science and Engineering, Tokyo Institute of Technology) HONDA, Kazuya; AIKAWA, Kohsuke; MIKAMI, Koichi
- 1C9-32 Synthesis of(R)-(-)- and (S)-(+)-[6]-Gingerol using Palladium-Catalyzed Reductive Ring Opening Reaction of Oxiranes with Formic Acid (Waseda Univ., Graduate School of Advanced Science and Engineering)
  QIU, Fangming; KAMIKIHARA, Keigo; MATSUZAKA, Teruki; IRII, Hiroyuki; OKAMOTO, Mayumi; SHIMIZU, Isao
- 1C9-33 Synthesis of <sup>13</sup>C-[6]-Gingerol using Palladium-Catalyzed Decarbox-ylationof allylic esters of β-keto carboxylic acid. (Waseda Univ., Graduate School of Advanced Science and Engineering) UMEZAWA, Kazuhito; MATSUZAKA, Teruki; OKAMOTO, Mayumi; SHIMIZU, Isao

Chair: SHIBAHARA, Fumitoshi (14:40~15:40)

- \* 14:30-14:40: interval for laptop PC connection.(1C9-35, 1C9-37, 1C9-38, 1C9-39, 1C9-40)
- 1C9-35\* Palladium-Catalyzed Direct Alkynylation of Aromatic and Aliphatic Carbon-Hydrogen Bonds Using a Bidentate Directing Group (Faculty of Engineering, Osaka Univ.) TOBISU, Mamoru; ANO, Yusuke; CHATANI, Naoto
- 1C9-37 Oxidative Coupling Reaction with Nitrogen-substituted Aromatic Compounds Catalyzed by Pd/HPMoV/O<sub>2</sub> System (Faculty of Chemistry, Materials and Bioengineering, Kansai Univ., ORDIST, Kansai Univ.) MIZUTA, Yohei; SHIMIZU, Yosuke; OBORA, Yasushi; ISHII, Yasutaka
- 1C9-38 Oxidative reaction of aromatic compounds with olefins catalyzed by palladium catalyst (Faculty of Chemistry, Materials and Bioengineering, Kansai Univ.) HARADA, Seiichiro; ASAHINA, Akira; OBORA, Yasushi
- 1C9-39 Palladium-catalyzed reaction of acid chlorides, alkynes, and disilanes to cyclopentenones (Faculty of Chemistry, Materials and Bioengineering, Kansai Univ.) ARAI, Tomonari; OBORA, Yasushi
- 1C9-40 Development of Chemoselective and Regiospecific Suzuki-Miyaura Cross Coupling on an sp<sup>3</sup>-Carbon at Room Temperature (Waseda Univ.) OHKUBO, Takahiro; ENDO, Kohei; SHIBATA, Takanori

Chair: ENDOU, Kouhei (15:50 $\sim$ 16:50)

- \* 15:40-15:50: interval for laptop PC connection.(1C9-42, 1C9-43, 1C9-44, 1C9-45, 1C9-46, 1C9-47)
- **109–42** Pd-Catalyzed C-H/C-H Cross-Coupling of Indoles/Pyrroles and Azines (Dept Chem, Nagoya Univ) YAMAGUCHI, Atsushi; MANDAL, Debashis; YAMAGUCHI, Junichiro; ITAMI, Kenichiro
- 1C9-43 Pd-Catalyzed C-H/C-H Arylation of Polycyclic Aromatic Hydrocarbons (Graduate School of Science, Nagoya Univ.) MOCHIDA, Kenji; KAWSUMI, Katsuaki; SEGAWA, Yasutomo; ITAMI, Kenichiro
- 1C9-44 Pd-catalyzed C-H/C-B Arylation of Polycyclic Aromatic Hydrocarbons (Graduate School of science, Nagoya Univ.) KAWASUMI, Katsuaki; MOCHIDA, Kenji; SEGAWA, Yasutomo; ITAMI, Kenichiro
- 1C9-45 Palladium-Catalyzed Oxidative Cyclization of Benzanilides (Graduate School of Engineering, Kyoto Univ.) NAKANISHI, Yuuta; ISHIDA, Naoki; MURAKAMI, Masahiro
- 1C9-46 Mechanistic insight of site-selective direct arylation of azoles by a Pd-phenanthroline complex (Dept. Chem., Fac. Eng., Gifu Univ.) YAMAGUCHI, Eiji; SHIBAHARA, Fumitoshi; MURAI, Toshiaki
- 1C9-47 Rearrangement reaction of N-allenyl-carbamochalcogenates with decarbonylation by palladium-catalyst (Grad. Sch. Eng., Osaka Univ.; Osaka Dental Univ.) SHIRO, Daisuke; NAGAI, Hiroyuki; TSUDA, Susumu; FUJIWARA, Shin-ichi; IWASAKI, Takanori; KUNIYASU, Hitoshi; KAMBE, Nobuaki

Chair: KUNIYASU, Hitoshi (17:00 $\sim$ 18:00)

- \* 16:50-17:00: interval for laptop PC connection.(1C9-49, 1C9-51, 1C9-53, 1C9-54)
- 1C9-49\*\* Enantioselective Cyclization/Diacetoxylation of Alkynyl Cyclohexadienones Catalyzed by Palladium-Spiro Bis(isoxazoline) Complex (ISIR, Osaka Univ.) MOHANTA, Suman Chandra; TAKENAKA, Kazuhiro; TAKIZAWA, Shinobu; SUZUKI, Takeyuki; SASAI, Hiroaki
- **1C9-51\*** DFT study on 5-endo-trig type cyclization of  $\beta$ ,  $\gamma$ -unsaturated carboxylic acids using Pd-SPRIX catalyst (ISIR, Osaka Univ.) GABR, Randa Kasem Mohamed; BAJRACHARYA, Gan B.; LIN, Xianjin; TAKENAKA, Kazuhiro; TAKIZAWA, Shinobu; OKADA, Yoshihiro; HATAKEYAMA, Takuji; NAKAMURA, Masaharu; SASAI, Hiroaki
- 1C9-53 Axial Chirality Control of Pd Complexes bearing Tropos Ligands and Application to Asymmetric Catalysis (Graduate School of Science and Engineering, Tokyo Institute of Technology) MIYAZAKI, Yoshitaka; AIKAWA, Kohsuke; MIKAMI, Koichi

1C9-54<sup>#</sup> Synthesis of Chiral N-Heterocyclic Carbene Ligands with New Rigid Backbones and Application to the Palladium-Catalyzed Enantioselective Intramolecular α-Arylation of Amides (Kyoto Univ.) LIU, Lantao; ISHIDA, Naoki; ASHIDA, Shinji; MURAKAMI, Masahiro

#### Sunday, March 27, PM

#### Pt

Chair: ITO, Shingo (13:30∼14:30)

- \* 13:20-13:30: interval for laptop PC connection.(2C9-28, 2C9-29, 2C9-30, 2C9-31, 2C9-32, 2C9-33)
- 2C9-28 Hydrosilylation of Alkynes and Subsequent Vinylation of Aldehydes by Platinum-catalyzed One-pot Reaction (Saitama Univ.) UEMURA, Ryosuke; KINOSHITA, Hidenori; MIURA, Katsukiyo
- 2C9-29 Pt(II)-Catalyzed Intermolecular [4+2]-Cycloaddition Reaction of Electron-rich Allenes with Electron-rich Dienes (Tokyo Institute of Technology) AZUMA, Yuka; WATANABE, Eiichi; EBISAWA, Masaru; KUSAMA, Hiroyuki; IWASAWA, Nobuharu
- 2C9-30 [3+2]-Cycloaddition Reaction of Platinum-Containing Carbonyl Ylides for the Preparation of Fused Carbocycles (Tokyo Institute of Technology) WATANABE, Eiichi; ISHIDA, Kento; KUSAMA, Hiroyuki; IWASAWA, Nobuharu
- 2C9-31 Platinum-Catalyzed Cycloisomerization of 1,4-Enynes via 1,2-Alkenyl Migration (Department of Chemistry, Graduate School of Science, Tohoku Univ.) SATO, Takuma; NAKAMURA, Itaru; TERADA, Masahiro

#### Pd

- 2C9-32 Asymmetric hydrosilylation of styrenes using a chiral polymer ligand (PQXphos) featuring reversible switch of helical chirality (Graduate School of Engineering, Kyoto Univ.) ADACHI, Takumi; AKAI, Yuto; YAMAMOTO, Takeshi; NAGATA, Yuuya; SUGINOME, Michinori
- 2C9-33 Enantioselective Suzuki-Miyaura Cross-Coupling Using Chilal Helical Polyquinoxaluine as a Chiral Ligand (Kyoto Univ.) AKAI, Yuto; YAMAMOTO, Takeshi; NAGATA, Yuuya; SUGINOME, Michinori

Chair: NAKAMURA, Itaru (14:40~15:40)

- \* 14:30-14:40: interval for laptop PC connection.(2C9-35, 2C9-36, 2C9-37, 2C9-38, 2C9-39, 2C9-40)
- 2C9-35 Anionic tethered N-heterocyclic carbene: NHC-Pd complex for asymmetric allylic substitution (Kansai Univ.) SHIRASAKI, Hiroshi; KAWAKAMI, Miaki; SAKAGUCHI, Satoshi
- 2C9-36 Development of Novel Chiral Spiro Ligands Bearing Sulfur Donor (ISIR, Osaka Univ.) TAKATANI, Shuhei; TAKENAKA, Kazuhiro; SASAI. Hiroaki
- 2C9-37 Pd-Catalyzed Enantioselective Synthesis of Planar Chiral Mediumsized Cyclic Amides (IMCE, Kyushu Univ.; IGSES, Kyushu Univ.; Tokyo Tech.) ITO, Masato; KATANODA, Keisuke; AKIYAMA, Toshiyuki; TOMOOKA, Katsuhiko
- **2C9–38** Application of Optically Active α-Chiral Phosphine Ligands Obtained by a Catalytic Asymmetric Reduction of Acylphosphines (Ehime Univ.) HAYASHI, Minoru; MATSUURA, Takashi; SAKAI, Minako; ISHITOBI, Hiroyuki; WATANABE, Yutaka
- **2C9-39** Coordination-Insersion Copolymerization of Allyl Monomers with Ethylene (The Univ. of Tokyo, Graduate School of Engineering) KANAZAWA, Masafumi; ITO, Shingo; NOZAKI, Kyoko
- 2C9-40 Sulfonamidoquinoline-Palladium(II) Complex-Catalyzed γ-Selective and Stereospecific Allyl-Aryl Coupling Reaction between Allylic Acetates and Arylboronic Acids (Department of Chemistry, Faculty of Science, Hokkaido Univ.) MAKIDA, Yusuke; OHMIYA, Hirohisa; SAWAMURA, Masaya

Chair: SHINTANI, Ryo (15:50 $\sim$ 16:50)

- \* 15:40-15:50: interval for laptop PC connection.(2C9-42, 2C9-43, 2C9-44, 2C9-45, 2C9-46, 2C9-47)
- 2C9-42 Construction of Lactone and Lactam by Allylation of Vinylcyclopropane (Nagasaki Univ., Faulty of Engineering) TANAKA, Shota; YAMAGUCHI, Yumi; KIMURA, Masanari
- 2C9-43 Pd-Catalyzed Propargylation of Lactols to Form Hydroxyhomopropargyl Alcohols (Nagasaki Univ., Faulty of Engineering) SIRATORI, Syouitt; HIROKAWA, Singo; KIMURA, Masanari
- 2C9-44 Synthesis of Nitrogen Heterocycles via Efficient Activation of 2,3-Dimethylenebutane-1,4-diol (Nagasaki Univ., Faulty of Engineering) SANADA, Shohei; YAMAGUCHI, Yumi; KIMURA, Masanari
- **2C9-45** Reactivities of [α-silyl or α-boryl-π-allyl]palladium intermediates (Univ. of Toyama) HORINO, Yoshikazu; MURATA, Yasuno; YOSHIKAWA, Saori; KURODA, Shigeyasu
- 2C9-46 Synthesis of 1,2-naphthalenediols from Diazonaphthoquinones (Kyusyu Institute of Technology) KISANUKI, Masato; SAKATA, Rie; OKAUCHI, Tatsuo; KITAMURA, Mitsuru
- 2C9-47 Pd-Catalyzed Addition of Alkynyl Ethers to Alkynes (Institute of Science and Engineering; Chuo Univ.) SHIRAISHI, Yuki; MINAMI, Yasunori; HIYAMA, Tamejiro

- Chair: OHMIYA, Hirohisa  $(17:00\sim18:00)$
- \* 16:50-17:00: interval for laptop PC connection.(2C9-49, 2C9-50, 2C9-51, 2C9-52, 2C9-53, 2C9-54)
- 2C9-49 Pd-Complex-Catalyzed Addition Reactions of Thiophosphinate to Terminal Alkynes: Effects of solvent and substituent of substrate on yield. (Chemical Resources Laboratory, Tokyo Institute of Technology) HOSHI, Nobutaka; KASHIWABARA, Taigo; TANAKA, Masato
- 2C9-50 Palladium-Catalyzed Benzylic Substitution of Benzylic Carbonates with Phosphorus Compounds (Kyushu Univ.) USUI, Kazumi; UENO, Satoshi; KUWANO, Ryoichi
- 2C9-51 Palladium-Catalyzed Decarboxylative Cyclopropanation of 2-Alkylidenetrimethylene Carbonates with Isocyanates. (Graduate School of Science, Kyoto Univ.) SHINTANI, Ryo; MORIYA, Kohei; HAYASHI, Tamio
- 2C9-52 Palladium-Catalyzed Denitrogenative Annulation Reaction of 1,2,3-Benzotriazin-4(3H)-ones with Isocyanides (Graduate School of Engineering, Kyoto Univ.) NISHIDA, Yui; MORIMOTO, Masao; MIURA, Tomoya; MURAKAMI, Masahiro
- 2C9-53 Pd-complex-catalyzed non-decarbonylative addition of PhS-C(O)C(O) OR toward alkynes (Tokyo Institute of Technology) KASHIWABARA, Taigo; TANAKA, Masato
- **2C9-54** Palladium-Catalyzed [3+2] Cycloaddition of *m*-(Silylmethyl)benzylic Carbonates with Electron-Deficient Alkenes (Kyushu Univ.) TANAKA, Takeshi; UENO, Satoshi; KUWANO, Ryoichi

# Monday, March 28, PM

#### Po

Chair: OGASAWARA, Masamichi (12:40~13:40)

- \* 12:30-12:40: interval for laptop PC connection.(3C9-23, 3C9-26)
- 3C9-23 Young Scholar Lectures of CSJ Novel Methods for Introduction of Polar Functional Groups via Transition-Metal-Catalyzed Aromatic C-H Bond Cleavage (Keio Univ.) KOCHI, Takuya
- 3C9-26 Young Scholar Lectures of CSJ Development of Highly Selective Carbon-Carbon Bond Formation Reactions with Organoboron Compounds (Grad. Sch. Sci., Hokkaido Univ.) OHMIYA, Hirohisa

Chair: MAKIOKA, Yoshikazu (13:50~14:50)

- \* 13:40-13:50: interval for laptop PC connection.(3C9-30, 3C9-32, 3C9-33, 3C9-34, 3C9-35)
- 3C9-30\* Nanoporous palladium as a catalyst for Suzuki coupling reaction (Center for Integrated NanoTechnology Support, Tohoku Univ.; WPI Advanced Institute for Materials Research, Tohoku Univ.; Institute for Materials Research, Tohoku Univ.) TANAKA, Shinya; ASAO, Naoki; YAMAMOTO, Yoshinori; CHEN, Mingwei; ZHANG, Wei; INOUE, Akihisa
- 3C9-32 Space Integration of Lithiation and Murahashi Coupling Using a Flow Microreactor System (Kyoto Univ.) MORIWAKI, Yuya; NAGAKI, Aiichiro; KENMOKU, Akira; HAYASHI, Atsushi; YOSHIDA, Jun-ichi
- 3C9-33 Bromoalkynylation of alkynes with palladium-exchanged hydroxyapatite catalyst (Sophia Univ.) MORITA, Maiko; SUZUKI, Noriyuki; MASUYAMA, Yoshiro
- 3C9-34 Formylation of aryl halides by PdO/ Co<sub>3</sub> O<sub>4</sub> (Dept. of Chemistry, Kyushu Univ.) NORIO, Takafumi; HAMASAKI, Akiyuki; LIU, Xiao hao; OHASHI, Hironori; TOKUNAGA, Makoto
- 3C9-35 Preparation of Palladium Nanoparticles in Ionic Liquids by Sputter Deposition and its Application to Suzuki-Miyaura Coupling in Water (Faculty of Engineering, Osaka Univ.) ODA, Yoshiro; HIRANO, Koji; YOSHII, Kazuki; KUWABATA, Susumu; TORIMOTO, Tsukasa; MIURA, Masahiro

Chair: OHMURA, Toshimichi (15:00 $\sim$ 15:50)

- \* 14:50-15:00: interval for laptop PC connection.(3C9-37, 3C9-38, 3C9-39, 3C9-40, 3C9-41, 3C9-42)
- 3C9-37 Palladium-Catalyzed Decarboxylative Intramolecular Aziridination from 4H-Isoxazol-5-ones (Kyoto Univ.) OKAMOTO, Kazuhiro; ODA, Tomohiro; KOHIGASHI, Sho; OHE, Kouichi
- **3C9–38** Palladium-Catalyzed Synthesis of N-Heteroaromatics from 4*H*-Isoxazol-5-ones as a Nitrene Source (Kyoto Univ.) OKAMOTO, Kazuhiro; KOHIGASHI, Sho; ODA, Tomohiro; OHE, Kouichi
- 3C9-39 Synthesis of Methylenecyclopropanes by Palladium-Catalyzed Reaction of Aryl Halides with Propargyl-Substituted Malonate Esters (Graduate School of Engineering, Kyoto Univ.) FUJINO, Daishi; YORIMITSU, Hideki; OSHIMA, Koichiro
- 3C9-40 Palladium-Catalyzed Carbonylative Coupling Reaction of Aryl Halides Using An Iron Carbonyl Complex (Graduate School of Science, Kyoto Univ.) NAKAYA, Ryotaro; YORIMITSU, Hideki; OSHIMA, Koichiro
- **3C9-41** Palladium-Catalyzed Esterification of Aryl Halides with Formates (Graduate School of Engineering, Kyoto Univ.) HOSOKI, Tomoya; KATAFUCHI, Yuko; IWAI, Tomohiro; FUJIHARA, Tetsuaki; TERAO, Jun; TSUJI, Yasushi

Chair: TERAO, Jun (15:50∼17:10)

3C9-42 Synthesis of Divalent Quarterarenes as AB-type Cross-Coupling Monomers for Polyarene Synthesis (Graduate School of Engineering, Kyoto

- Univ.) TAKAHASHI, Hikaru; SUGINOME, Michinori
- \* 16:00-16:10: interval for laptop PC connection.(3C9-44, 3C9-46, 3C9-47, 3C9-48, 3C9-49)
- **3C9-44\*** Complementary Stereochemical Control in Stereospecific Suzuki-Miyaura Coupling of Optically Active (α-Amide)benzylboronic Esters (Kyoto Univ.) AWANO, Tomotsugu; OHMURA, Toshimichi; SUGINOME, Michinori
- **3C9-46** Synthesis of Dienyl Homoallyl Alcohols via Palladium Catalyst and Triethylborane (Nagasaki Univ., Fautly of Engineering) TAKUSHIMA, Daiki; FUKUSHIMA, Masahiro; KIMURA, Masanari
- 3C9-47 Synthesis of Indole Alkaloids via Palladium-Catalyzed Allylation (Graduate School of Science and Technology, Nagasaki Univ.) KUWAHARA, Hikari; TANAKA, Shota; KIMURA, Masanari
- **3C9–48** Stereoselective Allylation of Terminal Alkynes by Pd Catalyst and Organoboranes (Graduate School of Science and Technology, Nagasaki Univ.) FUKUSHIMA, Masahiro; KIMURA, Masanari
- **3C9-49** Highly Active Palladium Catalyst for Suzuki-Miyaura Reaction Bearing Biphenylene-Substituted Dicyclohexylruthenocenylphosphine (CyR-Phos) (Faculty of Eng., Niigata Univ. and Grad. School of Sci. and Tech., Niigata Univ.) HOSHI, Takashi; HONMA, Tomonobu; SUZUKI, Toshio; HAGIWARA, Hisahiro

Chair: YORIMITSU, Hideki (17:20~18:10)

- \* 17:10-17:20: interval for laptop PC connection.(3C9-51, 3C9-53, 3C9-54, 3C9-55)
- 3C9-51\*† Palladium-catalyzed asymmetric allylic amination of trifluoromethyl group-contained racemic unsymmetrical 1,3-disubstituted allylic ester (Tottori Univ.) HIRAKAWA, Takuya; IKEDA, Kazunori; KAWATSURA, Motoi; ITOH, Toshiyuki
- 3C9-53 Palladium-catalyzed asymmetric allylic alkylation of trifluoromethyl group-contained racemic unsymmetrical 1,3-disubstituted allylic ester (Tottori Univ.) IKEDA, Kazunori; HIRAKAWA, Takuya; KAWATSURA, Motoi; ITOH, Toshiyuki
- **3C9-54** Palladium-catalyzed double alkylation of mono-substituted fluorine-contained allyl acetate (Tottori Univ.) YAMAMOTO, Mitsuaki; HAYASHI, Shunsuke; KAWATSURA, Motoi; ITOH, Toshiyuki
- 3C9-55 Development of Multinuclear Palladium Complex-Catalyzed Ring-Opening Reactions Using BINOL-PHOS Ligand (Waseda Univ.) TANAKA, Keisuke; ENDO, Kohei; SHIBATA, Takanori

#### Tuesday, March 29, AM

#### Si, Ge

Chair: MATSUO, Tsukasa (9:20 ∼10:20)

- \* 9:10-9:20: interval for laptop PC connection.(4C9-03, 4C9-04, 4C9-05, 4C9-07, 4C9-08)
- 4C9-03 Stereoselective Preparation of Enol Silyl Ethers by Three-Component Coupling via Silyl Migration (Tokyo Univ. of Agric. and Tech.) TSUBOUCHI, Akira; ENATSU, Shouko; SASAKI, Natsuki; TAKEDA, Takeshi
- 4C9-04 Regio- and Stereoselective Preparation of Highly Substituted Homoallylic Alcohols Utilizing Cross-coupling of Vinylsilanes (Tokyo Univ. of Agric. and Tech.) TAKEDA, Takeshi; WASA, Hideki; TSUBOUCHI, Akira
- 4C9-05\* Reactivity of a Stable 1,2-Dibromodisilene (Kyoto Univ.; Kyoto Univ. Pioneering Research Unit for Next Generation) AGOU, Tomohiro; HAN, Joon Soo; SASAMORI, Takahiro; TOKITOH, Norihiro
- **4C9-07** Alkylation and Alkenation of Carbonyl Compounds with  $\alpha$ -Dimethylsilyl-substituted Nitriles (Saitama Univ.) JINZAKI, Takaaki; KINOSHITA, Hidenori; MIURA, Katsukiyo
- 4C9-08 Nitro-Mannich Type Reaction Promoted by Germanium(II) (Osaka Univ.) YASUDA, Makoto; HOSOI, Takahisa; BABA, Akio

#### Pd

Chair: NAGAKI, Aiichiro (10:30 $\sim$ 11:30)

- \* 10:20-10:30: interval for laptop PC connection.(4C9-10, 4C9-12, 4C9-13, 4C9-14, 4C9-15)
- 4C9-10\* Molecular sieving effect of the Heck reaction catalyzed by the palladium nanoparticules immobilized in crosslinked polyammonium salts (Interdisciplinary Graduate School of Science and Engineering, Tokyo Institute of Technology; ChemicalResources Laboratory, Tokyo Institute of Technology) SAKURAI, Hisayuki; MAKIOKA, Yoshikazu; TANIGUCHI, Yuki
- **4C9-12** Synthesis of rare-metal nanoclusters and their use in catalysis (Faculty of Chemistry, Materials and Bioengineering, Kansai Univ.) ISOMURA, Yuto; HYOTANISHI, Megumi; NAKAJIMA, Yui; KAWASAKI, Hideya; OBORA, Yasushi
- 4C9-13 Synthesis of a Silica-Supported 9-Phospha-10-Silatriptycene and the Application to Palladium-Catalyzed Cross-Coupling Reactions (Department of Chemistry, Faculty of Science, Hokkaido Univ.) MIYAZAKI, Tatsuya; KAWAMORITA, Soichiro; OHMIYA, Hirohisa; SAWAMURA, Masaya
- **4C9-14** Borylation of Hindered Aryl Chlorides Catalyzed by a Silica-Supported Phosphine-Palladium Complex (Department of Chemistry, Faculty of Science, Hokkaido Univ.) KAWAMORITA, Soichiro;

OHMIYA, Hirohisa; SAWAMURA, Masaya

4C9-15 Transition Metal/Light Induced Four-Component Coupling Reactions of Alkyl Iodides, Alkenes, Carbon Monoxide, and Alcohols (Graduate School of Science, Osaka Prefecture Univ.) FUSANO, Akira; FUKUYAMA, Takahide; SUMINO, Shuhei; RYU, Ilhyong

#### Fe

Chair: HATA, Takeshi (11:40∼12:30)

- \* 11:30-11:40: interval for laptop PC connection.(4C9-17, 4C9-18, 4C9-19, 4C9-20, 4C9-21)
- 4C9-17<sup>#</sup> Iron-Catalyzed Oxidative Amination for the Selective Synthesis of Diarylamine (The Univ. of Tokyo) NAKAMURA, Yuki; ILIES, Laurean; NAKAMURA, Eiichi
- 4C9-18# Iron-Catalyzed Direct Arylation of Benzamide Derivatives (Univ. of Tokyo) KONNO, Eita; CHEN, Quan; ILIES, Laurean; NAKAMURA, Fiichi
- 4C9-19# Iron-Catalyzed Direct Arylation of Olefinic C-H Bond with Aryl Grignard Reagents (Univ. of Tokyo) ASAKO, Sobi; ILIES, Laurean; NAKAMURA, Eiichi
- **4C9-20** Kinetic Resolution of Planar-Chiral (η 5-Dihydroindenyl)iron(II) Complexes by Molybdenum-Catalyzed EnantioselectiveRing-Closing Metathesis (Catalysis Research Center, Hokkaido Univ.; Aichi Univ. of Edu.) OGASAWARA, Masamichi; ARAE, Sachie; WATANABE, Susumu; NKAJIMA, Kiyohiko; TAKAHASHI, Tamotsu
- 4C9-21 Asymmetric Iron-bis(oxazolinylphenyl)amine Catalyzed Hydrosilylation of Ketones: Reversal of Enantioselectivity. (Nagoya Univ.) INAGAKI, Tomohiko; ITO, Akihiro; ITO, Jun-ichi; NISHIYAMA, Hisao

### Tuesday, March 29, PM

#### Fe

Chair: HATAKEYAMA, Takuji (13:40~14:40)

- \* 13:30-13:40: interval for laptop PC connection.(4C9-29, 4C9-30, 4C9-31, 4C9-32, 4C9-33, 4C9-34)
- 4C9-29 Iron-porphyrin-catalyzed hetero-Diels-Alder reaction of dienes and aldehydes (Univ. of Kyoto; Graduate School of Engineering) FUJIWARA, Kyohei; KURAHASHI, Takuya; MATSUBARA, Seijiro
- 4C9-30 Cobalt-porphyrin-catalyzed aza-Diels-Alder reaction of dienes and imines (Univ. of Kyoto; Graduate School of Engineering) WAKABAYASHI, Ryota; KURAHASHI, Takuya; MATSUBARA, Seijiro
- 4C9-31 Manganese-porphyrin-catalyzed cycloisomerization of eneynes (Univ. of Kyoto; Graduate School of Engineering) OZAWA, Takuya; KURAHASHI, Takuya; MATSUBARA, Seijiro
- **4C9-32** Convenient Synthesis of Benzocycloheptenones Using Iron-Catalyzed Coupling Products from 2,4-Dienoates and Grignard Reagents (Tokyo Institute of Technology) YOKOMIZO, Tomofumi; GOTOH, Hideyuki; HATA, Takeshi; URABE, Hirokazu
- 4C9-33 Iron-Catalyzed Selective Synthesis of Allenes from Functionalized Conjugated Enynes and Grignard Reagents (Tokyo Institute of Technology) HATA, Takeshi; IWATA, Satoshi; SETO, Shumpei; URABE, Hirokazu
- **4C9-34** Iron-Catalyzed Selective Synthesis of Peroxyacetals from Benzyl Ethers and *tert*-Butyl Hydroperoxide (Tokyo Institute of Technology) IWATA, Satoshi; HATA, Takeshi; URABE, Hirokazu

Chair: KUNIYASU, Hitoshi (14:50~15:40)

- \* 14:40-14:50: interval for laptop PC connection.(4C9-36, 4C9-38, 4C9-39, 4C9-40)
- 4C9-36\*\* Synthesis of Polycyclic Aromatic Compounds via Iron-Catalyzed Annulation of Alkyne with Grignard Reagent (Univ. of Tokyo) MATSUMOTO, Arimasa; ILIES, Laurean; NAKAMURA, Eiichi
- 4C9-38 Synthesis of Benzosiloles through Iron-Catalyzed Aryllithiation of Alkynes (Graduate School of Science, Kyoto Univ.) SHIRAKAWA, Eiji; MASUI, Seiji; WATABE, Ryo; NARUI, Rintaro; IKEDA, Daiji; HAYASHI, Tamio
- 4C9-39<sup>†</sup> Iron-Catalyzed Oxidative Coupling of Arylboronic Acids with Arenes (Graduate School of Science, Kyoto Univ.) SHIRAKAWA, Eiji; UCHIYAMA, Nanase; HAYASHI, Tamio
- 4C9-40 Iron-Catalyzed Pinacol Coupling of Aryl Ketones with a Phenyltitanium Reagent (Graduate School of Science, Kyoto Univ.) SASAKI, Keigo; HAYASHI. Tamio

Chair: SHIRAKAWA, Eiji (15:50∼16:30)

- \* 15:40-15:50: interval for laptop PC connection.(4C9-42, 4C9-43, 4C9-44, 4C9-45)
- 4C9-42 Theoretical Studies of Iron-Catalyzed Cross-Coupling Reaction (International Research Center for Elements Science, Institute for Chemical Research, Kyoto Univ.) OKADA, Yoshihiro; HATAKEYAMA, Takuji; CHUNG, Lung Wa; MOROKUMA, Keiji; NAKAMURA, Masaharu
- 4C9-43 Synthesis of triarylamines by iron-catalyzed aromatic amination reaction (International Research Center for Elements Science, Institute for Chemical Research, Kyoto Univ.) IMAYOSHI, Ryuji; YOSHIMOTO, Yuya; HATAKEYAMA, Takuji; NAKAMURA, Masaharu
- 4C9-44 C-Glycoside Synthesis Based on Iron-Catalyzed Cross-Coupling

- Reaction (International Research Center for Elements Science, Institute for Chemical Research, Kyoto Univ.) KAWAMURA, Shintaro; GABRIEL, Toma; SHING, Tony K. M.; NAKAMURA, Masaharu
- **4C9-45** Iron Catalyzed (sp³)C-(sp³)C Cross-Coupling Reaction Using diene as a Ligand (Graduate School of Engineering, Osaka Univ.) SHIMIZU, Ryohei; IWASAKI, Takanori; KUNIYASU, Hitoshi; KAMBE, Nobutaki

# Room D1

Bldg. 11 11-11

# Physical Chemistry -Chemical Kinetics and Dynamics-

# Saturday, March 26, AM

Chair: YAMAGUCHI, Shoichi (9:20 ∼10:10)

- \* 9:10-9:20: interval for laptop PC connection.(1D1-03, 1D1-05, 1D1-06, 1D1-07)
- 1D1-03\* Measurement of phase transition dynamics of poly(N-isopropylacry-lamide) under temperature control using transient grating method (Chuo Univ.) INOUE, Hayato; KUSHIMA, Keisuke; KATAYAMA, Kenji
- 1D1-05 Reorientation dynamics of nematic liquid crystal measured by transient grating method (Chuo Univ.) CHIBA, Takaaki; INOUE, Hayato; KATAYAMA, Kenji
- 1D1-06 Light curing dynamics of a photopolymer measured by transient grating technique (Chuo Univ.) ARAI, Mika; INOUE, Hayato; KATAYAMA, Kenji
- 1D1-07 Nucleation reaction dynamics of platinum nanoparticles in the photoreduction processes using the transient grating method (Chuo Univ.) MAEDA, Naotaka; EITOKU, Takeshi; IKEZOE, Yasuhiro; KATAYAMA, Kenji

Chair: KATAYAMA, Kenji (10:20~11:20)

- \* 10:10-10:20: interval for laptop PC connection.(1D1-09, 1D1-10, 1D1-11, 1D1-12, 1D1-14)
- 1D1-09 Transient grating method under high pressure applied for exploring the reaction of BLUF protein TePixD (Department of Chemistry, Graduate School of Science, Kyoto Univ.) KUROI, Kunisato; TANAKA, Keisuke; KIMURA, Yoshifumi; OKAJIMA, Kouji; IKEUCHI, Masahiko; TOKUTOMI, Satoru; TERAZIMA, Masahide
- 1D1-10 Triiodie photodissociation and subsequent relaxation process in [BMIm][I] (Kyoto. Univ) NISHIYAMA, Yoshio; TERAZIMA, Masahide; KIMURA, Yoshifumi
- 1D1-11 Study on the Inhomogeneity Effect on the Photo-inducedProton Transfer Reaction in Room Temperature Ionic Liquids (Kyoto Univ.) KIMURA, Yoshifumi; SUDA, Kayo; TERAZIMA, Masahide
- 1D1-12\* Fluorescence enhancement of perylene bisimide using two-dimensional photonic crystals with ultra-low background emission (KARC, NICT) KAJI, Takahiro; YAMADA, Toshiki; UEDA, Rieko; OTOMO, Akira
- 1D1-14 Single molecule detection of solute molecules in nano- to micrometer sized droplets (Osaka Univ. Graduate School of Engineering Science and Center for Quantum Material Science under Extreme Conditions) IIDA, Atsushi; ITO, Syoji; MIYASAKA, Hiroshi

Chair: KIMURA, Yoshifumi (11:30 $\sim$ 12:20)

- \* 11:20-11:30: interval for laptop PC connection.(1D1-16, 1D1-18, 1D1-19)
- 1D1-16\* Optical Trapping of quantum dots and dye-doped polystyrene nanoparticlesassisted by gap-mode localized surface plasmon (Hokkaido Univ.) SHOJI, Tatsuya; KITAMURA, Noboru; TAKASE, Mai; MURAKOSHI, Kei; MIZUMOTO, Yoshihiko; ISHIHARA, Hajime; TSUBOI, Yasuyuki
- 1D1-18 Optical trapping of polymer chains using enhanced electromagnetic field of Localized Surface Plasmon: A fluorescence microscopy approach (Hokkaido Univ.) TOSHIMITSU, Mariko; SHOJI, Tatsuya; KITAMURA, Noboru; MATSUMURA, Yuriko; ONODERA, Takayuki; TAKASE, Mai; MURAKOSHI, Kei; TSUBOI, Yasuyuki
- 1D1-19\* New Photo-Isomerization Path of Indocyanine Green in Condensed Phase Investigated by Two-pulse Excitation (Kobe Univ.) FUYUKI, Masanori; FURUTA, Koichi; WADA, Akihide

# Saturday, March 26, PM

Chair: TSUBOI, Yasuyuki (13:30~14:20)

- \* 13:20-13:30: interval for laptop PC connection.(1D1-28, 1D1-29, 1D1-30, 1D1-32)
- 1D1-28 Femtosecond Laser Induced Morphology Change of Single Silver Nanocubes. (Ehime Univ.) MIZUMOTO, Yosei; ASAHI, Tsuyoshi; OKAZAKI, Ken-ichi; TORIMOTO, Tsukasa
- 1D1-29 Photochromism of a film of poly butyl methacrylate doped with gold nanoparticle and diarylethene (Ehime Univ.) MORI, Takuya; NISHI, Hiroyasu; KOBATAKE, Seiya; ASAHI, Tsuyoshi

- 1D1-30\* Mechanisms and Kinetics for Hydrothermal Reaction of Glucose (Inst. Chem. Res., Kyoto Univ.) KIMURA, Hiroshi; NAKAHARA, Masaru; MATUBAYASI, Nobuyuki
- 1D1-32 Theoretical design of the isomerization reactions of pi-electron molecules induced by photodetachment (Tohoku Univ., Graduate school of Science) NAKAMURA, Kosuke; HOKI, Kunihito; KANNO, Manabu; KONO, Hirohiko

Chair: MURAKOSHI, Kei (14:30~15:00)

- \* 14:20-14:30: interval for laptop PC connection.(1D1-34)
- 1D1-34 CSJ Award for Young Chemists Fabrication of Enhanced Optical Fields Using Nano-engineered Metallic Particles and Its Application to Chemical Reactions (RIES, Hokkaido Univ.) UENO, Kosei

Chair: ASAHI, Tsuyoshi (15:10~15:40)

- \* 15:00-15:10: interval for laptop PC connection.(1D1-38, 1D1-39, 1D1-40)
- 1D1-38 Fabrication of Singlet Oxygen Generating Membranes Loaded with Photosensitizer Dye Nanoparticles (Nagaoka Univ. of Tech.) TAKAHASHI, Yukiko; ITOU, Daiki; SAITO, Hironobu; NOSAKA, Yoshio
- 1D1-39 The photoisomerization behavior of the benzodimethyldihydropyrene monolayer on ITO electrode (The Univ. of Tokyo) NISHIKAWA, Masaaki; KUME, Shoko; NISHIHARA, Hiroshi
- 1D1-40 Photoinduced One-Electron Oxidation of Organic Compounds on Europium-Based Metal-Organic Frameworks (ISIR, Osaka Univ.) TACHIKAWA, Takashi; CHOI, Jun Rye; FUJITSUKA, Mamoru; MAJIMA. Tetsuro

Chair: HOSOI, Haruko (15:50~16:30)

- \* 15:40-15:50: interval for laptop PC connection.(1D1-42, 1D1-44, 1D1-45)
- 1D1-42\* Electric Field Effects on Photoexcitation Dynamics of the Model Compound of Chromophores of Fluorescent Proteins (RIES, Hokkaido Univ.; Aichi Univ. Edu.) NAKABAYASHI, Takakazu; HINO, Kazuyuki; OHTA, Yuka; ITO, Sayuri; NAKANO, Hirofumi; OHTA, Nobuhiro
- 1D1-44 Dependence of Laser Ablation Wavelength on Preparation of Polyynes in Liquid Phase Using Pellet Targets (Ritsumeikan Univ.) MATSUTANI, Ryutaro; INOUE, Kohei; AOYAMA, Takeshi; WADA, Noriyuki; KOJIMA, Kojima
- 1D1-45 Non-destructive Ionization Using Clathrated Matrix (Tokyo Metropolitan Univ.) FUJINO, Tatsuya; KORENAGA, Takashi

Chair: NAKABAYASHI, Takakazu (16:40~17:30)

- \* 16:30-16:40: interval for laptop PC connection.(1D1-47, 1D1-48, 1D1-49, 1D1-50, 1D1-51)
- **1D1-47** Phase Transition of DMPC Liposome Membrane Observed with Picosecond Time-Resolved Fluorescence Spectroscopy: Temperature Dependence of Photoisimerization Rate of *trans*-stilbene (Gakushuin Univ.) NOJIMA, Yuki; IWATA, Koichi
- 1D1-48 Energy transfer from lattice conduction band to dopant in LaInO<sub>3</sub>:Pr<sup>3</sup> observed with picosecond time-resolved emission spectroscopy (Gakushuin Univ.) SHIMOJO, Hideaki; TAKAYA, Tomohisa; IWATA, Koichi; MORI, Yuki; MORI, Daisuke; INAGUMA, Yoshiyuki
- 1D1-49 Solvent dependence of two-photon absorption spectra of a model green fluorescent protein chromophore (Toho Univ.) RYO, Tayama; TAKEUCHI, Satoshi; MIZUNO, Hideaki; MIYAWAKI, Atsushi; TAHARA, Tahei; HOSOI, Haruko
- 1D1-50 Phase separation dynamics of thermoresponsive polymers poly (oxyethylene vinyl ether) systems: by using laser temperature jump technique (Hokkaido univ.) TSUBOI, Yasuyuki; KIKUCHI, Kanae; SHOJI, Tatsuya; KITAMURA, Noboru; SIMOMOTO, Hiroaki; KANAOKA, Shokyoku; AOSHIMA, Sadahito
- 1D1-51 Substituent Effect on Photophysics of Coronene and Benzoperylene Derivatives (Faculty of Science and Technology, Keio Univ.) MIURA, Tomoaki; HIRAYAMA, Sunao; SAKAI, Hayato; HASOBE, Taku

# Sunday, March 27, AM

Chair: NAKATA, Satoshi  $(9:20\sim10:20)$ 

- \* 9:10-9:20: interval for laptop PC connection.(2D1-03, 2D1-04, 2D1-05, 2D1-06, 2D1-07)
- 2D1-03 Photo-Control of Excitability of Cardiomyocyte (Kyoto Univ.; Ecole Normale Superieure) MAGOME, Nobuyuki; NICOLAS, Moisan; TANAKA, Koichiro; BAIGL, Damien; YOSHIKAWA, Kenichi; AGLADZE, Konstantin
- 2D1-04 Non-lenear electrochemical emulation of unidirectional wave propagation arong upper urinary tract (Saitama Univ. graduate school of Science& Engineering) KOYAMA, Hiroaki; NAKABAYASHI, Seiichiro
- 2D1-05 Collective group behavior in extracellular electron transfer of electricity-producing bacteria (RCAST, The Univ. of Tokyo) NAKANISHI, Shuji; LIU, Huan; MATSUDA, Shoichi; HASHIMOTO, Kazuhito
- 2D1-06 Novel electrochemical oscillation during Cu electrodeposition in the presence of SCN- ions (Sch. Eng., The Univ. of Tokyo; RCAST, The Univ. of Tokyo) KAMIYA, Kazuhide; NAKANISHI, Shuji; HASHIMOTO, Kazuhito
- 2D1-07\* Analysis of target-like bioluminescence pattern triggered by oxygen

stimulus on a colony of luminous bacterium (Kyoto Institute of Technology) KARATANI, Hajime; KAWAKAMI, Hajimu

Chair: SOGOSHI, Norihito (10:30~11:30)

- \* 10:20-10:30: interval for laptop PC connection.(2D1-10, 2D1-11, 2D1-13, 2D1-15)
- 2D1-10 Adsorbed bacteria show oscillatory bioluminescence (School of Biosci. Biotechnol.) SASAKI, Satoshi; HORIE, Masato
- **2D1-11\*** Two-dimensional Fluorescence Lifetime Correlation Analysis of Hairpin DNA (RIKEN) ISHII, Kunihiko; TAHARA, Tahei
- 2D1-13\* Spontaneous Fluctuation of Cytochrome c Revealed by Lifetime-weighted Fluorescence Correlation Spectroscopy (RIKEN) OTOSU, Takuhiro; ISHII, Kunihiko; TAHARA, Tahei
- 2D1-15 Color analysis of the autocatalysis of permanganate ion by hydrogen peroxide (Applied Chemistry Kanagawa Inst.Tech) HONDA, Kazuhiro

# Sunday, March 27, PM

Chair: IKOMA, Tadaaki (12:40∼13:30)

- \* 12:30-12:40: interval for laptop PC connection.(2D1-23, 2D1-24, 2D1-25, 2D1-26)
- 2D1-23 Excited Triplet States of Carbazole Dimers (2) Two Kinds of EPR Signals (Tohoku Univ.; Osaka Kyoiku Univ.;Ritsumeikan Univ.) YAMAUCHI, Seigo; TANABE, Mana; MATSUOKA, Hideto; TANI, Keita; YAMAMOTO, Masahide
- 2D1-24 Photo exited states and time-resolved ESR of a weakly exchange coupled bodipy-stable radical system (Osaka City Univ.) KAWANAKA, Yusuke; TEKI, Yoshio
- 2D1-25 Theoretical Study of the Generation Mechanism of the Unique Dynamic Electron Spin Polarization of Photo-Excited High-Spin States via a Quantum-Mixed Doublet- Triplet System(3) (Osaka City Univ.) MATSUMOTO, Takafumi; TEKI, Yoshio
- 2D1-26\* High frequency Pulse EPR Studies of Proton-Coupled Electron Transfer in Single Crystals of Photosystem II (Institute of Multidisciplinary Research for Advanced Materials, Tohoku Univ.; Okayama Univ.; Institute for Molecular Science; Agape-Kabutoyama Institute of Medicine) MATSUOKA, Hideto; SHEN, Jian-ren; KAWAMORI, Asako; NISHIYAMA, Kei; YAMAUCHI, Hideto

Chair: ASANO, Motoko (13:40 $\sim$ 14:30)

- \* 13:30-13:40: interval for laptop PC connection.(2D1-29)
- 2D1-29\* Special Lecture Electron Transfer in Natural and Artificial Photosynthesis Studied Using Time-Resolved Electron Paramagnetic Resonance Spectroscopy (Dept. Chem., Brock Univ., Canada) Arthur van der Est

Chair: YONEMURA, Hiroaki (14:40 $\sim$ 15:40)

- \* 14:30-14:40: interval for laptop PC connection.(2D1-35, 2D1-37, 2D1-38, 2D1-39)
- 2D1-35\* Ling-Lived Triplet Charge-Separated State of a Zinc Porphyrin-Fullerene Linked Dyad (Osaka Univ.; Univ. Sydney) OHKUBO, Kei; LEE, Sai Ho; JEFFREY, Reimers R.; CROSSLEY, Maxwell J.; FUKUZUMI, Shunichi
- 2D1-37 Electron Transfer in CdTe Quantum Dot-Cucurbituril Supramolecular Complex (ISIR, Osaka Univ.) TACHIKAWA, Takashi; CUI, Shi-cong; FUJITSUKA, Mamoru; MAJIMA, Tetsuro
- 2D1-38<sup>#</sup> Unusually Long-Lived Charge Separation in a Compact Ferrocene-Naphthalenediimide Dyad (Osaka Univ.; Ajou Univ.) SUPUR, Mustafa; EL-KHOULY, Mohamed E.; KAY, Kwang-yol; FUKUZUMI, Shunichi
- 2D1-39\* Electron Transfer from Oligothiophenes in the Higher Triplet Excited States (ISIR, Osaka Univ.) FUJITSUKA, Mamoru; SAKAMOTO, Masanori; SUGIMOTO, Akira; MAJIMA, Tetsuro

Chair: TACHIKAWA, Takashi (15:50 $\sim$ 16:40)

- \* 15:40-15:50: interval for laptop PC connection.(2D1-42, 2D1-43, 2D1-44, 2D1-45)
- 2D1-42 Studies on Photo-induced Electron Transfer of BODIPY-Platinum-Triphenylamine Triads (Osaka City Univ., Univ. of Toyama, Kyoto Institute of Technology) IEKI, Nobuhiro; SUZUKI, Shuichi; SUGIMURA, Ryoji; NAITOH, Takahiro; KOZAKI, Masatoshi; KIMOTO, Kenshi; NOZAKI, Koichi; IKEDA, Noriaki; OKADA, Keiji
- **2D1-43** Photo-induced Electron Transfer of Twisted *m* and *p*-Di(phenylethynyl)benzene-Linked Triphenylamine-Naphthaldiimide Diads (Osaka City Univ., Univ. of Toyama, Kyoto Institute of Technology, and Tohoku Univ.) HORIKOSHI, Takafumi; SUZUKI, Shuichi; SUGIMURA, Ryoji; KOZAKI, Masatoshi; KIMOTO, Kenshi; NOZAKI, Koichi; MATSUSITA, Hironori; IKEDA, Noriaki; AKIYAMA, Kimio; OKADA, Keiji
- 2D1-44 Photo-induced Electron Transfer of Anthraquinone-Phenothiazine Trimer Dyad :A Remarkable Structural Change within Phenothiazine Trimer in a Hole Transfer Step (Osaka City Univ., Univ. of Toyama, Kyoto Institute of Technology,) KARIMATA, Ayumu; SUZUKI, Shuichi; KOZAKI, Masatoshi; KIMOTO, Kenshi; NOZAKI, Koichi; MATSUSHITA, Hironori; IKEDA, Noriaki; OKADA, Keiji
- 2D1-45\* Excited State Dynamics and Photoelectrochemical Properties of Fullerene Peapod-Poly(3-hexylthiophene) Hybrids (Kyoto Univ., JST PRESTO, iCeMS) UMEYAMA, Tomokazu; TEZUKA, Noriyasu;

MATANO, Yoshihiro; IMAHORI, Hiroshi

Chair: OHKUBO, Kei (16:50~17:30)

- \* 16:40-16:50: interval for laptop PC connection.(2D1-48, 2D1-49, 2D1-50, 2D1-51)
- 2D1-48 Synthesis and photoinduced electron-transfer dynamics of donor-acceptor systems composed of planar and nonplanar Al(III)-porphyrins (Graduate School of Engineering, Osaka Univ.) KANEMATSU, Masanori; KOJIMA, Takahiko; FUKUZUMI, Shunichi
- 2D1-49 Control of titania conduction band level and photo-electric conversion in Dye-doped titania (Shinshu Univ.) SETIAWAN, Rudi Agus; NISHIKIORI, Hiromasa; TANAKA, Nobuaki; FUJII, Tsuneo
- 2D1-50 Photo-electric conversion properties of dye- and titania gel-modified multiwalled carbon nanotubes (Shinshu Univ.) OHTA, Takuma; NISHIKIORI, Hiromasa; TANAKA, Nobuaki; ENDO, Morinobu; FUJII, Tsuneo
- 2D1-51 Acid-base equilibrium and photo-electric conversion in fluorescein-doped titania gel (Shinshu Univ.) MIYASHITA, Kyohei; NISHIKIORI, Hiromasa; TANAKA, Nobuaki; FUJII, Tsuneo

# Monday, March 28, PM

Chair: KAWAI, Akio (12:30∼13:30)

- \* 12:20-12:30: interval for laptop PC connection.(3D1-22, 3D1-23, 3D1-24, 3D1-25, 3D1-26, 3D1-27)
- **3D1-22** Magnetic Field Effect on the Emission Intensity of an OLED using PPV derivatives (Saitama Univ.; RIKEN) SUZUKI, Yasunori; YAGO, Tomoaki; SAKAGUCHI, Yoshio; WAKASA, Masanobu
- 3D1-23 Magnetic field effects on photochemical reactions in mesoporous silicates of MCM-41: SLE analysis (Saitama Univ.) YAGO, Tomoaki; MAEYAMA, Tomoaki; MATSUI, Hiroki; WAKASA, Masanobu
- 3D1-24 Effect of Chirality on Magnetic Orientation of Single-Walled Carbon Nanotubes (Faculty of Engineering, Kyushu Univ.; Graduate school of Engineering, Kyushu Univ.) MATSUURA, Kakeru; YONEMURA, Hiroaki; TAHARA, Hironobu; SAKAI, Natsuko; YAMADA, Sunao
- 3D1-25 Effect of Aspect Ratio on Magnetic Organization and Magnetic Orientation of Gold Nanorods (Faculty of Engineering, Kyushu Univ.; Graduate school of Engineering, Kyushu Univ.) SAKAI, Natsuko; YONEMURA, Hiroaki; YAMADA, Sunao
- 3D1-26 Effects of high magnetic field up to 5 T on NIH3T3 mouse fibroblasts growth (Graduate School of Science and Engineering, Saitama Univ.) MATSUI, Hiroki; SAKAI, Takafumi; WAKASA, Masanobu
- **3D1-27** Magnetic field effect on the photocatalytic reaction of 2-PrOH with magnetic photocatalyst (Graduate School of Science & Engineering, Saitama Univ.) ABE, Toshiki; WAKASA, Masanobu

Chair: WAKASA, Masanobu (13:40 $\sim$ 14:40)

- \* 13:30-13:40: interval for laptop PC connection.(3D1=29, 3D1=30, 3D1=31, 3D1=33, 3D1=34)
- 3D1-29 Magnetic Field Effect on Device Parameters of Bulk Heterojunction Solar Cell (Niigata Univ.; Yamagata Univ.) KOBAYASHI, Ryosuke; AMBE, Christopher; IKOMA, Tadaaki; NAKAYAMA, Ken-ichi
- 3D1-30 Electron Spin Polarization created in radical inducedtriplet quenching of dye molecules (Department of Chemistry, Titech.) IWAMA, Masakai; AKAI, Nobuyuki; KAWAI, Akio; SHIBUYA, Kazuhiko
- 3D1-31\* Magnetic Field Effects and Time-Resolved ESR spectra in the Photogenerated Biradical from Intramolecular Electron-Transfer in Phenothiazine-C<sub>60</sub> linked Compounds: Effect of Spacer (Faculty of Engineering, Kyushu Univ.; Graduate school of Engineering, Kyushu Univ.) YONEMURA, Hiroaki; YAMASHITA, Tetsuya; MORIBE, Shinya; YAMADA. Sunao
- 3D1-33 Magnetic Field Effects and Time-Resolved ESR spectra in Phenothiazine-Viologen Linked Compounds in an Ionic Liquid (Faculty of Engineering, Kyushu Univ.; Graduate school of Engineering, Kyushu Univ.) NAKASHIMA, Akio; YONEMURA, Hiroaki; TAHARA, Hironobu; YAMADA, Sunao
- 3D1-34 Magnetic Field Effects on Photocurrents of Zinc-porphyrin-Viologen Linked Compounds in an Ionic Liquid: Comparison between Hydrophilic and Hydrophobic Electrodes (Department of Applied Chemistry, Faculty of Engineering, Kyushu Univ.) TAHARA, Hironobu; YONEMURA, Hiroaki; HARADA, Satoko: YAMADA, Sunao

Chair: KONO, Hirohiko (14:50 $\sim$ 16:00)

- \* 14:40-14:50: interval for laptop PC connection.(3D1-36, 3D1-38, 3D1-40, 3D1-42)
- 3D1-36\*† Double excitation in electron collisions with H<sub>2</sub> molecules (Dept. of Chem., Tokyo Inst. of Tech.) ISHIKAWA, Lisa; ODAGIRI, Takeshi; YACHI, Kazufumi; OHNO, Naruhito; TSUCHIDA, Toshinori; KITAJIMA, Masashi; KOUCHI, Noriyuki
- 3D1-38\* Robust existence of reaction boundary to determine the fate of chemical reactions in multi-dimensional molecular systems (Hokkaido Univ. RIES) KAWAI, Shinnosuke; KOMATSUZAKI, Tamiki
- 3D1-40\* Theoretical study of bifurcating reactions accompanying the totally-symmetric valley-ridge inflection point (Hokkaido Univ.) HARABUCHI, Yu; TAKETSUGU, Tetsuya

3D1-42 Quantum chemical study on flame inhibition mechanism of manganese compounds (Yokohama national Univ. Graduate School of Environment and Information Sciences) SUZUKI, Michio; KOSHIBA, Yusuke; OHTANI, Hideo

Chair: YATSUHASHI, Tomoyuki (16:10~17:10)

- \* 16:00-16:10: interval for laptop PC connection.(3D1-44, 3D1-46, 3D1-47, 3D1-48)
- 3D1-44\* Two-color dissociative ionization of nitrogen molecule byEUV-FEL and femto-second laser light pulses (RIKEN SPring-8 Center) SATO, Takahiro; IWASAKI, Atsushi; OWADA, Shigeki; OKINO, Tomoya; YAMANOUCHI, Kaoru; YAGISHITA, Akira; KANNARI, Fumihiko; AOYAMA, Makoto; YAMAKAWA, Koichi; TAKAHASHI, Eiji; MIDORIKAWA, Katsumi; NAKANO, Hidetoshi; YABASHI, Makina; NAGASONO, Mitsuru; TONO, Kensuke; TOGASHI, Tadashi; ISHIKAWA, Tetsuya
- 3D1-46<sup>#</sup> Fourier-transformation rotational spectroscopy of acetonitrile in terahertz domain (The Univ. of Tokyo) ONO, Keisuke; IWASAKI, Atushi; HATANAKA, Koji; YAMANOUCHI, Kaoru
- 3D1-47<sup>#</sup> Observation of dissociative ionization of ethanol by tunable near IR femtosecond laser pulses (The Univ. of Tokyo, School of Science) OWADA, Shigeki; OKANO, Yasuaki; OKINO, Tomoya; AOYAMA, Makoto; YAMAKAWA, Koichi; YAMANOUCHI, Kaoru
- 3D1-48\*\* Development of attosecond pulse generation system for investigating ultrafast hydrogen migration in intense laser fields (Univ. of Tokyo) OKINO, Tomoya; ANDO, Toshiaki; YAMANOUCHI, Kaoru

Chair: OKINO, Tomoya (17:20 $\sim$ 18:20)

- \* 17:10-17:20: interval for laptop PC connection.(3D1-51, 3D1-52, 3D1-54, 3D1-55, 3D1-56)
- 3D1-51 Intense laser field induced dissociative ionization of formic acid dimer (Niigata Univ. of Pharmacy and Applied Life Science) HOSHINA, Kennosuke; HAGIHARA, Hiroshi; TSUGE, Masashi
- 3D1-52\*\* Observation of laser-assisted electron scattering in femtosecond intense laser fields (School of Science, Univ. of Tokyo) KANYA, Reika; MORIMOTO, Yuya; YAMANOUCHI, Kaoru
- 3D1-54 Coulomb Explosion of Highly Charged Diiodoacetylene (Osaka City Univ., PRESTO JST) YATSUHASHI, Tomoyuki; MITSUBAYASHI, Naoya: ITSUKASHI, Masako: NAKASHIMA, Nobuaki
- 3D1-55 Photofragmentation Dynamics of the cis-Hexafluorocyclobutane molecule at the F K-edge (Hiroshima Univ.; JASRI/SPring-8; KEK; Ehime Univ.) NAKASHIMA, Toru; OKADA, Kazumasa; SUEMITSU, Atsushi; TAMENORI, Yusuke; SUZUKI, H.Isao; NAGAOKA, Shin-ichi
- **3D1-56** Photoreaction Mechanism of Ketoprofen with Basic Amino Acids (Aoyama Gakuin Univ.) SUZUKI, Tadashi; ISOZAKI, Tasuku

### Tuesday, March 29, AM

Chair: EGASHIRA, Kazuhiro (9:00  $\sim$ 10:00)

- \* 8:50-9:00: interval for laptop PC connection.(4D1-01, 4D1-02, 4D1-03, 4D1-05, 4D1-06)
- 4D1-01 Proton transfer reactions and structures for multiply-charged biomolecular ions with ESI (Yokohama City Univ.) SUDO, Ayako; OKAMURA, Takuya; YAMASHITA, Kazuki; ARAKAWA, Ryota; MACHIDA, Keishi; MATSUMOTO, Masaru; NONOSE, Shinji
- 4D1-02 Collisional reactions of multiply-charged peptide ions (Yokohama City Univ.) MACHIDA, Keishi; OKAMURA, Takuya; YAMASHITA, Kazuki; ARAKAWA, Ryota; SUDO, Ayako; MATSUMOTO, Masaru; NONOSE, Shinji
- 4D1-03\* Temperature dependence of proton transfer reactions for multiply-charged protein and peptide ions (Yokohama City Univ.) NONOSE, Shinji; OKAMURA, Takuya; YAMASHITA, Kazuki; ARAKAWA, Ryota; MACHIDA, Keishi; SUDO, Ayako; MATSUMOTO, Masaru
- 4D1-05 Charge asymmetric dissociation of N<sub>2</sub> induced by low-energy collision of highly-charged ion (Tokyo Metropolitan Univ.) NAKADAI, Katsuki; MOTOJIMA, Tomonori; MATSUMOTO, Jun; SHIROMARU, Haruo; ACHIBA, Yohii
- 4D1-06 Development of a tabletop electrostatic ion storage ring in TMU (Tokyo Metropolitan Univ.) MATSUMOTO, Jun; HASHIMOTO, Kouhei; MAJIMA, Takuva: SHIROMARU, Haruo: ACHIBA, Yohii

Chair: YASUMATSU, Hisato (10:10∼11:10)

- \* 10:00-10:10: interval for laptop PC connection.(4D1-08, 4D1-09, 4D1-10, 4D1-11, 4D1-12, 4D1-13)
- **4D1-08** Reflectron imaging of the photodissociation of size-selected Mg<sup>+</sup>(CH<sub>3</sub>I) ionic complexes (Tohoku Univ.) YAMAKITA, Yoshihiro; HOSHINO, Horoshi; SUZUKI, Yoshitomo; MISAIZU, Fuminori
- 4D1-09 Development of a reflectron imaging apparatus for photodissociation of cluster ions (Tohoku Univ.) SUZUKI, Yoshitomo; YAMAKITA, Yoshihiro; HOSHINO, Hiroshi; MISAIZU, Fuminori
- 4D1-10 Photodissociation imaging of MgAr<sup>+</sup> with a reflectron mass spectrometer (Tohoku Univ.) HOSHINO, Hiroshi; YAMAKITA, Yoshihiro; SUZUKI, Yoshitomo; MISAIZU, Fuminori
- 4D1-11 Structure and dissociation channels of AgnBrm by using alkali metal target (Osaka Univ.) MATSUI, Yusuke; HAYAKAWA, Shigeo;

- FUJIHARA, Akimasa; NAGAO, Hirofumi; TOYODA, Michisato; MORI, Hirotoshi: MATSUDA, Ava; SATO, Nanako; HIRAYAMA, Natsumi
- 4D1-12 In situ structure observation of Ag nanoparticles realized by tandem analyses of differential mobility analyzer and aerosol particle mass analyzer. (Institute of Science and Engineering, Chuo Univ.) HORIUCHI, Mami; SEKIGUCHI, Yasumasa; NISIDA, Naoki; TANAKA, Hideki
- 4D1-13 Structure analysis of Ag nanoparticle clusters produced on carbon nanotubes (Faculty of Science and Engineering, Chuo Univ.) SHINOHARA, Taiki; NISHIDA, Naoki; TANAKA, Hideki

Chair: TANAKA, Hideki (11:20~12:10)

- \* 11:10-11:20: interval for laptop PC connection.(4D1-15, 4D1-16, 4D1-17, 4D1-18, 4D1-19)
- 4D1-15 Development of vertical type high-temperature pulsed-arc discharge and production of high-quality single wall carbon nanotubes with large diameter (Department of Chemistry, Toho Univ.) ABE, Yuuichi; SUGAI, Toshiki
- 4D1-16 Development of Ion trap mobility apparatus and measurement of charged particles (Department of Chemistry, Toho Univ.) SAWANISHI, Yoshihiko; SHINOZAKI, Masashi; SUGAI, Toshiki
- 4D1-17 Development of Large scale ion trap mobility measurement system. (Department of Chemistry, Toho Univ.) SUGAI, Toshiki; SAWANISHI, Yoshihiko; SHINOZAKI, Masashi
- 4D1-18 Electronic state separations of V<sup>+</sup>, Nb<sup>+</sup>, and Ta<sup>+</sup> by gas-phase ion mobility spectrometry (Tohoku Univ.) TAHARA, Hiroshi; KOMATSU, Kunihiko; KOYASU, Kiichirou; MISAIZU, Fuminori
- 4D1-19 Oxidation reactions of isomer-separated carbon cluster ions (Tohoku Univ.) OHTAKI, Tomohiro; KOYASU, Kiichirou; MISAIZU, Fuminori

### Tuesday, March 29, PM

Chair: MISAIZU, Fuminori (13:20 $\sim$ 14:20)

- \* 13:10-13:20: interval for laptop PC connection.(4D1-27, 4D1-29, 4D1-30, 4D1-31, 4D1-32)
- 4D1-27\*# Probing structures of small gold cluster cations with dinitrogen (Genesis Res. Inst., Inc.; Tokyo Univ. Sci.; Toyota Tech; Kyushu Univ.) GANPATHI, Naresh Patwari; ITO, Tomonori; EGASHIRA, Kazuhiro; TERASAKI. Akira
- 4D1-29 Water induced hyper reactivity of gold dimer cation with carbon monoxide (Genesis Res. Inst., Inc.; Tokyo Univ. Sci.; Toyota Tech; Kyushu Univ.) ITO, Tomonori; GANPATHI, Naresh Patwari; EGASHIRA, Kazuhiro; TSUKIYAMA, Koichi; TERASAKI, Akira
- 4D1-30 Photoabsorption spectroscopy of chromium dimer cations: Direct measurement by photon-trap spectroscopy (Genesis Res. Inst., Inc.: Tokyo Univ. Sci.; Toyota Technological Institute, Kyushu Univ.) EGASHIRA, Kazuhiro; ITO, Tomonori; TERASAKI, Akira
- 4D1-31 Oxidation Catalytic Properties of Monatomic-Layered Platinum Cluster Disk Deposited on Silicon Surface (Toyota Tech. Inst.; Genesis Res. Inst., Inc.) YASUMATSU, Hisato; HAYAKAWA, Tetsuichiro
- 4D1-32 Oxygen Adsorption onto Copper Cluster Cations and Anions: Influence of Charge and Size upon Their Reactivity (Genesis Res. Inst., Inc.) HIRABAYASHI, Shinichi; ICHIHASHI, Masahiko

Chair: MAFUNE, Fumitaka (14:30 $\sim$ 15:30)

- \* 14:20-14:30: interval for laptop PC connection.(4D1-34, 4D1-35, 4D1-37, 4D1-38, 4D1-39)
- 4D1-34 The effect of plasmonic optical fields on the closed-open ring reaction of diarylethene (Waseda Univ., School of Advanced Science and Engineering) MIZOBATA, Hidetoshi; OKAMOTO, Hiromi; IMURA, Kohei
- 4D1-35\*† Plasmonic antenna effects on photoelectric conversion properties using electron transfer system from Au nanostructures to n-type semiconductor electrodes (RIES-Hokkaido Univ., PRESTO-JST) NISHIJIMA, Yoshiaki; UENO, Kosei; MISAWA, Hiroaki
- 4D1-37 Size separation of magic-numbered gold clusters by reverse phase columns (Tokyo Univ. of Science) SAKAMOTO, Chihiro; NIIHORI, Yoshiki; NEGISHI, Yuichi
- 4D1-38 Size Separation of Silicon Clusters by Gel Permeation Chromatography (Tokyo Univ. of Science) KOBAYASHI, Hiroshige; IMAMURA, Masaki; NEGISHI, Yuichi
- 4D1-39 Precise synthesis and electronic structure of Pt<sub>1</sub>Au<sub>24</sub> (SR) 18 (Tokyo Univ. of Science,Institute for Molecular Science) MUNAKATA, Kenta; KURASHIGE, Wataru; NOBUSADA, Katsuyuki; NEGISHI, Yuichi

Chair: NEGISHI, Yuichi (15:40 $\sim$ 16:20)

- \* 15:30-15:40: interval for laptop PC connection.(4D1-41, 4D1-42, 4D1-43, 4D1-44)
- 4D1-41 Development of novel separation and recovery technique for precious metals based on particle-formation process induced by laser reduction (Japan Atomic Energy Agency) SAEKI, Morihisa; OHBA, Hironori
- 4D1-42 Catalic activity of neutral Rh clusters in the gas phase (The Univ. of Tokyo, Graduate School of Arts and Science) YAMADA, Akira; MIYAJIMA, Ken; MAFUNE, Fumitaka
- 4D1-43 Gas synthesis of Gold cluster supported by Titanium oxide and composition dependence of catalytic reactivity (The Univ. of Tokyo, Graduate School of Arts and Science) HIMENO, Hidenori; MIYAJIMA,

Ken; MAFUNE, Fumitaka

4D1-44 Reactivity of Pt clusters with N<sub>2</sub>O and its size dependence (The Univ. of Tokyo, Graduate School of Arts and Science) YAMAMOTO, Hirotaka; MIYAJIMA, Ken; MAFUNE, Fumitaka

# Room D2

Bldg. 11 11-12

# Physical Chemistry -Chemical Kinetics and Dynamics-

### Sunday, March 27, AM

Chair: OSHIMA, Akihiro  $(9:00\sim10:00)$ 

- \* 8:50-9:00: interval for laptop PC connection.(2D2-01, 2D2-02, 2D2-04, 2D2-06)
- 2D2-01 LET and dose rate effect on radiation induced polymerization (Tokyo Metropolitan Industrial Technology Research Institute; Japan Atomic Energy Agency) NAKAGAWA, Seiko; TAGUCHI, Mitsumasa; KIMURA, Atsushi; SEKIGUCHI, Masayuki; YUNOKI, Shunji
- 2D2-02\* Radiation-induced Reductions of Nitrate and Platinum Group Elements Coexisting in Aqueous Solutions (Japan Atomic Energy Agency) NAGAISHI, Ryuji; KUMAGAI, Yuta
- 2D2-04\*\* A study of temperature dependent temporal behaviors of solvated electron in water and methanol by scavenging method (NSED/JAEA; Univ. Tokyo; Univ. Paris-Sud) LIN, Mingzhang; KATSUMURA, Yosuke; MUROYA, Yusa; YAN, Yu; KUMAGAI, Yuta; NAGAISHI, Ryuji; MOSTAFAVI, Mehran
- 2D2-06 Pulse-radiolysis study on the Reaction of Hydrated Electron in Aqueous Solution in the Presence of Colloidal Silica (Japan Atomic Energy Agency; The Univ. of Tokyo) KUMAGAI, Yuta; NAGAISHI, Ryuji; YAMADA, Reiji; MUROYA, Yusa; KATSUMURA, Yosuke

Chair: NAKAGAWA, Seiko (10:10 $\sim$ 11:10)

- \* 10:00-10:10: interval for laptop PC connection.(2D2-08, 2D2-09, 2D2-10, 2D2-11, 2D2-12)
- 2D2-08 Fabrication of proton exchange membranes for PEFC using ion beam irradiation (RISE, Waseda Univ.) YOSHIKAWA, Taeko; FUJITA, Hajime; MURAKAMI, Takeshi; OSHIMA, Akihiro; WASHIO, Masakazu
- 2D2-09 Fuel cell test at room temperature under non-humidified condition of functionally gradient PEMs fabricated by EB grafting (RISE, Waseda Univ.) TSUCHIDA, Ryota; FUJITA, Hajime; YOSHIKAWA, Taeko; TATSUMI, Takahiro; HIRAIWA, Satoshi; OSHIMA, Akihiro; WASHIO, Masakazu
- 2D2-10 The evaluation of thin proton exchange membrane for PEFC based on cross-linked PTFE (RISE, Waseda Univ.) HIRAIWA, Satoshi; FUJITA, Hajime; YOSHIKAWA, Taeko; TATSUMI, Takahiro; TSUCHIDA, Ryota; OSHIMA, Akihiro; WASHIO, Masakazu
- 2D2-11 Non-contact Quantitative Microwave Detection of Radiation Induced Degradation of Polymers (3) (Fukui Univ. of Technology; Osaka Univ.) SUNAGAWA, Takeyoshi; SAEKI, Akinori; SEKI, Shu
- 2D2-12\* Diffusion-controlled Reaction in Non-volcanic Hot Springs from Deep Wells in the Kanto, Osaka, Ishikari, Nobi Plains and the Ise-Shima-Suzuka Districts (Mie Heal. Env. Res. Inst.; Hokkaido Inst. Pub.Heal.; Hot Spa Res. Cent.) MIYAZAKI, Tetsuo; MORI, Yasunori; AOYANAGI, Naoki; UCHINO, Eiji; KANROJI, Yasuo

Chair: MUROYA, Yusa (11:20 $\sim$ 12:20)

- \* 11:10-11:20: interval for laptop PC connection.(2D2-15, 2D2-17, 2D2-18, 2D2-19, 2D2-20)
- 2D2-15\* Femtosecond pulse radiolysis study of geminate ion recombination and charge transfer reaction in n-dodecane (ISIR, Osaka Univ.) KONDOH, Takafumi; YANG, Jinfeng; NORIZAWA, Kimihiro; KAN, Koichi; KOZAWA, Takahiro; OGATA, Atsushi; YOSHIDA, Yoichi
- 2D2-17 A trial for the detection of H<sub>2</sub><sup>+</sup> in ground state in condensed phase (Nagoya Univ; JAEA Kansai) SHIMIZU, Yuta; HARA, Hidetoshi; KUMADA, Takayuki; KUMAGAI, Jun
- 2D2-18 Total cross sections for electron scattering from Ar, Kr, And Xe in the cold electron collision regime (Dept. Chem. Tokyo Tech.; Dept. Phys. Sophia Univ.; KEK-PF) KITAJIMA, Masashi; KUROKAWA, Manabu; KISHINO, Takaya; ODAGIRI, Takeshi; KATO, Hidetoshi; HOSHINO, Masamitsu: TANAKA. Hiroshi: ITO. Kenii
- 2D2-19 Study on Metal Reduction of Functionalized Perfluorinated-Polymers by Plasma Exposure (Research Institute for Science and Engineering, Waseda Univ.) TSUBOKURA, Hidehiro; TAKAHASHI, Tomohiro; FUJITA, Hajime; OYAMA(GOWA), tomoko; YAMAMOTO, Hiroki; OSHIMA, Akihiro; TAGAWA, Seiichi; WASHIO, Masakazu
- 2D2-20 Fabrication of nano -/micro- scale crosslinked PTFE structures by EB-NIL (RISE, Waseda Univ.) KOBAYASHI, Akinobu; OKUBO, Satoshi; TAKAHASHI, Tomohiro; Gowa Oyama, Tomoko; TSUBOKURA, Hidehiro; YANAMORI, Naomi; YAMAMOTO, Hiroki; OSHIMA,

Akihiro; TAGAWA, Seiichi; WASHIO, Masakazu

### Sunday, March 27, PM

Chair: YAMAGUCHI, Tomohiko (13:30~14:30)

- \* 13:20-13:30: interval for laptop PC connection.(2D2-28, 2D2-29, 2D2-30, 2D2-31, 2D2-32, 2D2-33)
- 2D2-28 Mode Control of Self-Motion with Black Light (Department of Chemistry, Faculty of Science, Hiroshima Univ.) MATSUDA, Yui; NAKATA, Satoshi; SUEMATSU, J.Nobuhiko
- 2D2-29 Density wave of a wave train in a circular reaction field (Hiroshima Univ.) SUEMATSU, J. Nobuhiko; SATO, Taisuke; MOTOIKE N., Ikuko; NAKATA, Satoshi
- 2D2-30 Self-motion of a camphor boat on a SDS aqueous phase (Graduate School of Science, Hiroshima Univ.) NAKATA, Satoshi; SUEMATSU, J. Nobuhiko; MATSUDA, Yui
- 2D2-31 Photochemical oscillators based on benzoquinones (Yokohama Nat. Univ.) AMEMIYA, Takashi; JICHANG, Wang; ITOH, Kiminori
- 2D2-32 Photo-excitation in the Ruthenium-Catalyzed Belousov-Zhabotinsky Reaction (Department of Chemistry, Faculty of Science, Hiroshima Univ.) SATO, Taisuke; NAKATA, Satoshi; KITAHATA, Hiroyuki; SUEMATSU J., Nobuhiko; AMEMIYA, Takashi; MORI, Yoshihito
- 2D2-33 Contact Line Pulsation with Frequency Depending on Applied Voltage and Ionic Species (Department of Chemical Engineering and Materials Science, Doshisha Univ.) OOMIYA, Katsuhito; KIYOSHIMA, Sakuma; BAN, Takahiko; SHIOI, Akihisa

Chair: SUEMATSU, Nobuhiko (14:40~15:40)

- \* 14:30-14:40: interval for laptop PC connection.(2D2-35, 2D2-36, 2D2-37, 2D2-38, 2D2-39)
- 2D2-35 Influence of Light on the Luminol-H<sub>2</sub>O<sub>2</sub>-KSCN-CuSO<sub>4</sub>-NaOH Chemical Oscillating System (Keio Univ.) TAKAYAMA, Shunsuke; ASAKURA, Kouichi
- 2D2-36 Turing pattern formation by CIMA reaction in an open gel reactor composed of polymer having quaternary alkyl ammonium cationic side chains (Keio Univ.; Yamano College of Aesthetics) IRIE, Ryosuke; NAKANO, Takaya; ASAKURA, Kouichi; KAMATA, Masazumi
- 2D2-37<sup>#</sup> Macroscale Precipitation Patterns from the Meniscus of an Evaporating Solution (AIST) CHEN, Yong-jun; SUZUKI, Kosuke; MAHARA, Hitoshi; YAMAGUCHI, Tomohiko
- 2D2-38 Controlling a Periodic Deposition Pattern of Fullerene Microcrystals by Dewetting Velocity (AIST) SUZUKI, Kosuke; CHEN, Yon-jun; MAHARA, Hitoshi; YAMAGUCHI, Tomohiko
- 2D2-39\* Self-generated motion of droplets with deformability induced by Korteweg force (Doshisha Univ.; Dept. of Chem. Eng. & Mat. Sci.) BAN, Takahiko; YAMADA, Tomohiro; SHIOI, Akihisa

Chair: YOSHIHARA, Sachio (15:50~16:30)

- \* 15:40-15:50: interval for laptop PC connection.(2D2-42, 2D2-43, 2D2-44)
- 2D2-42 Theoretical Study on Solvation and Desolvation of Mg<sup>2+</sup> (Kyoto Univ.; Fuji Heavy Industries Ltd.) KAJI, Akihiro; SAEKI, Takuya; ITO, Akihiro; TANAKA, Kazuyoshi; HATOZAKI, Osamu
- 2D2-43 Theoretical study on desolvation process of solvated Li<sup>+</sup>cluster on the modeled carbon electrode surface (Kyoto Univ.; Fuji Heavy Industries Ltd.) SAEKI, Takuya; ITO, Akihiro; TANAKA, Kazuyoshi; HATOZAKI, Osamu
- 2D2-44\* Electrodeposition Process of Pt Ultrathin Layer on Au(111) Surface (Ochanomizu Univ.) KONDO, Toshihiro; SHIBATA, Masayo; SAKURAI, Takara; MASUDA, Takuya; UOSAKI, Kohei

Chair: TANAKA, Kazuyoshi (16:40~17:20)

- \* 16:30-16:40: interval for laptop PC connection.(2D2-47, 2D2-49, 2D2-50)
- 2D2-47\* In situ Monitoring of Pt Dissolution Reaction during Oxidation/ Reduction Cycle by Electrochemical Quartz Crystal Microbalance (Ochanomizu Univ.) SAKURAI, Takara; SHIBATA, Masayo; KONDO, Toshihiro; YAGI, Ichizo
- 2D2-49 Discrimination of Ascorbic Acid Diastereomer Using Dihydroxyalk-anedithiol-modified Au Electrode (Tokai Univ.) KOMATSU, Masaharu; ANDO, Takahiro; SUZUKI, Shota
- 2D2-50 Electrochemical Reaction Analysis of the Boron Doped Diamond under Magnetic Field (Grad. Sch. Eng., Utsunomiya Univ.) YOSHIHARA, Sachio; WATANABE, Yuta

# Physical Chemistry -Properties-Monday, March 28, AM

## Conductors

Chair: YAMOCHI, Hideki (12:30~13:30)

- \* 12:20-12:30: interval for laptop PC connection.(3D2-22)
- **3D2–22** CSJ Award for Creative Works Development of Functional π-Electron Systems Based on Metal-dithiolene Complexes (RIKEN) KATO, Reizo

# Monday, March 28, PM

Chair: SHIRAHATA, Takashi (13:40 $\sim$ 14:40)

- \* 13:30-13:40: interval for laptop PC connection.(3D2-29, 3D2-30, 3D2-31, 3D2-32, 3D2-33, 3D2-34)
- **3D2-29** Development of photo-functional organic materials using TTF derivatives substituted by BODIPY framework (Grad. School of Sci., Osaka Pref. Univ.) TSUJIMOTO, Keijiro; OGASAWARA, Reiko; FUJIWARA, Hideki
- **3D2-30** Development of external-field-responsive organic conductors using TTF derivatives substituted with 1,3,4-benzothiazole (Grad. School of Sci., Osaka Pref.Univ.) HAYASHI, Sadayoshi; YOKOTA, Sayo; UEZONO, Rika; FUJIWARA, Hideki
- **3D2-31** Development of dye-sensitized solar cells using TTF-benzothiazole hybrid molecules (Grad. School of Sci., Osaka Pref. Univ.; Grad. School of Eng., Osaka Pref. Univ.) FUJIWARA, Hideki; UEZONO, Rika; YOKOTA, Sayo; HAYASHI, Sasayoshi; TSUJIMOTO, Keijiro; HAMAMURA, Yuuto; NAKAZUMI, Hiroyuki
- 3D2-32 Photo-induced spin dynamics for photoconductive TTF-derivatives (Institute for Molecular Science; The Graduate Univ. for Advanced Studies; Osaka Pref. Univ.) FURUKAWA, Ko; TSUJIMOTO, Keijiro; SUGISHIMA, Yasuo; FUJIWARA, Hideki; NAKAMURA, Toshikazu
- 3D2-33 Measurements of physical properties on MV[Ni(dmit)<sub>2</sub>]<sub>2</sub> with possible optical response (Hokkaido Univ.; Graduate School of Chemical Sciences and Engineering) TAKANO, Takahiro; TAKAHASHI, Yukihiro; NAITO, Toshio; INABE, Tamotsu
- 3D2-34 Cation radical salt of mono-chlorinated EDO-TTF with anions of various shapes (Kyoto Univ.; LTM) ISHIKAWA, Manabu; NAKANO, Yoshiaki; URUICHI, Mikio; YAKUSHI, Kyuya; YAMOCHI, Hideki

Chair: NAITO, Toshio (14:50~15:50)

- \* 14:40-14:50: interval for laptop PC connection.(3D2-36, 3D2-37, 3D2-38, 3D2-39, 3D2-40, 3D2-41)
- 3D2-36 Structures and properties of the protonated charge transfer complex (ISSP) LEE, Sangchul; SHIKAMA, Takahisa; TAKAHASHI, Kazuyuki; KIMATA, Motoi; TAJIMA, Hiroyuki; MORI, Hatsumi
- **3D2-37** Synthesis and properties of pi-extended TTF derivatives by pyrazine rings (Tokyo Institute of Technology) ASHIZAWA, Minoru; MEGURO, Mamoru; TANIOKA, Akihiko; MORI, Takehiko
- **3D2-38**\* Syntheses and Properties of Novel Chiral BEDT-TTF Derivatives and their complexes (ISSP; Nottingham Trent Univ.) KRIVICHAS, Sara; ICHIKAWA, Atsushi; TAKAHASHI, Kazuyuki; KIMATA, Motoi; TAJIMA, Hiroyuki; WALLIS, John; MORI, Hatsumi
- 3D2-39 Structures and physical properties of radical salts based on Iodine-bonded donors (Dept.Chem., TMU; Univ. of Hyogo) ISO, Daisuke; OSAKI, Kunihiko; SASAMORI, Kouta; YOSHIMOTO, Haruo; FUJITA, Wataru; KODAMA, Takasi; YAMADA, Jun-ichi; KIKUCHI, Koichi
- 3D2-40 Structure and physical properties of alkyl-substituted TTP conductors (Grad. Sch. Sci., Eng., Ehime Univ.) NISHIWAKI, Masataka; NAKAMURA, Kenichi; SHIRAHATA, Takashi; MISAKI, Yohji
- **3D2-41** Structure and physical properties of EDO-EBDT analogs (Grad. Sch. Sci., Eng., Ehime Univ.) MORIKAWA, Toru; SHIRAHATA, Takashi; NAKANO, Yoshiaki; YAMOCHI, Hideki; MISAKI, Yohji

Chair: NAKANO, Yoshiaki (16:00~17:10)

- \* 15:50-16:00: interval for laptop PC connection.(3D2-43, 3D2-45, 3D2-46, 3D2-47, 3D2-49)
- **3D2-43\*** Successive phase-transition in a ferroelectric organic conductor α'-(BEDT-TTF)<sub>2</sub>IBr<sub>2</sub> (Institute for Molecular Scinence) YAMAMOTO, Kaoru; KOWALSKA, Aneta; URUICHI, Mikio; YAKUSHI, Kyuya
- 3D2-45<sup>†</sup> The structure and physical properties of quartz type hydrogen bonded network created by diprotonated tetrakis(4-pyridyl)methane (Department of Chemistry, Graduate School of Science, Osaka Univ. Institute for Solid State Physics, The Univ. of Tokyo) INOKUCHI, Daisuke; HIRAO, Yaukazu; TAKAHASHI, Kazuyuki; MATSUMOTO, Kouzou; KURATA, Hirovuki; MORI, Hatsumi; KUBO, Takashi
- 3D2-46 Hole Doping in Soluble Organic-Inorganic Hybrid Semiconductors using organic dications (Graduate school of Science, Hokkaido Univercity) TAKAHASHI, Yukari; TAKAHASHI, Yukihiro; NAITOU, Toshio; INABE, Tamotsu
- **3D2-47\*** Strain-Induced Insulator/Superconductor Transition in Thin Single Crystals of κ-(BEDT-TTF)<sub>2</sub>Cu[N(CN)<sub>2</sub>]<sub>2</sub>Cl (RIKEN; JST PREST; Osaka Univ.) SUDA, Masayuki; KAWASUGI, Yositaka; YAMAMOTO, Hiroshi; KATO Reizo
- 3D2-49<sup>†</sup> Preparation of TCNQ-based charge-transfer salts by mechanical grinding (Graduate school of science, Kobe Univ.) FUNABIKI, Akira; MOCHIDA, Tomoyuki; SAKURAI, Takahiro; OOTA, Hitoshi; HASEGAWA, Hiroyuki; ICHIMURA, Kunihiro

Chair: YAKUSHI, Kyuya (17:20 $\sim$ 18:30)

- \* 17:10-17:20: interval for laptop PC connection.(3D2-51, 3D2-52, 3D2-53, 3D2-54, 3D2-55, 3D2-56)
- 3D2-51 Rectification effect on phase transition in a molecular rystal (School of Sci., Univ. Hokkaido) YOKOKURA, Seiya; TAKAHASHI, Yukihiro;

NAITO, Toshio; INABE, Tamotsu

- 3D2-52 Nano-size crystals grown on the surface of molecular crystal 1 (Univ. of Hokkaido) TAKAHASHI, Yukihiro; HAYAKAWA, Kei; NAKAGAWA, Yuki; MUROI, Syunsuke; NAITO, Toshio; INABE, Tamotsu
- 3D2-53 Nano-size crystals grown on the surface of molecular crystal (2) (Grad. School of Chem. Sci. and Eng., Univ. Hokkaido) HAYAKAWA, Kei; MUROI, Shunsuke; YOKOKURA, Seiya; TAKAHASHI, Yukihiro; NAITO, Toshio: INABE, Tamotsu.
- 3D2-54 Nano-size crystals grown on the surface of molecular crystal(3) (School of Sci., Univ. Hokkaido) NAKAGAWA, Yuki; MUROI, Shunsuke; TAKAHASHI, Yukihiro; NAITO, Toshio; INABE, Tamotsu
- 3D2-55 Orbital Views of the Single Molecular Conductance Perturbed by Anchor Units (IMCE, Kyushu Univ.) TSUJI, Yuta; STAYKOV, Aleksandar; YOSHIZAWA, Kazunari
- 3D2-56\* Theoretical estimation of a conductivity of 1-Dmetal complexes based on the elastic scattering Green's Function method (Osaka Univ.) KITAGAWA, Yasutaka; NAKANISHI, Yasuyuki; MATSUI, Tohru; SHIGETA, Yasuteru; KATAOKA, Yusuke; SAITO, Tohru; YASUDA, Natsunmi; KAWAKAMI, Takashi; YAMANAKA, Shusuke; OKUMURA, Mitsutaka

# Tuesday, March 29, AM

#### Conductors

Chair: OKAZAWA, Atsushi (9:00 ~10:00)

- \* 8:50-9:00: interval for laptop PC connection.(4D2-01, 4D2-02, 4D2-03, 4D2-05)
- 4D2-01 Doping effect in molecular spin ladder system [Ph(NH<sub>3</sub>)]([18]crown-6) [Ni(dmit)<sub>2</sub>]. (Graduate School of Science, Hiroshima Univ.) KUNISHIO, Kazuhisa; NISHIHARA, Sadafumi; AKUTAGAWA, Tomoyuki; NAKAMURA, Takayoshi; AKITA, Motoko; INOUE, Katsuya
- **4D2-02** Electrical properties of single component molecular system [Ni(dmit) 2] under very high pressure (RIKEN) CUI, Hengbo; KATO, Reizo
- **4D2-03\*** Physical Properties of M(dmit)<sub>2</sub> Salts and their Selenium Analogues with Fluorinated Ammonium Cations (RIKEN) NOMURA, Mitsushiro; TAJIMA, Akiko; CUI, Hengbo; OSHIMA, Yugo; YAMAMOTO, Hiroshi; KATO. Reizo
- 4D2-05\* Control of Structures and Physical Properties of Ni(dmit))<sub>2</sub> Anion RadicalSalts with use of the Halogen Bond (RIKEN) KUSAMOTO, Tetsuro; YAMAMOTO, Hiroshi; TAJIMA, Naoya; OSHIMA, Yugo; KATO, Reizo

Chair: AKUTAGAWA, Tomuyuki (10:10 $\sim$ 11:10)

- \* 10:00-10:10: interval for laptop PC connection.(4D2-08, 4D2-10, 4D2-12)
- 4D2-08\*†#Orbital views on Electron Transport Properties of Cyclophanes (IMCE, Kyushu Univ.) LI, Xinqian; STAYKOV, Aleksandar; YOSHIZAWA, Kazunari
- 4D2-10\*\*\* Electron Transport through Asymmetrically Doped Graphenes (nstitute for Materials Chemistry and Engineering and International Research Center for Molecular Systems, Kyushu Univ.) STAYKOV, Aleksandar; LI, Xinqian; YOSHIZAWA, Kazunari

### Magnetic Materials

4D2-12\* Strong spin-spin interaction and weakferromagnetism mediated by the mixed-valence ethynyl-TTF type ligand (Inst Mol Sci) NISHIJO, Junichi; NISHI, Nobuvuki

Chair: KUBO, Kazuya (11:20 $\sim$ 12:00)

- \* 11:10-11:20: interval for laptop PC connection.(4D2-15, 4D2-17)
- 4D2-15\* Construction of the molecular chains composed by polar or non-polar organic radicals using an organic 1-D porous material, "CLPOT", as a template (College of Humanities and Sciences, Nihon Univ.; Graduate School of Science, Osaka Univ.) KOBAYASHI, Hirokazu; ASAJI, Tetsuo; TANI, Atsushi
- 4D2-17\*† Conductivity and magnetoresistivity of Co-Pd alloy nanoparticles cross-linked with conjugated molecules (TIT) ITO, Yoshikazu; TAKAI, Kazuyuki; MIYAZAKI, Akira; SIVAMURUGAN, Vajiravelu; VALIYAVEETTIL. Suresh: ENOKI. Toshiaki

# Tuesday, March 29, PM

# Magnetic Materials

Chair: ISHIDA, Takayuki (13:10 $\sim$ 14:10)

- \* 13:00-13:10: interval for laptop PC connection.(4D2-26, 4D2-29, 4D2-30, 4D2-31)
- **4D2–26** CSJ Award for Young Chemists The Creation of Phase Transition Materials Exhibit an Anomalous Bistability and Observation of Light-Induced Phase Collapse (Sch. Sci., The Univ. of Tokyo) TOKORO, Hiroko

#### Magnetic and Conducting Materials

- 4D2-29 Low Temperature Crystal Structure and Magnetic Phase Transition of Single-component Magnetic Molecular Conductor, [Cu(dmdt)<sub>2</sub>] (Nihon Univ.) ZHOU, Biao; IDOBATA, Yuki; KOBAYASHI, Akiko; KOBAYASHI, Hayao; CUI, Hengbo; KATO, Reizo
- **4D2-30** Structures and properties of an organic magnetic metal,  $\kappa$   $\beta$  "- $(ET)_2(PO-CONHC_2H_4SO_3)$  (3) (PO = 2,2,5,5-teramethyl-3-pyrrolin-1-oxyl)free radical) (Univ. of Hyogo) AKUTSU, Hiroki; YAMASHITA, Shinji; YAMADA, Jun-ichi; NAKATSUJI, Shin'ichi; COLDIA, Amalia
- 4D2-31 Structure and electrical conductivity of TTF-based metal complexes (Ibaraki Univ.) NISHIKAWA, Hiroyuki; KITABATAKE, Ryosuke; MITSUMOTO, Kiyotaka; OSHIO, Hiroki

#### Magnetic Materials

Chair: NISHIJO, Junichi (14:20~15:20)

- \* 14:10-14:20: interval for laptop PC connection.(4D2-33, 4D2-34, 4D2-35, 4D2-36, 4D2-38)
- 4D2-33 Electronic Properties of Four-legged MX-tube Complex Including Electron Donor Molecule (Kyoto Univ.; JST-CREST) OTSUBO, Kazuya; KITAGAWA, Hiroshi
- 4D2-34 Crystal structures and physical properties of radical ion salts of squaric-acid substituted TTF derivatives (Univ. of Toyama) ONO, Satoshi; YAMAZAKI. Miki: MIYAZAKI. Akira
- 4D2-35 Preparation and electronic properties of ferrocene-DCNQI chargetransfer complexes (Kobe Univ.) FUNASAKO, Yusuke; MOCHIDA, Tomoyuki; SAKURAI, Takahiro; OHTA, Hitoshi
- **4D2-36\*** Crystal Structures and Magnetic Properties of Phthalocyanine -based Complex Bearing a Spin Crossover Cation (ISSP; Kumamoto Univ.; Keio Univ.; IMCE) TAKAHASHI, Kazuyuki; MATSUDA, Masaki; MORI, Hatsumi; KIMATA, Motoi; TAJIMA, Hiroyuki; YAMAMOTO, Takashi; EINAGA, Yasuaki; SATO, Osamu
- 4D2-38 Synthesis, structures and properties of a new anion radical with a thiadiazole dioxide moiety (Graduate School of Science, Nagoya Univ.; Research Center for Materials Science, Nagoya Univ.) SHUKU, Yoshiaki; SUIZU, Rie; AWAGA, Kunio

Chair: MIYAZAKI, Akira (15:30~16:30)

- \* 15:20-15:30: interval for laptop PC connection.(4D2-40, 4D2-41, 4D2-42, 4D2-43, 4D2-44, 4D2-45)
- **4D2-40** Lanthanide-ion dependence of exchange interaction in 4f-3d trinuclear complexes (The Univ. of Electro-Communications) SHIMADA, Takashi; FUJIWARA, Kei; OKAZAWA, Atsushi; TANAKA, Go; YOSHII, Shunsuke; NOJIRI, Hiroyuki; ISHIDA, Takayuki
- 4D2-41 Magnetic properties of bis(phthalocyaninato)terbium(III) gold nanoparticle hybrid structures (Graduate School of Environmental Science, Hokkaido Univ.) NODA, Yuki; NORO, Shin-ichiro; KUBO, Kazuya; AKUTAGAWA, Tomoyuki; NAKAMURA, Takayoshi
- 4D2-42 Theoretical calculations of zero-field splitting parameter D for single molecular magnets (Osaka Univ.) KAWAKAMI, Takashi; TAKEDA, Ryo; KINISHITA, Keiji; ITO, Akira; KITAGAWA, Yasutaka; YAMANAKA, Shusuke; YAMAGUCHI, Kizashi; OKUMURA, Mitsutaka
- 4D2-43 Theoretical study about adsorption of O2 molecule on aromatic hydrocarbon (Grad. Sch. Sci., Osaka Univ.) KINOSHITA, Keiji; SAITO, Toru; KAWAKAMI, Takashi; KITAGAWA, Yasutaka; YAMANAKA, Shusuke; OKUMURA, Mitsutaka

#### Organic Device

- 4D2-44 Frequency-dependent rectification property of diodes based on ambipolar OFET (Univ. of Tokyo, Graduate School of Arts and Sciences) ITOH, Takuro; MORI, Ichirou; MATSUSHITA, Michio; SUZUKI, Kentaro; TOYOTA, Taro; HIGUCHI, Hiroyuki; SUGAWARA, Tadashi
- 4D2-45 In situ conductance measurement of pentacene thin films during growth on sapphire (0001) (Kyoto Univ.) MURDEY, Richard; SATO, Naoki

# Room D3

Bldg. 11 11-13

# Physical Chemistry - Properties-Monday, March 28, PM

### Ionic Liquid

Chair: SHIBUYA, Kazuhiko (12:30~13:30)

- \* 12:20-12:30: interval for laptop PC connection.(3D3-22, 3D3-24, 3D3-26)
- 3D3-22\* Observation of quasi-liquid layer of an ionic liquid 1-butyl-3-

- methyimidazolium bromide in the crystalline state (Graduate School of Advanced Integration Science, Chiba Univ.) ENDO, Takatsugu: IMANARI, Mamoru; SEKI, Hiroko; NISHIKAWA, Keiko
- **3D3-24**\*† Synthesis, properties and reactivities of ionic liquids comprising ruthenium complexes (Kobe Univ.) INAGAKI, Takashi; MOCHIDA, Tomovuki
- **3D3-26**\*† Effect of Substituent Flexibility on Physicochemical Properties for Cyclohexylimidazolium Salts (Chiba Univ., Graduate School of Advanced Integration Science) MANDAI, Toshihiko; IMANARI, Mamoru; NISHIKAWA, Keiko

Chair: KAWAII. Hitoshi (13:40~14:40)

- \* 13:30-13:40: interval for laptop PC connection.(3D3-29, 3D3-30, 3D3-31, 3D3-32, 3D3-33, 3D3-34)
- 3D3-29 Thermal properties and reactivities of ionic liquids based on bis (oxazoline) metal complexes (Kobe Univ.; Toho Univ.) MIURA, Yuji; MOCHIDA, Tomoyuki; MOTODATE, Satoshi; KATO, Keisuke
- 3D3-30 Thermal properties and melting behavior of feroocenium salts with perfluoroalkyl caroxylate anions (Kobe Univ.) HAMADA, Shota; MOCHIDA, Tomoyuki
- 3D3-31 The Melting and Crystallization behaviors of 1-alkyl-3-methylimidazolium bromide (Graduate School of Advanced Integration Science, Chiba Univ.) FUJISHIRO, Mai; ENDO, Takatugu; TOZAKI, Ken-ichi; NISHIKAWA, Keiko
- 3D3-32 NMR study on dynamics of a room-temperature ionic liqud:1-butyl-3methylimidazolium hexafluorophosphate (Graduate School of Advanced Integration Science, Chiba Univ.) MURATA, Hiroki; ENDO, Takatsugu; IMANARI, Mamoru; SEKI, Hiroko; NISHIKAWA, Keiko
- 3D3-33 Limiting molar conductivity of the ions composing ionic liquids (Keio Univ.) KATAYAMA, Yasushi; YAMAZAKI, Yukiko; MIURA, Takashi
- 3D3-34 Electronic Absorption Spectra on Vaporized Ionic Liquid:1-ethyl-3methylpyridinium bis(trifluoromethanesulfonyl)amide (Tokyo Institute of Technology) OGURA, Takahiro; AKAI, Nobuyuki; KAWAI, Akio; SHIBUYA, Kazuhiko

Chair: MOCHIDA, Tomoyuki (14:50~15:50)

- \* 14:40-14:50: interval for laptop PC connection.(3D3-36, 3D3-39, 3D3-40, 3D3-41)
- 3D3-36 Young Scholar Lectures of CSJ Rechargeable batteries using polynuclear metal complex clusters and their reaction mechanism (Grad. Sch. Sci., Nagoya Univ.) YOSHIKAWA, Hirofumi

### **Optical Property**

- 3D3-39 Super-Resolution Imaging of Phase-Separated Structure with Far-Field Fluorescence Microscopy (Kyoto Inst. Tech.) SHIOYAMA, Akane; MASUO, Sadahiro; MACHIDA, Shinjiro; ITAYA, Akira
- **3D3-40** Fluorescence properties of perylene derivatives in polymer films (Fac. of Education, Shinshu Univ.) ITO, Fuyuki; SASAKI, Tomoko; UGACHI, Yuri
- 3D3-41 Photochemical properties of stilbene dendrimers with naphthyl groups (Univ. of Tsukuba) NAKAZATO, Satoshi; ARAI, Tatsuo

# Liquid and Solution

Chair: OHTA, Kazuchika (16:00~17:10)

- \* 15:50-16:00: interval for laptop PC connection.(3D3-43, 3D3-45, 3D3-46,
- 3D3-43\* Characteristics of pure water interacting with a magnetic field (Shinshu Univ.) OZEKI, Sumio; HONMA, Yuta; OTSUKA, Otsuka; MATSUSHITA, Tomohisa
- **3D3-45** Tacticity effect on the phase separation of the aqueous solution of poly (N-ethylacrylamide)s (Hiroshima Univ.) KATSUMOTO, Yukiteru; SHIMODA, Naotsugu
- 3D3-46 Study on the hydration of choline dihydrogen phosphate and its analogous ionic liquids (Tokyo Univ. Agriculture and Technology;Ohno & Nakamura Lab) NIKAWA, Yohsuke; FUJITA, Kyoko; OHNO, Hiroyuki
- 3D3-47 Cation dependence of solvation structure of iodide ions on the surface of the electrolyte aqueous solution (The Univ. of Tokyo, Graduate School of Arts and Science) HIRANUMA, Yojiro; SYOJI, Makoto; KANIWA, Keisuke: MIYAJIMA, Ken: MAFUNE, Fumitaka
- 3D3-48\* Site-selective solvation observed in supercritical fluid: Raman spectroscopy of cis, trans-stilbene in supercritical CO2 (N-BARD, Hiroshima Univ.; Department of Chemistry, Graduate School of Science, Hiroshima Univ.) KAJIYA, Daisuke: SAITOW, Ken-ichi

#### Condensed Matter

Chair: YAMAMURA, Yasuhisa (17:20~18:30)

- \* 17:10-17:20: interval for laptop PC connection.(3D3-51, 3D3-53, 3D3-54, 3D3-55, 3D3-56, 3D3-57)

  3D3-51\* Orientational Ordering of Partially Deuterated Methyl Groups in
- Solid Methanol (Osaka Univ.) SUZUKI, Hal; INABA, Akira
- 3D3-53 Construction of a thermal analysis equipment and the investigation

into the high pressure low temperature phase behavior of water (Tokyo Institute of Technology; Graduate School of Science and Engineering; Department of Chemistry; Oguni-Laboratory) IWAKI, Shinji

3D3-54 Neutron Diffraction Study of Adsorbed D2 in Coordination Polymers (Hokkaido Univ., Yokohama City Univ., the Univ. of Tokyo) KAKIZAKI, Yoshiki; TAKEUCHI, Hirotoshi; MARUTA, Goro; TAKAMIZAWA, Satoshi; TAKEDA, Sadamu; YAMADA, Takeshi; YAMAMURO, Osamu

#### Liquid Crystal

- 3D3-55 Discotic Liquid Crystals of Organic Transition Metal Complexes(103) : Synthesis of Liquid Crystalline Asymmetric Phthalocyanine-Fullerene Dyads and Clarification of Their Helical Structure (Shinshu Univ.) NAKAGAKI, Takahiro; TAUCHI, Risa; SHIMIZU, Masahiro; OHTA, Kazuchika
- 3D3-56 Discotic Liquid Crystals of Organic Transition Metal Complexes(104): Synthesis and Mesomorphism of Phthalocyanine Derivatives Exhibiting Extremely Long-range of Ordered Stacking (Shinshu univ.) IGARASHI, Kensaku; SATO, Hiroyuki; YAMA, Yoshitaka; OHTA, Kazuchika
- 3D3-57 Discotic Liquid Crystals of Organic Transition Metal Complexes(105): Synthesis of Phthalocyanine-based Metal Complexes (C<sub>n</sub>S)<sub>8</sub>PcM and Effect of Central Metal on the Phase Transition Behavior (Shinshu Univ.) NARISAWA, Yusuke; BAN, Kazue; OHTA, Kazuchika

# Tuesday, March 29, AM

### Thin Film and Surface

Chair: OUCHI, Yukio (9:00 ∼10:00)

- \* 8:50-9:00: interval for laptop PC connection.(4D3-01, 4D3-03, 4D3-05, 4D3-06)
- **4D3-01\*** Atrazine Detection Using Au(111) Electrode Modified with Self-Assembled Monolayer of Quinone Derivative (Ochanomizu Univ.) UMEZAWA, Noriko; KONDO, Toshihiro
- 4D3-03\*† Magnetic field effect on emission and photocurrent in metalloporphyrin devices (Univ. of Tokyo Institute for Solid State Physics) ISOZAKI, Hikaru; TAJIMA, Hirovuki
- **4D3-05** Highly Efficient Photoelectric Conversion in Organic Thin-film Photocells with Ionic Liquid (Nagoya Univ.) NODA, Yukiko; HU, Laigui; LI, Bo: AWAGA, Kunio
- 4D3-06 Analysis of Localized Vibrational Mode in Single-Wall Carbon Nanotubulite using Surface-Enhanced Raman Scattering (Research Center for Exotic Nano Carbons, Shinshu Univ.) FUJIMORI, Toshihiko; KANEKO Katsumi

Chair: KONDO, Toshihiro (10:10 $\sim$ 11:10)

- \* 10:00-10:10: interval for laptop PC connection.(4D3-08, 4D3-09, 4D3-10, 4D3-12)
- 4D3-08 Characterization of carbon-nanotubes dispersed by phospholipids (Yamagata Univ.) SATO, Yuki; SANO, Masahito
- 4D3-09 Nanohybridization between polyoxometalates and carbon nanotubes and applications to rechargeable batteries (Nagoya Univ.; Institute for Molecular Sciences) KAWASAKI, Naoya; HAMANAKA, Shun; WANG, Heng; YOKOYAMA, Toshihiko; YOSHIKAWA, Hirofumi; AWAGA, Kunio
- 4D3-10\*\* Electrical Properties of Nanoparticles/SWNT Complex Measured by PCI-AFM (Graduate School of Science, Osaka Univ.) HONG, Liu; TANAKA, Hirofumi; TANAKA, Daisuke; OGAWA, Takuji
- **4D3-12\*** Dielectric Environmental Effect on the Electronic States of (n,m) Single-Walled Carbon Nanotubes (Kyushu Univ.) HIRANA, Yasuhiko; TANAKA, Yasuhiko; NIIDOME, Yasuro; NAKASHIMA, Naotoshi

Chair: NAKASHIMA, Naotoshi (11:20∼12:00)

- \* 11:10-11:20: interval for laptop PC connection.(4D3-15, 4D3-16, 4D3-17, 4D3-18)
- 4D3-15<sup>†</sup> IV-SFG Studies on Ionic Liquid / Alkane Interfaces (Nagoya Univ. Chemistry) SAKAI, Yasunari; IWAHASHI, Takashi; OGAWA, Yoshimi; ISHIYAMA, Tatsuya; MORITA, Akihiro; KIM, Doseok; OUCHI, Yukio
- 4D3-16 Electronic states of ultra thin Ti oxide films formed on Mo(100) (Rikkyo Univ.; Tokyo Inst. Technol.) HASEGAWA, Tomo; KAKEHUDA, Youhei; EDAMOTO, Kazuyuki; OZAWA, Kenichi
- 4D3-17 Difference of core level energies for surface and bulk molecules in organic solids (Kyoto Univ., JST PRESTO, RIKEN) YOSHIDA, Hiroyuki; ITO, Eisuke; HARA, Masahiko; SATO, Naoki
- 4D3-18 LT-STS observation of Landau levels at zero-magnetic field (Univ. of Tsukuba) MACHIDA, Takahiro; GUO, Donghui; IWATAKE, Keigo; KONDO, Takahiro; NAKAMURA, Junji

# Tuesday, March 29, PM

Chair: KONDO, Takahiro (13:10∼14:10)

- \* 13:00-13:10: interval for laptop PC connection.(4D3-26, 4D3-28, 4D3-30, 4D3-31)
- 4D3-26\* Chemical & Physical Properties of Atomic Defects on Titanium Dioxide Surfaces (IIAIR Tohoku Univ.; RIKEN; JSPS; Liverpool Univ.; RIKEN; Chiba Univ.; WPI-AIMR, Tohoku Univ.; Univ. Tokyo) MINATO, Taketoshi; PANG, Chi Lun; KAJITA, Seiji; ASAO, Naoki; YAMAMOTO,

Yoshinori; NAKAYAMA Takashi; KAWAI, Maki; KIM, Yousoo

- 4D3-28\* Surface Synthesis of nanographene using Tetrabromoperilenebisimide derivertives. (Grad. Sch. Sci., Eng., Ehime Univ.; Institute of Advanced Energy, Kyoto Univ.) NAKAE, Takahiro; KUSHIDA, Yoshihiro; MIZOBUCHI, Shingo; SATO, Hisako; SAKAGUCHI, Hiroshi
- 4D3-30# Holes in graphene and how to repair them (Nagoya Univ.) IRLE, Stephan

#### Carbon Nanotube

4D3-31 Theoretical Study of Aromaticity by Nucleous-IndependentChemical Shifts in Single-Walled Carbon Nanotubes and Graphene Nanoribbons (Graduate School of Engineering, Kyoto Univ.) TSUMURA, Yoshihiro; FUENO, Hiroyuki; TANAKA, Kazuyoshi

Chair: FUENO, Hiroyuki (14:20~15:20)

- \* 14:10-14:20: interval for laptop PC connection.(4D3-33, 4D3-34, 4D3-35, 4D3-36, 4D3-37)
- 4D3-33 Photothermal and Photodynamic Effects of Metallic and Semiconducting Single-Walled Carbon Nanotubes (Kyoto Univ., JST PRESTO, iCeMS) MATOBA, Yoshinori; MURAKAMI, Tatsuya; TEZUKA, Noriyasu; UMEYAMA, Tomokazu; MATANO, Yoshihiro; HASHIDA, Mitsuru; IMAHORI, Hiroshi
- 4D3-34 Productction of Gold Nanoparticles by Laser Ablation in Solution and There Deposition on Carbon Nanotubes (Institute of Science and Engineering, Chuo Univ.) ENDO, Takahiro; MAFUNE, Fumitaka; TAKAHASHI, Tomoko; NISHIDA, Naoki; TANAKA, Hideki
- 4D3-35 Synthesis and Optical Properties of Chemically Converted Graphene Covalently Modified with Porphyrins. (Kyoto Univ., iCeMS) MIHARA, Junya; UMEYAMA, Tomokazu; MATANO, Yoshihiro; IMAHORI, Hiroshi

#### **Fullerene**

- **4D3-36** Synthesis of Hydroxylated Fullerene C60(OH)6 via Chlorofullerene C60Cl6 and Characterization by ESI-MS spectra (Toho Univ.) UENO, Hiroshi; MORIYAMA, Hiroshi
- 4D3-37\* Radical coupling reaction and the retro reaction of La@C<sub>82</sub> (Univ. of Tsukuba, TARA) TAKANO, Yuta; OINUMA, Midori; TSUCHIYA, Takahiro; SLANINA, Zdenek; AKASAKA, Takeshi; KATO, Tatsuhisa; NAGASE, Shigeru

Chair: MIURA, Katsukiyo (15:30 $\sim$ 16:30)

- \* 15:20-15:30: interval for laptop PC connection.(4D3-40, 4D3-41, 4D3-42, 4D3-43, 4D3-44, 4D3-45)
- 4D3-40 Synthesis of selective Bingel adduct of endohedral metallofullerene, La@C<sub>72</sub>(C<sub>6</sub>H<sub>3</sub>Cl<sub>2</sub>)(C(COC<sub>2</sub>H<sub>5</sub>)<sub>2</sub>) (Univ. Tsukuba, TARA Center; IMS) SUZUKI, Mitsuaki; ITO, Tsuyoshi; NIKAWA, Hidehumi; TSUCHIYA, Takahiro; MIZOROGI, Naomi; ZDENEK, Slanina; NAGASE, Shigeru; AKASAKA, Takeshi
- 4D3-41\* Derivatization of the Insoluble La@C<sub>3v</sub>(7)-C<sub>82</sub>: Anomalous Reactivity of Cage Carbons Dictated by the Internal Metal (Univ. of Tsukuba; IMS) LU, Xing; AKASAKA, Takeshi; KUGA, Hidenori; NIKAWA, Hidefumi; MOZOROGI, Naomi; TSUCHIYA, Takahiro; SLANINA, Zdenek; NAGASE, Shigeru
- 4D3-42 Semi-metallic Single-component Crystal of Soluble La@C<sub>82</sub> Derivative with High Electron Mobility (Univ. of Tsukuba; Osaka Univ.; IMS) SATO, Satoru; SEKI, Shuhei; HONSHO, Yoshihito; WANG, Lu; NIKAWA, Hidefumi; HARANAKA, Masayuki; TSUCHIYA, Takahiro; NAGASE, Shigeru; AKASAKA, Takeshi
- 4D3-43 Structural determination and chemical functionalization of metallofullerene Sc<sub>2</sub>@C<sub>82</sub> (Univ. of Tsukuba; IMS) KURIHARA, Hiroki; YAMAZAKI, Yuko; MIZOROGI, Naomi; TSUCHIYA, Takahiro; AKASAKA, Takeshi; NAGASE, Shigeru
- **4D3−44** Synthesis and Characterization of Sc<sub>3</sub>N@C<sub>80</sub> derivative (Univ. of Tsukuba; IMS) SAITO, Chiharu; SATO, Satoru; MIZOROGI, Naomi; TSUCHIYA, Takahiro; NAGASE, Shigeru; AKASAKA, Takeshi
- 4D3-45<sup>†</sup> Synthesis and Property of Optically Active Endohedral Metallofullerene Derivative (Univ. of Tsukuba, TARA; Univ. of Complutense) SAWAI, Koji; TAKANO, Yuta; FILIPPONE, Salvatore; MARTIN, Nazario; OINUMA, Midori; TSUCHIYA, Takahiro; AKASAKA, Takeshi

# Room D4

Bldg. 11 11-21

# Applications of Materials Saturday, March 26, AM

Chair: KOBORI, Yoshihiro (10:50∼12:00)

\* 10:40-10:50: interval for laptop PC connection.(1D4-12, 1D4-16)

1D4-12 CSJ Award for Technical Development Invention and

Development of a Novel Pesticide, Flubendiamide (Nihon Nohyaku Co., Ltd.) TONISHI, Masanori; SEO, Akira; TSUBATA, Kenji; KODAMA, Hiroki: ABE, Noboru

**1D4-16** Young Scholar Lectures of CSJ Development of D-π-A Fluorescent Dyes Based on a Control of Molecular Arrangement and Orientation and Their Applications to Optoelectronic Devices (Grad. Sch. Eng., Hiroshima Univ.) OOYAMA, Yousuke

# Saturday, March 26, PM

Chair: HIGUCHI, Masayoshi (13:10~14:10)

- \* 13:00-13:10: interval for laptop PC connection.(1D4-26, 1D4-30)
- 1D4-26 CSJ Award for Technical Development Development of Dielectric Film for IC Packaging Substrates (Ajinomoto Fine-Techno Co., Inc.; Ajinomoto Co., Inc.) NAKAMURA, Shigeo; HAYASHI, Eiichi; YOKOTA, Tadahiko; TAKEUCHI, Koji
- 1D4-30\*† Synthesis and Evaluation of Noria Derivative with Naphthoquinone Diazide Groups for Negative-type Photo-resist without Chemically Amplified (Kanagawa Univ.) NIINA, Nobumitsu; TAKADA, Kazunari; KUDO, Hiroto; MARUYAMA, Ken; KIMURA, Toru; SHIMOKAWA, Tsutomu; NISHIKUBO, Tadatomi

Chair: KIMURA, Mutsumi (14:20~15:30)

- \* 14:10-14:20: interval for laptop PC connection.(1D4-33, 1D4-35, 1D4-36, 1D4-37, 1D4-38, 1D4-39)
- 1D4-33\*\* Organic-metallic Hybrid Polymer for Applications of Smart Window and Diaplay (NIMS; JST-CREST) ZHANG, Jian; HIGUCHI, Masayoshi
- 1D4-35 Electrochromic properties of phthalate derivatives connected to ITO electrode (Faculty of Engineering, Chiba Univ.) URA, Naoki; SHIMADA, Tuyoshi; IMAIZUMI, Kinji; NAKAMURA, Kazuki; KOBAYASHI, Norihisa
- **1D4–36** Electrochemically driven reflective-emissive dual-mode cell containing PEDOT and ruthenium complex. (Faculty of engineering, Chiba Univ.) IBATA, Yukie; KOBAYASHI, Kanae; ARAKI, Shingo; WATANABE, Yuichi; NAKAMURA, Kazuki; KOBAYASHI, Norihisa
- 1D4-37 Synthesis and Photoluminescence of New πe.-Conjugated Dinaphthothiophene Derivatives (Kanagawa Univ.) NAMBU, Yoko; HATTA, Chinami; NISHIKUBO, Tadatomi
- 1D4-38<sup>#</sup> Synthesis and EL properties of Ir(III) complexes bearing 2,2<sup>\*</sup>-dipyridylamido ligands (RIKEN) RAI, Virendra Kumar; NISHIURA, Masayoshi; TAKIMOTO, Masanori; HOU, Zhaomin
- 1D4-39 Achievement of color-tunable emission from AC-driven electrochemiluminescent cell based on acene derivatives (Faculty of engineering, Chiba Univ.) NAKAKOMI, Masaru; SUGIMOTO, Syunichi; NOBESHIMA, Taiki; NAKAMURA, Kazuki; KOBAYASHI, Norihisa

Chair: NAKAMURA, Kazuki (15:40 $\sim$ 16:40)

- \* 15:30-15:40: interval for laptop PC connection.(1D4-41, 1D4-42, 1D4-43, 1D4-44, 1D4-46)
- 1D4-41 Electroluminescent Properties of Polymer Light-emitting Diodes Doped with Bis-cyclometalated Iridium(III) Complexes Bearing Various Diketonate Ancillary Ligands. (Osaka Pref. Univ.; Technology Research Institute of Osaka Pref.) IKAWA, Shigeru; YAGI, Shigeyuki; MAEDA, Takeshi; NAKAZUMI, Hiroyuki; SAKURAI, Yoshiaki
- 1D4-42 Synthesis and Photoluminescent Properties of Phosphorescent Platinum(II) Complexes Bearing Oligofluorene-based Cyclometalating Ligands (Osaka Prefecture Univ.; Technology Research Institute of Osaka Pref.)
  TAKATA, Tomonari; YAGI, Shigeyuki; MAEDA, Takeshi; NAKAZUMI, Hiroyuki; SAKURAI, Yoshiaki
- 1D4-43 Synthesis of Binaphthyl-based Hole-transporting Host Materials for Solution-processed Phosphorescent OLED (Osaka Pref. Univ.; Technology Research Institute of Osaka Pref.) OUE, Toshihiko; YAGI, Shigeyuki; MAEDA, Takeshi; NAKAZUMI, Hiroyuki; SAKURAI, Yoshiaki
- **1D4-44\*** Molecular Orientation and the Electronic Transport Property of 2,7-Substituted Triphenylene Derivative (OPERA, Kyushu Univ.) ADACHI, Chihaya; TOGASHI, Kazunori; YOKOYAMA, Norimasa
- 1D4-46 Molecular Orientation and the Electronic Transport Property of 2,11-Substituted Triphenylene Derivatives (OPERA, Kyushu Univ.) ADACHI, Chihaya; NOMURA, Shintaro; TOGASHI, Kazunori; YASUDA, Takuma

Chair: YASUDA, Takuma (16:50~17:50)

- \* 16:40-16:50: interval for laptop PC connection.(1D4-48, 1D4-50, 1D4-51, 1D4-52, 1D4-53)
- 1D4-48\* Development of the fluorescence protein detection method by AIE effect (Saitama Univ.) AIZAWA, Hiroaki; KOYAMA, Tetsuo; MATSUOKA, Koji; HATANO, Ken
- 1D4-50 Detection of enzymatic reaction by using graphene-modified gold electrode (NTT Microsystem Integration Labs. NTT Corp.) UENO, Yuko; FURUKAWA, Kazuaki; HIBINO, Hiroki; TAMECHIKA, Emi
- 1D4-51 Volatile Organic Compounds sensing by Metal-Organic Frameworks complex thin film. (Faculty of Textile Science and Technology Shinshu Univ..) YAMAGIWA, Hiroki; FUKAWA, Tadashi; KIMURA, Mutsumi; MIHARA, Takashi
- 1D4-52 VOC sensor using Hierarchically Structured ZnO nanoparticles with Organic monolayers (Shinshu Univ.) KUNIEDA, Eriko; FUKAWA,

Tadashi; KIMURA, Mutsumi; MIHARA, Takashi

1D4-53 Effect of organic additives on charge transport property of functional thin film containing metal oxide particles. (the faculty of engineering in Chiba) TACHIKAWA, Nobuya; FUJITA, Yuuki; NAKAMURA, Kazuki; KOBAYASHI. Norihisa

#### Sunday, March 27, PM

Chair: MORISAKI, Yasuhiro (13:20~14:20)

- \* 13:10-13:20: interval for laptop PC connection.(2D4-27, 2D4-28, 2D4-29, 2D4-30, 2D4-32)
- 2D4-27 Development of formaldehyde free epoxy modified CNSL paints (Meiji univ.) FUJISHIRO, Tatsuya; YOKOYAMA, Kota; MIYAKOSHI, Tetsuo
- 2D4-28 The effect of intermolecular interactions on optical properties of bisazomethine dyes in a crystalline state (Yokohama Natl. Univ.; Chungnam Natl. Univ.; Kyungpook Natl. Univ.) SASAKI, Naho; KIM, Byung-soon; MATSUMOTO, Shinya; SON, Young-a; KIM, Sung-hoon
- 2D4-29 Application of substituted indoline dyes for DSSC (Gifu Univ.) SHIOTA, Takahiro; KUBOTA, Yasuhiro; FUNABIKI, Kazumasa; MASAKI, Matsui
- 2D4-30\* Development of Fluorescence Sensors for Water Based on Photo-Induced Electron Transfer (PET) Characteristics (Hiroshima Univ.) OOYAMA, Yousuke; MATSUGASAKO, Ai; SUMOMOGI, Minako; KOMAGUCHI, Kenji; IMAE, Ichiro; HARIMA, Yutaka
- 2D4-32 Fluorescence Properties of Semi-squarylium and Squarylium Dyes (Gifu Univ.) FUKUSHIMA, Masato; KUBOTA, Yasuhiro; FUNABIKI, Kazumasa; MASAKI, Matsui

Chair: MATSUMOTO, Shinya (14:30~15:20)

- \* 14:20-14:30: interval for laptop PC connection.(2D4-34, 2D4-35, 2D4-36, 2D4-37)
- 2D4-34 Solid Fluorescence and Physical Properties of Pyridinium Styryl Dyes (Gifu Univ.) OKADA, Ayumi; KUBOTA, Yasuhiro; FUNABIKI, Kazumasa: MASAKI, Matsui
- 2D4-35 Synthesis and photophysical properties of novel heteropolycyclic azohydrazone-type boron complex exhibitting near-infrared emission (Kochi Univ.) OOYAMA, Haruka; SAKAMOTO, Takehiro; IKE, Maki; YOSHIDA, Katsuhira
- 2D4-36 Phenothiazine-type Color Former Organo-gel for Radiation Detection (Saitama Univ.; TMITRI) TACHIKAWA, Tatsuya; KURACHI, Yuka; SEKIGUCHI, Masayuki
- 2D4-37\* Adhesion of hydrogels by electrophoresis (Department of Materials Science and Technology, Tokyo Univ. of Science) ASOH, Taka-aki; KIKUCHI, Akihiko

Chair: KUBOTA, Yasuhiro (15:30 $\sim$ 16:30)

- \* 15:20-15:30: interval for laptop PC connection.(2D4-40, 2D4-41, 2D4-43, 2D4-44, 2D4-45)
- 2D4-40 Preparation and Thermal Stability of Calcium Carbonate/Calcium Fluoride Nanocomposites-Encapsulated Low Molecular Weight Aromatic Compounds (Hirosaki Univ.; INAX) SAITO, Tomoya; KAKEHI, Hiroshi; KATO, Yoshihiro; MIURA, Masashi; ISU, Norifumi; SAWADA, Hideo
- 2D4-41\*† Preparation of fluoroalkyl end-capped vinyltrimethoxysilane oligomer/silica nanocomposites-encapsulated biphenylenes segments possessing flammable and nonflammable characteristics (Hirosaki Univ.) GOTO, Yuki; MATSUKI, Yusuke; SAWADA, Hideo
- 2D4-43 Preparation of Novel ABA Triblock-Type Acrylic Acid Cooligomers Containing Fluoroalkyl Groups and Application to Nanocomposite Reactions with These Oligomers (Hirosaki Univ.; Goo Chemical Industrial Co., Ltd.) NAGANO, Runa; KIKUCHI, Mieko; SAKAI, Yoshio; FURUKAWA, Teruo; SAWADA, Hideo
- 2D4-44 Preparation of Novel Fluoroalkyl End-capped Cooligomer/Rose Bengal Nanocomposites Possessing Thermochromism Behavior (Hirosaki Univ.; Shimane Univ.) IZUMI, Shunsuke; GOTO, Yuki; TAKAHASHI, Keigo; YOSHIDA, Masato; SAWADA, Hideo
- 2D4-45 Releasing Behavior of Encapsulated Low Molecular Weight Aromatic Compounds into Fluoroalkyl End-capped Acrylic Acid Oligomer/Silica Nanocomposites (Hirosaki Univ.) KIKUCHI, Mieko; SAWADA, Hideo

Chair: ASOH, Taka-aki (16:40 $\sim$ 17:40)

- \* 16:30-16:40: interval for laptop PC connection.(2D4-47, 2D4-48, 2D4-49, 2D4-50, 2D4-51, 2D4-52)
- 2D4-47 Preparation and Thermal Stability of Ethylmethylimidazolium Hexafluorosilicate/Silica Nanocomposites (Hirosaki Univ.; National Institute of Advanced Industrial Science and Technology; Nippon Chemical Industrial Co., Ltd.) SASAKI, Takahiro; NISHIDA, Masakazu; KODAMA, Shun; SUGIYA, Masashi; SAWADA, Hideo
- 2D4-48 Preparation and Application of Fluoroalkyl End-Capped Vinyltri-methoxysilane Oligomer/Zinc Oxide Nanocomposites-Encapsulated Low Molecular Weight Aromatic Compounds (Hirosaki Univ.) KUDOU, Ikue; GOTO, Yuki; SASAZAWA, Kazuo; SAWADA, Hideo
- 2D4-49 Preparation of Novel Fluorinated Carboxylic Acid /Silica Nanocomposites-Encapsulated Bisphenol A Application to the Surface Modification of Glass by the Use of These Nanocomposites (Hirosaki Univ.; INAX) ISE,

- Shougo; GOTO, Yuki; KAKEHI, Hiroshi; MIURA, Masashi; SATO, Yusuke; ISU. Norifumi: SAWADA, Hideo
- 2D4-50 Preparation and Application of Gold Nanoparticles through Autoreduction of Gold Ions in the Presence of A Variety of Fluoroalkyl End-capped Oligomers (Hirosaki Univ.; Shimane Univ.) TSUZUKIISHI, Taiki; IIZUKA, Mari; YOSHIDA, Masato; SAWADA, Hideo
- 2D4-51 Interactions of Fluoroalkyl End-capped 2-Acrylamide-2-methylpropanesulfonic Acid Oligomer with a Variety of Ketones (Hirosaki Univ.; Shimane Univ.) KIJIMA, Tetsushi; YOSHIDA, Masato; SAWADA, Hideo
- 2D4-52 Syntheses and Properties of Head-to-head Type Vinyl Arene Dimers Bearing two Fluoroalkyl End-groups (School of Medicine, Shimane Univ.; Guraduate School of Science and Technology Hirosaki Univ.) IIZUKA, Mari; FUKUSHIMA, Shoju; GOTO, Yuki; SAWADA, Hideo; YOSHIDA, Masato

# Monday, March 28, AM

Chair: IKOMA, Shuji  $(9:00\sim9:50)$ 

- \* 8:50-9:00: interval for laptop PC connection.(3D4-01, 3D4-02, 3D4-04, 3D4-05)
- **3D4-01** The Synthesis of Novel bis-Squarylium Dyes Exhibiting Electronic Absorption in the Near-Infrared Region and Their Application to Dye-Sensitized Solar Cells (Department of Applied Chemistry, Osaka Pref.Univ.) MIYANAGA, Kyohei; MAEDA, Takeshi; YAGI, Shigeyuki; NAKAZUMI, Hirovuki
- 3D4-02\* Synthesis and Two-Photon Absorption of Squarylium Dyes with Tripodal Structure (Graduate School of Engineering, Osaka Pref. Univ.) ARIKAWA, Shigeki; MAEDA, Takeshi; YAGI, Shigeyuki; NAKAZUMI, Hiroyuki
- 3D4-04 Utilization of Color Formers Developed by Oxidation to Radiation Detection System (Saitama Univ.; TMITRI) KOUGO, Midori; SEKIGUCHI, Masayuki; TACHIKAWA, Tatsuya
- 3D4-05 Color Former Organo-gel for Radiation Detection (3) (Saitama Univ.; TMITRI) TAKAHASHI, Jun; SEKIGUCHI, Masayuki; TACHIKAWA, Tatsuya

Chair: YAGI, Shigeyuki (10:00 $\sim$ 11:00)

- \* 9:50-10:00: interval for laptop PC connection.(3D4-07, 3D4-08, 3D4-09)
- 3D4-07 Stabilization of natural annatto dye by adsorption to organo-clay (Shizuoka Univ.; Tokyo Univ. Technol.) KOHNO, Yoshiumi; INAGAWA, Mayu; IKOMA, Shuji; SHIBATA, Masashi; MATSUSHIMA, Ryoka; MAEDA, Yasuhisa
- 3D4-08 Stabilization of Anthocyanidin Dye by Adsorption into Al- and Fecontaining Mesoporous Silica (Tokyo Univ. of Technol.; Shizuoka Univ.; KAST) SAOTOME, Aya; KOGUCHI, Mami; KOHNO, Yoshiumi; TAKAGI, Katsuhiko; SHIBATA, Masashi
- **3D4-09** CSJ Award for Technical Development Development of New Manufacturing Method of A Silane Coupling Agent for Automobile Tire (Dept. Org. Polym. Mater., Tokyo Tech; Daiso Co.,Ltd.) TAKATA, Toshikazu; YAMADA, Nobuo; KITAGAWA, Motoki; ICHINO, Tomoyuki

Chair: TAKATA, Toshikazu (11:10∼11:50)

- \* 11:00-11:10: interval for laptop PC connection.(3D4-14, 3D4-15, 3D4-16)
- **3D4-14** Thermal stabilization and functionalization of poly(L-lactide) by terminal modification with cinnnamic acid (Department of Applied Chemistry, Graduate School of Engineering, Hiroshima Univ.) MATSUBARA, Naoki; CAI, Zhengguo; NAKAYAMA, Yuushou; SHIONO, Takeshi; SHIRAHAMA, Hiroyuki
- 3D4-15 Deterioaration estimation of cable external coat by using terahertz time-domain spectroscopy (NTT Energyg and Environment Systems Lab.; NTT Microsystem Integration Lab.) TAKAHASHI, Kazue; AJITO, Katsuhiro; UENO, Yuko; OGAWA, Shigeo
- 3D4-16\* Control of biodegradability of poly(butylene succinate) by addition of cellulose acetate butyrate (AIST) TACHIBANA, Yuya; NINOMIYA, Fumi; FUNABASHI, Masahiro; KUNIOKA, Masao

# Monday, March 28, PM

Chair: MURATA, Yasujiro (13:10 $\sim$ 14:10)

- \* 13:00-13:10: interval for laptop PC connection.(3D4-26, 3D4-27, 3D4-28, 3D4-29, 3D4-30)
- 3D4-26 Relationship between Structure of Overcharge Protection Agents for Lithium Batteries and Overcharge Protection Effect (Hitachi Research Laboratory, Hitachi, Ltd.) IWAYASU, Norio; HONBOU, Hidetoshi
- 3D4-27 Rechargeable batteries using benzoquinone derivatives bearing perfluoroalkyl chains (Osaka Prefecture Univ.; Murata Manufacturing Co. Ltd.) MATSUBARA, Hiroshi; MAEGAWA, Takahiko; SATOH, Masaharu
- 3D4-28 Electrochemical Properties of Secondary Organic Battery using Phenazine 5,10-dioxide as Cathode Active Compound (Kobe City College of Tech.; Murata Manufacturing Co. Ltd.) KOIZUMI, Takuya; KOHNO, Naoki; SATOH, Masaharu; MIURA, Yozo
- 3D4-29 Redox properties of acenaphthoquinones and their application for organic secondary battery (Osaka Electro-Communication Univ.) ARAKI, Masashige; KAMADA, Yoshihiro; AONUMA, Shuji; SATOH, Masaharu
- **3D4-30\*** Polyoxometalate cluster batteries: battery performances and in situ

XAFS studies on reaction mechanism (Nagoya Univ.; Institute for Molecular Sciences) YOSHIKAWA, Hirofumi; HAMANAKA, Shun; WANG, Heng; YOKOYAMA, Toshihiko; AWAGA, Kunio

Chair: MATSUBARA, Hiroshi (14:20∼15:20)

- \* 14:10-14:20: interval for laptop PC connection.(3D4-33, 3D4-35, 3D4-36, 3D4-37, 3D4-38)
- 3D4-33\* BHJ Solar Cells Using Skeletally-Modified C<sub>60</sub> Derivatives (Institute for Chemical Research, Kyoto Univ.; Institute of Advanced Energy, Kyoto Univ.) MORINAKA, Yuta; MURATA, Michihisa; MURATA, Yasujiro; YOSHIKAWA, Osamu; SAGAWA, Takashi; YOSHIKAWA, Susumu
- 3D4-35 Multilayer Effect of Porphyrin Zn(II) Complexes with substituents for Intermolecular Interaction in Dye-Sensitized Solar Cells (Kochi Univ. of Tech., School of Env. Sci. and Eng.) SUMI, Katsuhiro; NOMURA, Masataka
- 3D4-36 Development of High-Performance Bulk-heterojunction Organic Solar Cells Using an Amorphous Molecular Material with a High Hole Drift Mobility as an Electron Donor (Faculty of Engineering, Osaka Univ.; Center for Advanced Science and Innovation, Osaka Univ.; Fukui Univ. Technol.) KAGEYAMA, Hiroshi; OHISHI, Hitoshi; TANAKA, Masatake; OHMORI, Yutaka; SHIROTA, Yasuhiko
- 3D4-37 Dye Sensitized Solar Cell Using Organic Redox Mediator (Dept. Appl. Chem., Waseda Univ.) OKUYAMA, Takumi; KIKUCHI, Akitomo; KATO, Fumiaki; OYAIZU, Kenichi; NISHIDE, Hiroyuki
- 3D4-38 The Effect of p-Type Doping on the Performance of Organic Thin-film Photovoltaic Devices m-MTDATA / C<sub>60</sub> and 2-TNATA / C<sub>60</sub> Systems (Fukui Univ. Technol.; The Kansai Electric Power Co. Ltd.; Faculty of Engineering, Osaka Univ.) UMEDA, Takao; CHUJO, Keigo; NOMURA, Yasuhiro; TSUCHIDA, Kotaro; HARA, Michibiro; TERASHIMA, Sayo; KOJI, Yasuhiro; KAGEYAMA, Hiroshi; SHIROTA, Yasuhiro

Chair: OYAIZU, Kenichi (15:30~16:20)

- \* 15:20-15:30: interval for laptop PC connection.(3D4-40, 3D4-41, 3D4-42, 3D4-43, 3D4-44)
- 3D4-40 Synthesis of Pt-C cathode catalysts for fuel cell utilizing Al-SBA-15 (Chiba Univ.) OGURA, Yuta; OKA, Kazuki; IZUMI, Yasuo
- 3D4-41 Preparation of transition metal nano particles using mpg-C3N4 template and their properties as PEFC cathode catalysts. (the Univ. of Tokyo) OHNISHI, Ryohji; TAKANABE, Kazuhiro; KUBOTA, Jun; DOMEN, Kazunari
- 3D4-42 Effect of Local Heating by Imidazolium Salts under Microwave Irradiation on the Fabrication of Organic-Inorganic Hybrids (Kyoto Univ.; Matsumoto Yushi-Seiyaku Co., Ltd.) KAJIWARA, Yuichi; TANAKA, Kazuo; CHUJO, Yoshiki
- 3D4-43 Characteristics of Polycarbonate Resin with Various Flame-Retardants including Polystyrene Sulphate (Sony Corp.) UEDA, Kenji; INAGAKI, Yasuhito
- **3D4-44** Study on the Thermal Conductivity of MgO Filler for Thermosetting Resins (Industrial Technology Center of Okayama Prefecture) NIGO, Hideyuki; MITSUISHI, Kazuta; YONEDA, Tatsunaka; NISHIDA, Naoto

# Room D5

Bldg. 11 11-22

# Physical Chemistry -Structure-Saturday, March 26, AM

### crystal structure

Chair: OGAWA, Keiichiro (9:00  $\sim$ 10:00)

- \* 8:50-9:00: interval for laptop PC connection.(1D5-01, 1D5-02, 1D5-03, 1D5-05, 1D5-06)
- 1D5-01 Crystal structure and control of photochromism for new cobaloxime complexes with azobenzene derivatives as axial base ligand (Tokyo Inst. of Tech.) YAMAGIWA, Hiroki; SEKINE, Akiko; UEKUSA, Hidehiro
- 1D5-02 Azo or hydrazone structure in some hydrogen-bonded azo pigments (Graduate School of Eng., Yokohama National Univ.) KAMEI, Yuya; MIZUGUCHI. Jin
- 1D5-03\* Crystal and electronic structure of pyrazolyl-azo-1,2,4-thiadiazol yellow azo pigment of the trans form (Graduate School of Eng., Yokohama National Univ.) SHIBATA, Hiroki; MIZUGUCHI, Jin
- 1D5-05 Crystal structure determination of novel monoazo pigments from powder X-ray diffraction data (Tokyo Inst. of Tech.) FUJII, Kotaro; UEKUSA, Hidehiro; OTANI, Junji; MATSUMURA, Michio
- 1D5-06 New structures of carbon crystal Predicion by using the SHS method (Wakayama Univ.; Kyoto Univ.; Toyota Phys. & Chem. Research Institute) YAMAKADO, Hideo; TOKOYAMA, Hiroaki; MAEDA, Satoshi; OHNO, Koichi

Chair: YAMAKADO, Hideo (10:10~11:00)

- \* 10:00-10:10: interval for laptop PC connection.(1D5-08, 1D5-10, 1D5-11, 1D5-12)
- **1D5-08\*** Appearance of a Large Magnetization at Elevated Temperatures in Nearly Antiferromagnetic α-Fe2<sub>2</sub>O<sub>3</sub> (Graduate School of Eng., Yokohama National Univ.; IMRAM, Tohoku Univ.) MIZUGUCHI, Jin; YUI, Yuhki; KIYANAGI, Ryoji; ISHIKAWA, Yoshihisa; NODA, Yukio
- 1D5-10 Stability and tinctorial strength of black leuco-colorants as viewed from the crystal structure of a phenolic developer (Graduate School of Eng., Yokohama National Univ.) SHIMA, Hideki; SATO, Kazuyuki; MIZUGUCHI, Jin
- 1D5-11 Pseudo-polymorphic transformation of photo-reactive dispiro compound revealed by powder X-ray crystal structure analysis (Tokyo Univ. of Science) ARITA, Atsuko; NAKAI, Izumi; SEKINE, Akiko; UEKUSA, Hidehiro; SUZUKI, Masaya; KOBAYASHI, Keiji
- 1D5-12 Host-guest interaction in bisphenol A inclusion crystal (Tokyo Inst. of Tech.) SANO, Fumiaki; SEKINE, Akiko; UEKUSA, Hidehiro

### Surface and Interface

Chair: ORITA, Hideo (11:10~12:10)

- \* 11:00-11:10: interval for laptop PC connection.(1D5-14, 1D5-15, 1D5-16, 1D5-17, 1D5-18, 1D5-19)
- 1D5-14 Oxygen adsorption mechanism on the potassium-doped graphite surface by supersonic molecular beam (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ARAKAWA, Keitaro; OH, June Pyo; STITHO, Yoshihiko; KONDO, Takahiro; NAKAMURA, Nakamura
- 1D5-15 Surface state of the nitrogen ion bombarded graphite Measurement of He atomic beam scattering (College of Engineering Sciences, Univ. of Tsukuba) SAITO, Yoshihiko; OH, June Pyo; ARAKAWA, Keitaro; KONDO, Takahiro; NAKAMURA, Nakamura
- 1D5-16 Change in electronic states of graphite surface sputtered by Ar inos (Univ. of Tokyo) USHIYAMA, Shota; AOKI, Masaru; MOTAI, Yuya; SHUDO, Ken-ichi; MASUDA, Shigeru
- 1D5-17 Electronic states of Nitrogen bombarded graphite investigated by STM/STS (Univ. of Tsukuba) SHIKANO, Taishi; SUZUKI, Tetsuya; KONDOU, Takahiro; NAKAMURA, Junji
- 1D5-18 Electronic states of potassium-doped graphite -LT-STM/STS measurement- (Univ. of Tsukuba) IWATAKE, Keigo; GUO, Donghui; MACHIDA, Takahiro; KONDO, Takahiro; NAKAMURA, Junji
- 1D5-19 Observation of p-nitroaniline crystal surface studied with frequency modulation atomic force microscopy (Graduate school of science, Kobe Univ.; Shimadzu Co.; JST; Graduate school of engineering, Kyoto Univ.; ICC, Kyoto Univ.) NISHIOKA, Rina; HIASA, Takumi; KIMURA, Kenjiro; ONISHI, Hiroshi; OHTA, Masahiro; WATANABE, Kazuyuki; YAMAZAKI, Masahi; KOKAWA, Ryohei; OHYABU, Noriaki; KOBAYASHI, Kei; YAMADA, Hirofumi

# Saturday, March 26, PM

Chair: NAKAMURA, Junji (13:20∼14:20)

- \* 13:10-13:20: interval for laptop PC connection.(1D5-27, 1D5-28, 1D5-29, 1D5-30, 1D5-31, 1D5-32)
- **1D5-27** Single Electron Transfer Analyses of Redox Active Ligand on Tripodal Molecule by Electrostatic Force Measurements (Osaka Univ.; Tokyo Tech.) TAKENAKA, Masahiro; MIWA, Takeshi; NADAF, Rashid N.; YOKOTA, Yasuyuki; FUKUI, Ken-ichi
- 1D5-28 Structure and electronic states of NO adsorbed on Cu(110) (Department of Chemistry, Kyoto Univ.) OKUYAMA, Hiroshi; SHIOTARI, Akitoshi; KITAGUCHI, Yuuya; HATTA, Shinnichiro; ARUGA, Tetsuya
- 1D5-29 STM mesurements for the adsorption of methanol andits dehydrogenation products on Cu(110) (Graduate School of Science, Kyoto Univ.) KITAGUCHI, Yuya; SHIOTARI, Akitoshi; HATTA, Shinichirou; OKUYAMA, Hiroshi; ARUGA, Tetsuva
- 1D5-30 Study of CO oxidation on Pd(111) surface by using ambient pressure XPS (BL7A of PF KEK) TOYOSHIMA, Ryo; YOSHIDA, Masaaki; MONYA, Yuuji; KOUSA, Yuka; HARADA, Taiga; ABE, Hitoshi; AMEMIYA, Kenta; KONDOH, Hiroshi
- 1D5-31 Study on formation process of N-doped TiO<sub>2</sub> photocatalyst with using ambient pressure XPS (KEK) MONYA, Yuji; YOSHIDA, Masaaki; KOUSA, Yuka; HARADA, Taiga; TOYOSHIMA, Ryo; ABE, Hitoshi; AMEMIYA, Kenta; MASE, Kazuhiko; KONDOH, Hiroshi
- 1D5-32<sup>†</sup> Isotope effects in the desorption and dehydrogenation of cyclohexane on Rh(111) (ISSP, Univ. of Tokyo) KOITAYA, Takanori; YOSHIMOTO, Shinya; MUKAI, Kozo; YOSHINOBU, Jun

Chair: MATSUMOTO, Yoshiyasu (14:30 $\sim$ 15:30)

- \* 14:20-14:30: interval for laptop PC connection.(1D5-34, 1D5-35, 1D5-36, 1D5-38, 1D5-39)
- 1D5-34 Temperature-dependence of CO oxidation on Ir(111) surface studied by dispersive-NEXAFS (Graduate School of Science and Technology, Keio Univ.) NAKAMOTO, Shuichi; YOSHIDA, Masaaki; KOUSA, Yuka; KOUZAI, Shogo; SUMII, Ryohei; ABE, Hitoshi; AMEMIYA, Kenta; KONDOH, Hiroshi

- 1D5-35 Considerations of transition metal surface using periodic DFT calculations with LCAO approximation: Interaction between Pt(111) surface and CO molecule (Department of Chemistry and Materials Technology, Kyoto Institute of Technology) SATO, Masaki; OKADA, Arifumi; ISHIKAWA, Yo-ichi
- 1D5-36\* DFT calculation on adsorption and decomposition of N<sub>2</sub>O on (110) surfaces of noble metals (Pd, Rh, Ir) (AIST; Hokkaido Univ.) ORITA, Hideo: KUBO Toshitaka: MATSUSHIMA Tatsuo
- 1D5-38 N<sub>2</sub>O decomposition process on Pd(112) analysis of spatial distribution of desorbing molecules- (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) SAKURAI, Masataka; MATSUSHIMA, Tatsuo; KONDO, Takahiro; NAKAMURA, Junji
- 1D5-39 Two-color sum-frequency generation study of C<sub>60</sub>/metal interfaces (AIST) MIYAMAE, Takayuki

Chair: MUNAKATA, Toshiaki (15:40 $\sim$ 16:40)

- \* 15:30-15:40: interval for laptop PC connection.(1D5-41, 1D5-43, 1D5-45)
- 1D5-41\* Detection of precursor states of CO under photo-stimulated desorption by sum frequency generation vibrational spectroscopy with heterodyne detection. (Kyoto Univ.) INOUE, Ken-ichi; WATANABE, Kazuya; NAKAI, Ikuyo; MATSUMOTO, Yoshiyasu
- 1D5-43\* Up versus Down Alignment of Solute Molecules at the Air/Water Interface Determined by HD-ESFG (RIKEN) YAMAGUCHI, Shoichi; WATANABE, Hidekazu; TAHARA, Tahei
- 1D5-45\*\* Orientational Distribution of Solute Molecules at the Air/Water Interface Determined by Polarization Second Harmonic Generation and Linear Reflection (RIKEN) KUNDU, Achintya; YAMAGUCHI, Shoichi; TAHARA, Tahei

Chair: AOKI, Masaru (16:50~17:50)

- \* 16:40-16:50: interval for laptop PC connection.(1D5-48, 1D5-49, 1D5-50, 1D5-51, 1D5-52)
- 1D5-48 Growth Processes of Copper Phthalocyanine Films on HOPG Studied with Two-Photon Photoemission Microspectroscopy (Graduate School of Science, Osaka Univ.) FURUSAWA, Jun; YAMAMOTO, Ryota; YAMADA, Takashi; MUNAKATA, Toshiaki
- 1D5-49<sup>†</sup> Angle-resolved micro-spot two-photon photoemission spectroscopy for unoccupied eletronic states of phthalocyanine film (Graduate School of Science, Osaka Univ.) YAMAMOTO, Ryota; MINAMI, Takafumi; SHIBUTA, Masahiro; YAMADA, Takashi; MUNAKATA, Toshiaki
- **1D5-50** Effect of NO adsorption on the magnetic structure of Ni/Cu(001) thin film (KEIO Univ.) KOUZAI, Shougo; ABE, Hitoshi; NAKAYAMA, Takeshi; AMEMIYA, Kenta; KONDOH, Hiroshi
- 1D5-51 EXAFS analysis of perpendicularly magnetized Fe/Co/Pd(111) films. (HIGH ENERGY ACCELERATOR RESEARCH ORGANIZATION) NAKAYAMA, Takeshi; ABE, Hitoshi; KOUZAI, Shougo; AMEMIYA, Kenta; KONDOH, Hiroshi
- 1D5-52\*† Chemical-states of self-assembly monolayer on oxide surface (Japan Atomic Energy Agency) NARITA, Ayumi; BABA, Yuji; SEKIGUCHI, Tetsuhiro; SHIMOYAMA, Iwao; HIRAO, Norie

Chair: KONDOH, Hiroshi (18:00~18:30)

- \* 17:50-18:00: interval for laptop PC connection.(1D5-55, 1D5-56, 1D5-57)
- 1D5-55<sup>†</sup> Local electronic states of thiophene derivative-Pt(111) junction system (Univ. of Tokyo) SATO, Hirofumi; USHIYAMA, Shota; AOKI, Masaru; MASUDA, Shigeru; SYUDO, Ken-ichi; YANAGISAWA, Susumu; MORIKAWA, Yoshitada
- 1D5-56 Adsorption of Tetrathiafulvalene on ZnO Surfaces (Tokyo Inst. Tech.; Rikkyo Univ.; KEK PF) OZAWA, Kenichi; MUNAKATA, Shiori; EDAMOTO, Kazuyuki; MASE, Kazuhiko
- 1D5-57 The effects of modification at semiconductor/dielectric interfaces in single crystal organic field-effect transistors (Kyoto Univ.) MIYATA, Kiyoshi; NAKAI, Ikuyo; WATANABE, Kazuya; ISHINO, Yuta; MIWA, Kazumoto; UEMURA, Takafumi; TAKEYA, Jun-ichi; MATSUMOTO, Yoshiyasu

# Sunday, March 27, AM

# Infrared and Raman Spectroscopy

Chair: TAKAYA, Tomohisa (9:30  $\sim$ 10:30)

- \* 9:20-9:30: interval for laptop PC connection.(2D5-04, 2D5-05, 2D5-06, 2D5-08)
- 2D5-04 Ultrafast Dynamics of 7-Azaindole Complex in Solution (Chiba Univ.) KATO, Tatsuya; SHIROTA, Hideaki
- 2D5-05 Interionic Interaction and Dynamics in Aromatic Ionic Liquids (Chiba Univ.) FUKAZAWA, Hiroki; SHIROTA, Hideaki
- 2D5-06\* Development of Tr-HD-VSFG spectroscopy and hole burning dynamics of interfacial water molecules (RIKEN) NIHONYANAGI, Satoshi; SINGH, Prashant; YAMAGUCHI, Shouichi; TAHARA, Tahei
- 2D5-08\* Higher Order Conformation of Polymer Studied by Terahertz Spectroscopy (Terahertz Sensing and Imaging Laboratory, Advanced Science Institute, RIKEN) HOSHINA, Hiromichi; MORISAWA, Yusuke; SATO, Harumi; NODA, Isao; OZAKI, Yukihiro; OTANI, Chiko

Chair: SHIMADA, Rintaro (10:40~11:40)

- \* 10:30-10:40: interval for laptop PC connection.(2D5-11, 2D5-12, 2D5-13, 2D5-14, 2D5-15, 2D5-16)
- 2D5-11 Surface-Enhanced Raman Scattering of Collagen Type I (Kwansei Gakuin Univ.) MINAMI, Satoshi; SUZUKI, Toshiaki; HAN, Xiaoxia; OZAKI, Yukihiro
- 2D5-12 Surface measurement of the Styrene-Butadiene Rubber/Multiwall Carbon Nanotubes Nanocomposites by using Tip enhanced Raman scattering (TERS) (Kwansei Gakuin Univ.) SUZUKI, Toshiaki, SATO, Harumi; KITAHAMA, Yasutaka; XINLEI, Yan; ITOH, Tamitake; XIAOXIA, Han; BOKOBZA, Liliane; OZAKI, Yukihiro
- 2D5-13 Analysis of local structure of an isolated single-walled carbon nanotube by surface-enhanced Raman scattering spectroscopy with controlled light polarization (Hokkaido Univ.) KOMEDA, Keiichiro; TAKASE, Mai; NAGASAWA, Fumika; YASUDA, Satoshi; NABIKA, Hideki; MURAKOSHI, Kei
- 2D5-14 Polarized SERS measurement on a single molecule at metal nano-gap (Hokkaido Univ.) NAGASAWA, Fumika; TAKASE, Mai; NABIKA, Hideki; MURAKOSHI, Kei
- 2D5-15 Change of Raman scattering and emission from H-aggregate with optically-trapped silver nanoparticles (Kwasei Gakuin Univ.; AIST) KASHIHARA, Masato; KITAHAMA, Yasutaka; ITOH, Tamitake; OZAKI, Yukihiro
- 2D5-16 Fabrication of silver nanoparticles for surface-enhanced Raman scattering measurement by near-field photo-reduction using apertured cantilever. (Kwasei Gakuin Univ.) KITAHAMA, Yasutaka; SUZUKI, Toshiaki; OZAKI, Yukihiro

# Sunday, March 27, PM

Chair: NARA, Masayuki  $(13:00{\sim}14:00)$ 

- \* 12:50-13:00: interval for laptop PC connection.(2D5-25, 2D5-26, 2D5-27, 2D5-28, 2D5-29, 2D5-30)
- 2D5-28, 2D5-29, 2D5-30)

  2D5-25<sup>†</sup> Time-Resolved Resonance Raman Spectroscopy on Structural Relaxation Process of Cytochrome c Oxidase Following Photolysis of Carbonmonoxide (Univ. of Hyogo, Grad. Sch. Life Sci.) ISHIGAMI, Izumi; NISHIGAKI, Takeshi; NAKASHIMA, Satoru; SHINZAWA-ITOH, Kyoko; YOSHIKAWA, Shinya; OGURA, Takashi
- 2D5-26 Resonance Raman Spectroscopy of Cytochrome c Oxidase Reconstituted in Phospholipid Vesicles (Univ. of Hyogo) NOMURA, Takashi; YANAGISAWA, Sachiko; SHINZAWA-ITO, Kyoko; YOSHIKAWA, Shinya; OGURA, Takashi
- 2D5-27 Protein Dynamics in Primary Process of the Photocycle of Halorhodopsin: Observation of Spectral Changes of Tryptophan Residues (Sch. Sci., Osaka Univ.) SHIMOO, Yumi; MIZUNO, Misao; KANDORI, Hideki; MIZUTANI, Yasuhisa
- 2D5-28 Resonance Raman study on the ferryl oxo iron porphyrins with various imidazole and imidazolate derivatives as axial ligand (Wakayama Nat. Coll. of Tech.; Okazaki Int. Integr.Biosci.; Univ. of Hyogo) ISHIMARU, Hirohito; FUJII, Hiroshi; OGURA, Takashi
- 2D5-29 Identification of Enantiomer-Dependent Interaction of Tryptophan with CO-bound Indoleamine 2,3-Dioxygenase (Univ. of Hyogo; RIKEN SPring-8 Center) YANAGISAWA, Sachiko; SUGIMOTO, Hiroshi; SHIRO, Yoshitsugu; OGURA, Takashi
- 2D5-30 Active site structures of heme proteins studied by a near-infrared Raman optical activity (Grad. Sch. Sci. Eng., Saga Univ.) SHINGAE, Takahito; TAKAHASHI, Satoshi; UNNO, Masashi

Chair: YANAGISAWA, Sachiko (14:10 $\sim$ 15:10)

- \* 14:00-14:10: interval for laptop PC connection.(2D5-32, 2D5-34, 2D5-35, 2D5-37)
- 2D5-32\*# A New Perspective of Identifying the Origin of the "Raman Spectroscopic Signature of Life" (The Univ. of Tokyo; RIKEN) CHIU, Liang-da; HAMAGUCHI, Hiro-o
- 2D5-34 Comparison of Ca<sup>2+</sup>-binding domains for tobacco calmodulin by using synthetic peptide analogues (Tokyo Med Dent Univ, Univ of Tokyo, AIST) NARA, Masayuki; IMAI, Fabiana Lica; TANOKURA, Masaru; MORII, Hisayuki
- 2D5-35\* Development of anharmonic vibrational theory and applications to biomolecules (Fuel Cell Nanomaterials Center, Univ. of Yamanashi) YAGI, Kiyoshi
- 2D5-37 Infrared Spectrum of Nitro(5,10,15,20-tetraphenylporphyrinato)(4-methylpyridine)cobalt(III) (part 5) YAMAMOTO, Kenichi

Chair: ITO, Fumiyuki  $(15:20{\sim}16:20)$ 

- \* 15:10-15:20: interval for laptop PC connection.(2D5-39, 2D5-41, 2D5-42, 2D5-43)
- 2D5-39\* Solvent dependence of the anharmonicity of the OH stretching vibration of the methanol—pyridine complex (Kwansei Gakuin Univ.; Josai Univ.; Open Univ. of Japan) FUTAMI, Yoshisuke; OZAKI, Yasushi; HAMADA, Yoshiaki; OZAKI, Yukihiro
- 2D5-41 Low Temperature-induced Conformational Changes of Imidazolium-based Ionic Liquids (Nat. Def. Acad.) HATANO, Naohiro; TAKEKIYO, Takahiro; ABE, Hiroshi; YOSHIMURA, Yukihiro
- 2D5-42 Direction of transition dipole moment for a combination band

investigated by near-infrared electroabsorption spectroscopy (School of Science, Univ. of Tokyo; National Chiao Tung Univ.) NISHIDA, Jun; YABUMOTO, Sohshi; SHIGETO, Shinsuke; HAMAGUCHI, Hiro-o

2D5-43\* Vibrational assignment of the nitrate radical NO3 in the groundelectronic state (Grad. Univ. Adv. Studies; Okayama Univ.; Hiroshima City Univ.) HIROTA, Eizi; KAWAGUCHI, Kentarou; SHIMIZU, Natsuko; FUJIMORI, Ryuji; ISHIWATA, Takashi

Chair: FUTAMI, Yoshisuke (16:30~17:30)

- \* 16:20-16:30: interval for laptop PC connection.(2D5-46, 2D5-47, 2D5-48, 2D5-49, 2D5-50)
- 2D5-46 Photoisomerization of cytosine isolated in low-temperature matrix (Tokyo Tech.) AKAI, Nobuyuki; KAWAI, Akio; SHIBUYA, Kazuhiko
- 2D5-47 Photo-Induced Hydrogen-Atom Migration of Adenine and 9-Methyladenine in Argon Matrices (Univ. of Agriculture and Technology) IIZUMI, Shota; SEKINE, Masahiko; NAKATA, Munetaka
- 2D5-48 Structure and Photoreaction Mechanism of 2-Chloro-6-Fluorophenol by Matrix-Isolation Infrared Spectroscopy (Univ. of Agriculture and Technology) NANBU, Shota; SEKINE, Masahiko; NAKATA, Munetaka
- 2D5-49 Matrix-isolation IR spectroscopy of 1:1 complexes containing CHCl3 (AIST) ITO, Fumiyuki
- 2D5-50\* Controlling Wave Packet Interference of Delocalized Excited States in Solids (Institute for Molecular Science) KATSUKI, Hiroyuki; OHMORI, Kenji

# Asian International Symposium -Physical ChemistryMonday, March 28, PM

Chair: FUJII, Asuka (13:30∼14:40)

- **3D5-28**# Keynote Lecture On the development of a first-principle based multi-model method to study aqueous systems: from clusters, interfaces to condensed phases (Inst. of Atomic and Molecular Sciences, Taiwan) Kuo, Jer-Lai (13:30~14:00)
- 3D5-31<sup>#</sup> Invited Lecture Conformational restriction in catecholamines studied by laser desorption supersonic jet laser spectroscopy (Tokyo Tech) ISHIUCHI, Shun-Ichi (14:00∼14:20)
- 3D5-33\* Invited Lecture Intermolecular structures in small solvated clusters and large crystalline clusters studied by IR absorption spectroscopy (Univ. of Hyogo) MATSUMOTO, Yoshiteru (14:20~14:40)

Chair: MURAKOSHI, Kei (14:50 $\sim$ 16:00)

- **3D5-36**<sup>#</sup> Keynote Lecture Polarization properties of SERS in Ag nanowire-particle combined system (Seoul Nat. Univ., Korea) Jeong, Dae Hong (14:50∼15:20)
- **3D5-39<sup>#</sup> Invited Lecture** Fabrication of metallic nanostructures for the enhancement of optical near fields and its chemical applications (Hokkaido Univ.; PRESTO-JST) UENO, Kosei (15:20∼15:40)
- 3D5-41# Invited Lecture Heterodyning of VSFG spectroscopy and structure of interfacial water molecules (RIKEN) NIHONYANAGI, Satoshi (15:40~16:00)

Chair: TUKUDA, Tatsuya (16:10∼17:20)

- 3D5-44# Keynote Lecture Control the Surface Structure of metal nanocrystals using Small molecules (Xiamen Univ., China) Zheng, Nanfeng (16:10~16:40)
- **3D5-47**<sup>#</sup> Invited Lecture Isolation, stability, and optical properties of ligand-protected bimetal clusters (Tokyo Univ. of Science) NEGISHI, Yuichi (16:40∼17:00)
- 3D5-49<sup>#</sup> Invited Lecture Electron conductive -junction gold nanoparticles (Univ. of Tsukuba) KANEHARA, Masayuki (17:00~17:20)

# Physical Chemistry -Structure-Tuesday, March 29, AM

#### Microwave

Chair: IMAJO, Takashi (9:40  $\sim$ 10:50)

- \* 9:30-9:40: interval for laptop PC connection.(4D5-05, 4D5-06, 4D5-08, 4D5-10)
- 4D5-05 Fourier transform microwave spectroscopy of isopropyl methyl ether (Kanagawa Inst. Tech. and Grad. Univ. Adv. Studies) WATANABE, Ryo; TAKAHASHI, Shun-ichi; KAWASHIMA, Yoshiyuki; HIROTA, Eizi

## Electronic State and Electronic Spectroscopy

- 4D5-06\* Vibronic coupling in C<sub>60</sub> and photoelectron spectrum (Kyoto Univ.; K.U.Leuven) IWAHARA, Naoya; SATO, Tohru; TANAKA, Kazuyoshi; CHIBOTARU, L. F.
- 4D5-08\* Experimental and Theoretical Study of Allowed Electronic Transitions of Organic Liquids by using Attenuated Total Reflectance in Far-Ultraviolet region (Kwansei Gakuin Univ.; NFRI; KURABO) MORISAWA, Yusuke; IKEHATA, Akifumi; HIGASHI, Noboru; OZAKI, Yukihiro

**4D5-10\*** Vibronic Bands of metal containing tri-atomic free radicals (Hiroshima City Univ.) FUKUSHIMA, Masaru; ISHIWATA, Takashi

Chair: YAGI, Kiyoshi (11:00~12:00)

- \* 10:50-11:00: interval for laptop PC connection.(4D5-13, 4D5-15, 4D5-17)
  4D5-13\*† Relationship between diradical character and second hyperpolarizability in open-shell singlet systems with metal-metal multiple bond (Graduate school of engineering science, Osaka Univ.) FUKUI, Hitoshi; INOUE, Yudai; INUI, Tomoya; KISHI, Ryohei; SHIGETA, Yasuteru; NAKANO, Masayoshi
- 4D5-15\* First principle study on the giant field effect on second hyperpolarizabilities of open-shell singlet molecules (Osaka Univ.) NAKANO, Masayoshi; MINAMI, Takuya; MUHAMMAD, Shabbir; INOUE, Yudai; KISHI, Ryohei; SHIGETA, Yasuteru; KUBO, Takashi; KAMADA, Kenji; OHTA, Koji; CHAMPAGNE, Benoit; BOTEK, Edith
- 4D5-17\* Assessment of Dispersion Terms evaluated withPerturbation Theory Based on Projected Molecular Orbitals (Toyota Phys. and Chem. Research Inst.) IWATA, Suehiro

# Tuesday, March 29, PM

Chair: IWATA, Suehiro (13:10~14:00)

- \* 13:00-13:10: interval for laptop PC connection.(4D5-26, 4D5-27, 4D5-29, 4D5-30)
- 4D5-26 Theoretical study on the linear absorption spectra of open-shell singlet molecules by the spin-unrestricted TDDFT based quantum master equation method(1) (Osaka Univ.) KISHIMOTO, Shingo; KISHI, Ryohei; FUJII, Hiroaki; INOUE, Yuudai; INUI, Tomoya; SHIGETA, Yasuteru; NAKANO, Masayoshi
- 4D5-27\* Theoretical study on the linear absorption spectra of open-shell singlet molecules by the spin-unrestricted TDDFT based quantum master equation method(2) (Osaka Univ.) KISHI, Ryohei; KISHIMOTO, Shingo; FUJII, Hiroaki; INOUE, Yudai; INUI, Tomoya; SHIGETA, Yasuteru; NAKANO, Masayoshi
- 4D5-29 Development of a method for calculation and analysis of thedynamic hyperpolarizabilities by the TDDFT based quantum master equationmethod (Osaka Univ.) FUJII, Hiroaki; KISHI, Ryohei; KISHIMOTO, Shingo; INOUE, Yudai; INUI, Tomoya; SHIGETA, Yasuteru; NAKANO, Masayoshi
- 4D5-30 Theoretical study on the relationship among aromaticity, open-shell character and third-order nonlinear optical property in metal clusters (Osaka Univ.) INOUE, Yudai; HUKUI, Hitoshi; INUI, Tomoya; KISHI, Ryohei; SHIGETA, Yasuteru; NAKANO, Masayoshi

Chair: FUKUSHIMA, Masaru (14:10 $\sim$ 14:50)

- \* 14:00-14:10: interval for laptop PC connection.(4D5-32, 4D5-33, 4D5-34)
- 4D5-32 High sensitive circular dichroism measurement by ellipticity detection of light with photon-counting method (IMRAM,Tohoku Univ.) ARAKI, Yasuyuki; MURAKAMI, Makoto; SAKAMOTO, Seiji; WADA, Takehiko
- 4D5-33 Study on two-photon absorption process into a vacuum ultra-violet region using an NO/N<sub>2</sub> mixture system (Tokyo Institute of Technology) MURA, Yurie; ASAO, Yuusuke; OGURA, Takahiro; AKAI, Nobuyuki; KAWAI, Akio; SHIBUYA, Kazuhiko; IMAJYO, Takashi
- 4D5-34\*\* Electro-protonic structure of CH3OH calculated by multicomponent multiconfigurational wave function theory (The Univ. of Tokyo) KATO, Tsuyoshi; YAMANOUCHI, Kaoru

#### Magnetic Resonance

Chair: KAWAI, Akio (15:00 $\sim$ 15:50)

- \* 14:50-15:00: interval for laptop PC connection.(4D5-37, 4D5-38, 4D5-39, 4D5-40, 4D5-41)
- 4D5-37 ESR/ENDOR Spectra of Fluorinated DPNOs in Solution Increase of the Number of Client Qubits in Synthetic Bus Spin-Qubits (Osaka City Univ.; Graduate School of Science, Osaka Univ.; Graduate School of Engineering Science, Osaka Univ.; CREST, JST) YOSHINO, Tomohiro; NISHIDA, Shinsuke; NAKAZAWA, Shigeaki; SATO, Kazunobu; RAHIMI, Robabeh; TOYOTA, Kazuo; SHIOMI, Daisuke; MORITA, Yasushi; KITAGAWA, Masahiro; TAKUI, Takeji
- **4D5-38** Quantum Spin Manipulation of DPNO-d<sub>8</sub> as a Synthetic Bus Spin-Qubit Radical by Pulsed ENDOR Technique (Osaka City Univ.; Graduate School of Science, Osaka Univ.; Graduate School of Engineering Science, Osaka Univ.; CREST, JST) YOSHINO, Tomohiro; NISHIDA, Shinsuke; NAKAZAWA, Shigeaki; SATO, Kazunobu; RAHIMI, Robabeh; TOYOTA, Kazuo; SHIOMI, Daisuke; MORITA, Yasushi; KITAGAWA, Masahiro; TAKUI, Takeji
- 4D5-39 A pulsed single-crystal ELDOR-NMR spectrum of isotope labeled diphenylnitroxide as models for molecular-spin bus quantum computing (Graduate School of Science, Osaka City Univ.) TANAKA, Ayaka; SATO, Kazunobu; YOSHINO, Tomohiro; NISHIDA, Shinsuke; NAKAZAWA, Shigeaki; RAHIMO, Robabeh; TOYOTA, Kazuo; SHIOMI, Daisuke; MORITA, Yasushi; KITAGAWA, Masahiro; TAKUI, Takeji
- 4D5-40\* Solid-state 7Li-NMR studies of Mn12 cluster batteries (Nagoya Univ.; Muenster Univ.) WANG, Heng; ZHENG, Zhaoyang; KAWASAKI, Naoya; YOSHIKAWA, Hirofumi; AWAGA, Kunio; ECKERT, Hellmut
- 4D5-41<sup>†</sup> Weakly-coupled exchange interactions in squarely arrayed tetra- and

tri- nitroxide radicals; Building of quantum bits in 2D arrays utilizing molecular frame of metal-phthalocyanines (Osaka City Univ.; Queensland Univ AIBN.; Queensland Univ CMR.; Osaka Univ.; CREST, JST) NOZAKI, Mikito; NAKAZAWA, Shigeaki; SUGISAKI, Kenji; NISHIDA, Shinsuke; SATO, Kazunobu; SHIOMI, Daisuke; TOYOTA, Kazuo; MICALLEF, Aaron,S; HANSON, Graeme,Richard; MORITA, Yasushi; KITAGAWA, Masahiro; TAKUI, Takeji

Chair: FURUKAWA, Kou  $(16:00\sim16:30)$ 

- \* 15:50-16:00: interval for laptop PC connection.(4D5-43, 4D5-44, 4D5-45)
- 4D5-43 Thermally activated trioxo-triangulene-based triplet exciton dynamics as studied by powder-pattern and single-crystal ESR spectroscopy (Osaka City Univ.; Osaka Univ.; JST) HIBI, Noritaka; UEDA, Akira; MORITA, Yasushi; NAKAZAWA, Shigeaki; SATO, Kazunobu; SHIOMI, Daisuke; TOYOTA, Kazuo; TAKUI, Takeji; MORIGUCHI, Miki; FUKUI, Kozo; NAKASUJI, Kazuhiro
- 4D5-44 Quantum operation in terms of molecular electron spin qubits by pulsed ESR (Osaka City Univ.; Kinki Univ.; Osaka Univ.; Bruker Bospin Co.; JST) NAKAZAWA, Shigeaki; SATO, Kazunobu; YOSHINO, Tomohiro; ISE, Tomoaki; NISHIDA, Shinsuke; MORI, Nobuyuki; RAHIMI, Robabeh; MORITA, Yasushi; TOYOTA, Kazuo; SHIOMI, Daisuke; KITAGAWA, Masahiro; NAKASUJI, Kazuhiro; HARA, Hideyuki; CARL, Patrik; HOFER, Peter; TAKUI, Takeji
- 4D5-45 Electron Spin Transient Nutation Spectroscopy of Weakly-Exchange Coupled Biradical as a Two-Qubit Model (Graduate School of Science, Osaka City Univ.; Graduate School of Science, Osaka Univ.; Graduate School of Engineering Science, Osaka Univ.; JST-CREST) AYABE, Kazuki; SATO, Kazunobu; ISE, Tomoaki; NISHIDA, Shinsuke; SUGISAKI, Kenji; NAKAZAWA, Shigeaki; MORITA, Yasushi; TOYOTA, Kazuo; SHIOMI, Daisuke; KITAGAWA, Masahiro; TAKUI, Takeji

# Room D6

Bldg. 11 11-23

# Functions of Materials Saturday, March 26, AM

# Electronic, Magnetic, Photochemical Functions

Chair: IMAE, Ichiro  $(9:20\sim10:00)$ 

- \* 9:10-9:20: interval for laptop PC connection.(1D6-03, 1D6-04, 1D6-05)
- 1D6-03 Superconducting Properties of Anodized Heavily Boron-Doped Diamond (Keio Univ.) NATSUI, Keisuke; YAMAMOTO, Takashi; WATANABE, Takeshi; EINAGA, Yasuaki
- 1D6-04# Biotin-modified biofunctional ferromagnetic L1o FePt Nanoparticles (Keio Univ.) INDRIANINGSIH, Anastasia Wheni; SUDA, Masayuki; HETA, Yushi; SUZUKI, Koji; EINAGA, Yasuaki
- 1D6-05\* Site-selective fabrication of novel phthalocyanine nanocrystals using the Nanoscale-electrocrystallization and its electronic properties (KARC, NICT) HASEGAWA, Hiroyuki

Chair: EINAGA, Yasuaki (10:10 $\sim$ 11:00)

- \* 10:00-10:10: interval for laptop PC connection.(1D6-08, 1D6-10, 1D6-12)
- 1D6-08\* Charge Transport Properties of Polysilsesquioxanes Having Oligothiophenes (Hiroshima Univ.) TOKITA, Daisuke; IMAE, Ichiro; OOYAMA, Yousuke; KOMAGUCHI, Kenji; OHSHITA, Joji; HARIMA, Yutaka
- 1D6-10\* Electroconductive Perylene Bisimide-Silica Hybrid Films with Long-Range Orientation (Toyota Central R&D Labs., Inc.; JST-CREST) MIZOSHITA, Norihiro; TANI, Takao; INAGAKI, Shinji
- 1D6-12 Optical antenna effects on stacked gold nanostructures (RIES-Hokkaido Univ., PRESTO-JST) AOYOH, Daisuke; MURAZAWA, Naoki; NISHIJIMA, Yoshiaki; UENO, Kosei; MISAWA, Hiroaki

Chair: TSUTSUMI, Osamu (11:10 $\sim$ 12:10)

- \* 11:00-11:10: interval for laptop PC connection.(1D6-14, 1D6-16, 1D6-18)
- 1D6-14\* Electromagnetic field enhancement effects localized on silver and titanium nanoshell structures (RIES-Hokkaido Univ., Zhejiang Univ., PRESTO-JST) YOKOTA, Yukie; WANG, Li; UENO, Kosei; QIU, Jianrong; MISAWA, Hiroaki
- 1D6-16\* Au Double Nanopillars with Nanogap for Plasmonic Sensor (RIKEN) KUBO, Wakana; FUJIKAWA, Shigenori; TANAKA, Takuo
- 1D6-18\* Construction of Light-Harvesting Antenna Systems by Dye-Organized Nanotubes (NTRC-AIST) KAMETA, Naohiro; ISHIKAWA, Kazuyuki; ASAKAWA, Masumi; MASUDA, Mitsutoshi; SHIMIZU, Toshimi

# Saturday, March 26, PM

Chair: MASUDA, Mitsutoshi (13:20∼14:10)

\* 13:10-13:20: interval for laptop PC connection.(1D6-27, 1D6-28, 1D6-30, 1D6-31)

- 1D6-27 Investigation of Photocatalytic Reaction by Optical Near-Field on Nano-structured Titanium Dioxide (The Univ. of Tokyo - Graduate School of Engineering - Department of Applied Chemistry) LE, Hac Huong Thu; PIHOSH, Yuriy; MAWATARI, Kazuma; KITAMURA, Kokoro; YATSUI, Takashi; KAWAZOE, Tadashi; OHTSU, Motoichi; KITAMORI, Takehiko
- 1D6-28\* Effects of Aggregation Structures on Photoluminescent Behavior of Cyclic Trinuclear Gold Complexes (Ritsumeikan Univ.) FUJISAWA, Kaori; UNO, Kenjiro; TSUTSUMI, Osamu
- 1D6-30 Photoluminescent Properties of Cyclic Trinuclear Gold Complexes in Columnar Liquid-Crystalline Phase (Ritsumeikan Univ.) TAMARU, Masakazu; FUJISAWA, Kaori; UNO, Kenjiro; TSUTSUMI, Osamu
- 1D6-31 Synthesis and photophysical properties of rod-like gold complexes (Ritsumeikan Univ.) KAWAKAMI, Naoya; IZUMI, Yuichi; FUJISAWA, Kaori; TSUTSUMI, Osamu

Chair: TANAKA, Kazuo (14:20~15:10)

- \* 14:10-14:20: interval for laptop PC connection.(1D6-33, 1D6-34, 1D6-35, 1D6-37)
- 1D6-33 Coordination Structure of Eu Complexes with Hexafluoroacetylace-tonate Ligands and Their Amplified Spontaneous Emission (Graduate School of Engineering, Shizuoka Univ.; Research Institute of Electronics, Shizuoka Univ.) SHIBATA, Yoh; KAWAI, Hideki
- 1D6-34 Synthesis and Property of Periodic Mesoporous Organosilica Containing Metal Complex within the Framework (Toyota Central R&D Labs., Inc.; JST/CREST) WAKI, Minoru; MIZOSHITA, Norihiro; OHASHI, Masataka; TANI, Takao; INAGAKI, Shinji
- 1D6-35\* Photoexcited States of Organic UV Absorbers (Yokohama National Univ.) KIKUCHI, Azusa; YAGI, Mikio
- **1D6-37** Excited States of UV-B Absorbers (Yokohama National Univ.) SHIBATA, Kenji; KIKUCHI, Azusa; YAGI, Mikio

Chair: YAGI, Mikio  $(15:20\sim16:10)$ 

- \* 15:10-15:20: interval for laptop PC connection.(1D6-39, 1D6-40, 1D6-41, 1D6-42, 1D6-43)
- 1D6-39# Luminescence enhancement reseach of TMPY/Perylene Co-Single Crystal (Tohoku Univ.) LI, Jinpeng; TAKAISHI, Shinya; KATOH, Keiichi; MIYASAKA, Hitoshi; YAMASHITA, Masahiro; SAWABE, Kosuke; TAKENOBU, Taishi
- 1D6-40 Phototriggered Micromanufacturing of PolystyreneFilms Containing Benzophenone (Yokohama National Univ.) YAMAMOTO, Shintaro; UBUKATA, Takashi; YOKOYAMA, Yasushi
- 1D6-41 Synthesis of 1,3-enaminoketonatoboron derivertives with Aggregation-induced Emission Enhancement Property (Graduate School of Engineering, Kyoto Univ.) YOSHII, Ryousuke; NAGAI, Atsushi; TANAKA, Kazuo; CHUJO, Yoshiki
- 1D6-42 Analysis of upconversion fluorescence with anthracene derivatives via triplet-triplet annihilation (Graduate School of Engineering, Kyoto Univ.) OHASHI, Wataru; TANAKA, Kazuo; CHUJO, Yoshiki
- 1D6-43 Induced β phase in poly(9,9-di-n-octylfluorene) films with addition of liquid crystal molecules and orientational control on a photoalignment layer (Grad. Sch. Eng., Nagoya Univ.) TOMIKAWA, Haruki; NAGANO, Shusaku; KAWATUKI, Nobuhiro; SEKI, Takahiro

### Sunday, March 27, AM

### Inorganic-Oganic Hybrid

Chair: TACHIBANA, Hiroshi  $(9:00\sim9:40)$ 

- \* 8:50-9:00: interval for laptop PC connection.(2D6-01, 2D6-02, 2D6-03, 2D6-04)
- 2D6-01 Chromism in bianthrone derivatives intercalated in clay minerals (Yamaguchi Univ.) NISHIOKA, Yukihiro; MATSUNAGA, Ryoya; TENMA, Yuta; SUZUKI, Yasutaka; KAWAMATA, Jun
- 2D6-02 Hybridization of montmorillonite and Ir(III) complex at an air-water interface (Ehime Univ.; NIMS; Toho Univ.) SATO, Hisako; NAKAE, Takahiro; TAMURA, Kenji; YAMAGISHI, Akihiko
- 2D6-03 Photoinduced Electron Transfer between EDTA, Ruthenium-Bipyridyl Complex, and Viologen Molecules in Clay Suspension (Tokyo Univ. of Agriculture and Technology) WATANABE, Shoko; NAKATO, Teruyuki
- 2D6-04 Structure of the niobate-clay binary nanosheet colloids (Tokyo Univ. of Agriculture and Technology) TAKAHASHI, Atsushi; MIYAMOTO, Nobuyoshi; YAMAUCHI, Yusuke; NAKATO, Teruyuki

# Sunday, March 27, PM

Chair: SATO, Hisako (13:00~14:00)

- \* 12:50-13:00: interval for laptop PC connection.(2D6-25, 2D6-26, 2D6-27, 2D6-28, 2D6-29, 2D6-30)
- 2D6-25<sup>†</sup> Electric alignment of niobate nanosheets and their photochemical reaction (Tokyo Univ. of Agriculture. and Technology) NONO, Yoshihiro; NAKATO, Teruyuki
- 2D6-26 Visible light-harvesting ability of cationic dyes on the clay nanosheet 'the effect of adsorption conditions' (Tokyo Metropolitan Univ.) ISHIDA, Yohei; MASUI, Dai; SHIMADA, Tetsuya; TACHIBANA, Hiroshi; INOUE, Haruo; TAKAGI, Shinsuke

- 2D6-27 Reversible morphology control of azobenzene / hexaniobate nano-composite (Tokyo Metropolitan Univ.) HAYASAKA, Yuika; NABETANI, Yu; TAKAMURA, Hazuki; SHIMADA, Tetsuya; TACHIBANA, Hiroshi; INOUE, Haruo
- 2D6-28 Morphology Analysis of Photo-responsive Layered Nanocomposites (Tokyo Metropolitan Univ.; SORST/JST) NABETANI, Yu; HAYASAKA, Yuika; TAKAMURA, Hazuki; SHIMADA, Tetsuya; TACHIBANA, Hiroshi; INOUE Harno
- 2D6-29 Electric field response of liquid crystalline colloid of fluorohectorite nanosheet (Fukuoka Inst. Technol.; Institute for Materials Chemistry and Engineering, Kyusyu Univ.) DEJIMA, Yoshiya; MIAYMOTO, Nobuyoshi; OKUMURA, Yasushi; KIKUCHI, Hirotsugu
- 2D6-30 Liquid crystal phases in the aqueous colloids of layered perovskites nanosheets (Fukuoka Inst. Technol.; National Institute for Materials Science (NIMS)) YAMAMOTO, Shinya; MIAYMOTO, Nobuyoshi; EBINA, Yasuo; SASAKI, Takayoshi

Chair: NAKATO, Teruyuki (14:10~15:10)

- \* 14:00-14:10: interval for laptop PC connection.(2D6-32, 2D6-34, 2D6-36, 2D6-37)
- 2D6-32\* Photoinduced electron transfer of titanium oxide nanofilm prepared by modified Langmuir-Blodgett process (Shinshu Univ.) USAMI, Hisanao; TORII, Tomoki
- 2D6-34\* Layer-by-Layer Architecture of Inorganic Nanosheets with a Confined Function (Keio Univ.) YAMAMOTO, Takashi; NAKASHIMA, Yumino; EINAGA, Yasuaki
- 2D6-36 Effect of Adsorption of Aromatic Compounds on Luminous Property of Rhodamine Dyes Incorporated into Layered Titanate Interlayer Space (Shimane Univ. and Nagoya Univ.) SASAI, Ryo; MORITA, Koichi; AOTO, Fumitaka
- 2D6-37 Application of graphene-based carbon thin films for photoelectric conversion device (Univ. of Hyogo) MIMURA, Taito; MATSUO, Yoshiaki

Chair: USAMI, Hisanao (15:20~16:10)

- \* 15:10-15:20: interval for laptop PC connection.(2D6-39, 2D6-41, 2D6-43)
- 2D6-39\* Analytical Study of Cross-linked Structure on Core-Shell Type Poly (vinylpyrrolidone)/Ceria Nanoparticles (National Institute of Advanced Industrial Science and Technology (AIST)) ITOH, Toshio; IZU, Noriya; MATSUBARA, Ichiro: SHIN, Woosuck: NISHIBORI, Maiko
- 2D6-41\* Thermo Chromic Cluster; Thermal Vibration of Inner Sulfite ions embedded in Metal Oxide Cluster (Univ. of Yamaguchi) TSUNASHIMA, Ryo; LONG, De-liang; CRONIN, Leroy; ISHIGURO, Katsuya; AKUTAGAWA, Tomoyuki; NAKAMURA, Takayoshi
- 2D6-43 Spherical Mo-Oxide Cluster of {Mo<sub>132</sub>}; Spectroscopy and Transport Property of Aqueous Solution (Yamaguchi Univ.) MATSUMOTO, Takumi; CRONIN, Leroy; TSUNASHIMA, Ryo; ISHIGURO, Katsuya

Chair: TSUNASIMA, Ryo (16:20 $\sim$ 17:30)

- \* 16:10-16:20: interval for laptop PC connection.(2D6-45, 2D6-46, 2D6-47, 2D6-48, 2D6-49, 2D6-50)
- 2D6-45 Fabrification of photo-functional silica hybrid material. (Tokyo Metropolitan Univ.) YAMAMOTO, Daisuke; NABETANI, Yu; SHIMADA, Tetsuya; YANO, Kazuhisa; TACHIBANA, Hiroshi; INOUE,
- 2D6-46 Photoinduced energy transfer within the Mesoporous Organosilica / Ru-Complex Hybrids (Tokyo Tech.; Toyota Central R&D Lab.) YUI, Tatsuto; SEKIZAWA, Keita; TAKEDA, Hiroyuki; INAGAKI, Shinji; ISHITANI, Osamu
- 2D6-47 Hybridization of acridone-bridged periodic mesoporous organosilica with a Ru(II) complex for constructing a light-harvesting system (Tokyo Tech., Toyota Central R&D Lab., CREST/JST) UEDA, Yutaro; YUI, Tatsuto; TAKEDA, Hiroyuki; INAGAKI, Shinji; ISHITANI, Osamu
- 2D6-48 Synthesis of poly(N-isopropylacrylamide) hydrogelhybridized with mesoporous silica particles (Fukuoka Inst. Technol.; Graduate School of Fukuoka Inst. Technol.; PREST JST; MANA, NIMS; JAEA) NAKAJIMA, Takuya; SHIMASAKI, Kotaro; KAMACHI, Yuichiro; SHINTATE, Morio; MOTOKAWA, Ryuhei; YAMAUCHI, Yusuke; MIYAMOTO, Nobuyoshi
- 2D6-49 Preparation of chiral ladder-like polysilsesquioxanes and their hybridization with photofunctional molecules. (Kagoshima Univ.; Ehime Univ.) TOYODOME, Hisaya; KANEKO, Yoshiro; SATO, Hisako
- 2D6-50\* Highly Conductive Transparent Carbon Nanotube Film (Kyushu Univ.) LIU, Qingfeng; FUJIGAYA, Tsuyohiko; NAKASHIMA, Naotoshi

# Monday, March 28, AM

#### Photochromism

Chair: YAGAI, Shiki  $(9:00\sim10:00)$ 

- \* 8:50-9:00: interval for laptop PC connection.(3D6-01, 3D6-02, 3D6-03, 3D6-04, 3D6-05, 3D6-06)
- **3D6-01** Synthesis and Photochromic Property of Cyclic Diarylethene Incorporating a Binaphthol (Yokohama National Univ.) TAKEI, Yoshiyuki; UBUKATA, Takashi; YOKOYAMA, Yasushi
- 3D6-02 Fluorescence Switching of Photochromic Hydroxy-bisthiazolylcoumarin (Yokohama National Univ.) SUZUKI, Kazushi; UBUKATA,

- Takashi; YOKOYAMA, Yasushi
- 3D6-03 Photochromism of Novel Arylbutadienes (Yokohama National Univ.) KOCHI, Jun-ichi: UBUKATA, Takashi: YOKOYAMA, Yasushi
- 3D6-04 Photochromism of novel bisarylindenol derivatives (Yokohama National Univ.) OGAWA, Hatsune; UBUKATA, Takashi; YOKOYAMA, Yasushi
- 3D6-05 Interaction between Acids and Bisthienylethene possessing 1,10-Phenanthroline Moiety (Yokohama National Univ.) HIROMOTO, Yuma; MINKOVSKA, Stela; UBUKATA, Takashi; YOKOYAMA, Yasushi
- 3D6-06 Phototriggered Surface Relief Formation on Amorphous Film of Diarylethenes (Yokohama National Univ.) NAKAYAMA, Megumi; UBUKATA, Takashi; YOKOYAMA, Yasushi

Chair: KOBATAKE, Seiya (10:10∼11:10)

- \* 10:00-10:10: interval for laptop PC connection.(3D6-08, 3D6-09, 3D6-10, 3D6-11, 3D6-12, 3D6-13)
- 3D6-08 Phototriggered Surface Relief Formation Using Photoresponsive Amorphous Naphthopyran Film (Yokohama National Univ.) TONOZUKA, Koji; UBUKATA, Takashi; YOKOYAMA, Yasushi
- **3D6-09** Mass Transfer of Spirooxazine Droplets Triggerd by Photoirradiation (Yokohama National Univ.) ARIMATSU, Kento; FUJII, Shohei; UBUKATA, Takashi; YOKOYAMA, Yasushi
- **3D6-10** Solvent Responsive Structural Colored Balloons (Grad. School of Eng., Kyoto Univ.) INOUE, Masafumi; HIGASHIGUCHI, Kenji; ODA, Tomohiro; MATSUDA, Kenji
- **3D6-11** Photochromic Behavior of Vesicle Composed of Amphiphilic Diarylethenes (Kyoto Univ.) SATO, Yosuke; NISHIMURA, Kazuki; HIROSE, Takashi; HIGASHIGUCHI, Kenji; MATSUDA, Kenji
- 3D6-12 Synthesis and Mechanochromic Photoluminescence of Aryl(I)-Isocyanide Complexes (Graduate School of Engineering and Faculty of Science, Hokkaido Univ.; PRESTO, JST) MUROMOTO, Mai; SAWAMURA, Masaya; ITO, Hajime
- 3D6-13 Mechanochromic photoluminescence of Au-isocyanide complex possessing triethylene glycol chains (Grad. Sch. Eng., Chiba Univ.) YAGAI, Shiki; AONUMA, Hiroaki; KARATSU, Takashi; KITAMURA, Akihide; OKURA, Takuma; KURENUMA, Sayaka; SAWAMURA, Masaya; ITO, Hajime

Chair: YOKOYAMA, Yasushi (11:20~12:20)

- \* 11:10-11:20: interval for laptop PC connection.(3D6-15, 3D6-17, 3D6-18, 3D6-19, 3D6-20)
- 3D6-15\* Mechanism of Photomechanical Bending of Anthrylmethyleneindanone Crystals (Ehime Univ.) UCHIMOTO, Hidetaka; KOSHIMA, Hideko
- 3D6-17 Phototuning of local surface plasmon resonance in Au nanorods (KEIO Univ.) YAZAKI, Yuka; KANAGAWA, Satoshi; SAIKI, Toshiharu; EINAGA, Yasuaki
- 3D6-18 Wavelength and Core Size Dependence of Photocycloreversion Reaction of Diarylethene Enhanced by Gold Nanoparticle (Graduate School of Engineering, Osaka City Univ.; Graduate School of Science and Engineering, Ehime Univ.) NISHI, Hiroyasu; ASAHI, Tsuyoshi; KOBATAKE, Seiya
- 3D6-19 Enhanced photochromism of tungsten oxide by adsorption of amino acid (Yamaguchi Univ.) TANAKA, Shohei; YAMAZAKI, Suzuko; ADACHI, Kenta; YAMATE, Taiki
- 3D6-20 Photoisomeric Behaviors of Polymeric Micelles Consisting of Benzo-18-crown-6 / Crownedspirobenzopyran Copolymers in the Presence of Metal Ion (Fac. Sys. Eng., Wakayama Univ.) OKAZAKI, Yuki; NAKAHARA, Yoshio: KIMURA. Kejichi

# Monday, March 28, PM

Chair: UCHIDA, Kingo (13:30 $\sim$ 14:30)

- \* 13:20-13:30: interval for laptop PC connection.(3D6-28, 3D6-29, 3D6-30, 3D6-31, 3D6-32, 3D6-33)
- 3D6-28 Photochromic Behaviors of Azobenzene Derivatives in 12-Hydroxystearic Acid-Tolene Gel. (Muroran Inst. Tech.) KURITA, Motoki; YAGI, Yuta; YOSHITAKE, Masashi; NAKANO, Hideyuki
- 3D6-29 Photoinduced Surface Relief Grating Formation Using Mixed Amorphous Films of Different Amorphous Molecular Materials (Muroran Inst. Tech.) NAKANO, Hideyuki
- 3D6-30 Diastereospecific Photochromic Reaction of Thiophenophan-1-enes (Saga Univ.) JIN-NOUCHI, Hirotsugu; TAKESHITA, Michinori
- 3D6-31 Syntheses and photochromic properties of pi conjugated fast photochromic polymers (Aoyama Gakuin Univ.) HARADA, Yuka; KAWAI, Shigekazu; HATANO, Sayaka; ABE, Jiro
- 3D6-32 Structure control of hydrogen bonding pi-conjugated supramolecular polymer by photoisomerization of diarylethenes (Grad. Sch. Eng., Chiba Univ.) OHTA, Keisuke; YAGAI, Shiki; KITAMURA, Akihide; KARATSU, Takashi
- **3D6-33** Synthesis and self-assembly of oligo(*p*-phenylenevinylene) linked by a diarylethene core (Grad. Sch. Eng., Chiba Univ.) YAGAI, Shiki; ISHIWATARI, Katsuya; KARATSU, Takashi; KITAMURA, Akihide

Chair: NAKANO, Hideyuki (14:40~15:40)

\* 14:30-14:40: interval for laptop PC connection.(3D6-35, 3D6-36, 3D6-37,

- 3D6-38, 3D6-39, 3D6-40)
- 3D6-35 Supramolecular fluorescence switching of hydrogen bonding diarylethenes and merocyanine dyes (Grad. Sch. Eng., Chiba Univ.: Grad. Sch. Sci. and Eng., Ehime Univ.: JST-CREST) YAGAI, Shiki; IWAI, Kazunori; KARATSU, Takashi; KITAMURA, Akihide; KUZUHARA, Daiki; YAMADA. Hiroko
- 3D6-36 Zn atom diffusion on an amorphous diarylethene surface (Osaka Kyoiku Univ.) NATSUME, Daisuke; TSUJIOKA, Tsuyoshi
- 3D6-37 Photochromism of Diarylethene Single Crystals with Hydrogen-Bonding Networks (Rikkyo Univ.; PRESTO, JST) MORIMOTO, Masakazu; IRIE, Masahiro
- 3D6-38 Reversible photo-control of the wettability on microcrystalline surface of an asymmetric diarylethene having sulfone group (Ryukoku Univ.; The KAITEKI Institute, Inc.; Mitsubishi Chemical; Rikkyo Univ.; Hokkaido Univ.) UCHIDA, Kingo; UYAMA, Ayaka; YAMAZOE, Seiji; YOKOJIMA, Satoshi; KOJIMA, Yuko; NAKAMURA, Shinichiro; MORIMOTO, Masakazu; MAYAMA, Hiroyuki
- 3D6-39 Photochromism of diarylethene derivaties having an azulene ring as an ethene moiety (Ryukoku Univ.; The KAITEKI Institute, Inc.) UCHIDA, Kingo; KITAI, Junichiro; KOBAYASHI, Takao; YOKOJIMA, Satoshi; NAKAMURA, Shinichiro
- 3D6-40 Optical response behavior of the structure coloring without angle dependence by the Christiansen filter effect (Graduated School of Engineering Nagoya Univ.) OGAWA, Kensuke; NAGANO, Shusaku; TAKEOKA, Yukikazu; SEKI, Takahiro

Chair: MORI, Shigeki (15:50~16:50)

- \* 15:40-15:50: interval for laptop PC connection.(3D6-42, 3D6-44, 3D6-45, 3D6-46)
- **3D6-42\*** Organic Photochromic Materials Melt by Photoirradiation (AIST) NORIKANE, Yasuo; HIRAI, Yuki; YOSHIDA, Masaru
- 3D6-44 Photoresponse of morphologies for liquid crystalline azobenzene block copolymers with poly(octadecylmethacrylate) (Grad. Sch. Eng., Nagoya Univ.) DOHI, Tomoki; NAGANO, Shusaku; SEKI, Takahiro
- 3D6-45 Photorealignment behavior of microphase separation structure and liquid crystal phase in a liquid crystalline azobenzene block copolymer with polybutyl methacrylate (Graduate School of Engineering, Nagoya Univ.) SANO, Masami; TAKAHASHI, Naomi; NAGANO, Shusaku; SHINOHARA, Yuva: AMEMIYA, Yoshivuki: SEKI. Takahiro
- 3D6-46\* Reversible photoswitching characteristics of azobenzene-containing self-assembled monolayers (Tokyo Institute of Technology) ISHIKAWA, Daisuke; HAN, Mina; HARA, Masahiko

Chair: NAGANO, Shusaku (17:00 $\sim$ 18:00)

- \* 16:50-17:00: interval for laptop PC connection.(3D6-49, 3D6-51, 3D6-52, 3D6-54)
- **3D6–49\*** Photo-Switching of Cooperative Porphyrin aggregation (Eindhoven Univ. of Tech.) HIROSE, Takashi; HELMICH, Floris; MEIJER, E.W.
- 3D6-51 Control of Conformation and Reactivity of Photochromic Terarylene with Intermoleculer Interaciton (Nara Inst. Sci. Tech.) FUJII, Ryosuke; NAKASHIMA, Takuya; KAWAI, Tsuyoshi
- 3D6-52\*† Photochemical reactivity of photochromic terarylene molecules having elimination units and their reaction mechanism (Graduate School of Materials Science, Nara Institute of Science and Technology) NAKAGAWA, Hisako; NAKASHIMA, Takuya; KAWAI, Tsuyoshi
- 3D6-54 Single-molecule Fluorescence Photoswitching based on Photoracemization (Hokkaido Univ.; PREST-JST; Rikkyo Univ.) FUKAMINATO, Tuvoshi: IRIE. Masahiro

# Tuesday, March 29, AM

#### Separation Property

Chair: OKADA, Tomohiko (9:00  $\sim$ 10:00)

- \* 8:50-9:00: interval for laptop PC connection.(4D6-01, 4D6-02, 4D6-03, 4D6-04, 4D6-05)
- 4D6-01 Preparation of cross-linked polymer ligand which can maintain structure of a polymer frame to endure recover of oxygenation. (Tokyo Denki Univ.) HACHISU, Kiyozumi
- 4D6-02 Separation of amino acids with a cation- and an anion-exchange membrane (Kanagawa Univ.) TSUKAHARA, Shota; NANZAI, Ben; IGAWA, Manabu
- 4D6-03 Separation of heavy metals by hydrophobic TPEN derivatives (Tokyo Tech; Research Laboratory of Nuclear Reactor) HASU, Ryosuke; INABA, Yusuke; KUWAE, Daiki; MORI, Atsunori; TAKESHITA, Kenji
- 4D6-04 The recovery of Rare earth from aqueous solution using Cu-Al Layered Double Hydroxides intercalated with edta (Tohoku Univ.; Graduate School of Environmental Studies) HOSHI, Kazuaki; KAMEDA, Tomohito; YOSHIOKA, Toshiaki
- 4D6-05\* Natural-resource derived carbon materials with uniform nanoporosity: structures and methane adsorption properties (Shinshu Univ. ENCs Project) SAKAMOTO, Hirotoshi; KANEKO, Katsumi; SILVESTRE-ALBERO, Ana Maria; SILVESTRE-ALBERO, Joaquin; RODRIGUEZ-REINOSO, Francisco

Chair: KAMEDA, Tomohito (10:10∼11:00)

\* 10:00-10:10: interval for laptop PC connection.(4D6-08, 4D6-10, 4D6-12)

4D6-08\* Development of the cell separation method with Euglena (Nagoya Univ.; FIRST, Nagoya Univ.) OKAMOTO, Yukihiro; SANO, Takahiro; KAJI, Noritada; TOKESHI, Manabu; BABA, Yoshinobu

#### **Biological Function**

- 4D6-10\*†#Immobilization of growth factor on inorganic surfaces for cell function control (RIKEN Ito nano science and engineering laboratory) KANG, Jeonghwa; SAKURAGI, Makoto; ABE, Hirosi; KITAJIMA, Takasi; AIGAKI, Toshiro; ITO, Yoshihiro
- 4D6-12 Refolding of Proteins in Self-Assembled Nanotube Hydrogels (NTRC-AIST) KAMETA, Naohiro; MASUDA, Mitsutoshi; SHIMIZU, Toshimi

Chair: ENDO, Hiroshi (11:10∼11:50)

- \* 11:00-11:10: interval for laptop PC connection.(4D6-14, 4D6-16, 4D6-17)
- **4D6-14\*** Response of Lipid Rafts (Microdomains) to Enzymatic Reaction (Univ. of Toyama) OKA, Yoshimi; UENO, Masaharu
- 4D6-16 The effect of surface charge of gold nanorods on their uptake by tumor cells (Kyoto Univ.) ISOBE, Yu; ITO, Takeo; KUSAKA, Eriko; AKAMATSU, Kanako; NISHIMOTO, Sei-ichi
- 4D6-17 Interaction between DNA and photoresponsive poly(vinyl alcohol) carrying a Malachite Green derivative (Nara National College of Technology) NAKAGAWA, Hinari; UDA, Ryoko

#### Tuesday, March 29, PM

Chair: ITO, Takeo (13:00~14:10)

- \* 12:50-13:00: interval for laptop PC connection.(4D6-25, 4D6-26, 4D6-27, 4D6-28, 4D6-29, 4D6-30, 4D6-31)
- 4D6-25 Application of new liposomes generated from erythrocytes and erythrocyte ghosts in DDS. (Keio Uni., Grad. School Basic Sci. & Tech.) SAITO, Kazutaka; OSANAI, Shuichi
- 4D6-26 An application of sugar chain-supported carbosilane dendrimer for drug delivery system (Saitama Univ.) OTOMO, Kentaro; AIZAWA, Hiroaki; VILLENEUVE, Masumi; KOYAMA, Tetsuo; MATSUOKA, Koji; TERUNMA, Daiyo; HATANO, Ken
- 4D6-27<sup>#</sup> Organic Nanotube Capsule for DDS [2]: Organic Nanotube with Carboxylate Inner Surface for Encapsulation and Release of Doxorubicin (NTRC-AIST) DING, Wuxiao; WADA, Momoyo; MASUDA, Mitsutoshi
- **4D6-28** Encapsulation of Proteins using Phase Transtion of Calcium Carbonate (AIST-Kansai; Natl. Inst. Animal Health; Osaka Inst. Tech.; Kobe Univ.) FUJIWARA, Masahiro; SHIOKAWA, Kumi; ARAKI, Miyuki; KUBOTA, Takayuki; ASHITAKA, Nobuyuki; MORIGAKI, Kenichi; NAKAHARA, Yoshiko
- 4D6-29 Application to n-DDS of polymer vesicle loaded cationic iron-porphyrin complex (Tokyo Univ. of Science) KATSUTA, Yoshitaka; KONDO, Takeshi; YUASA, Makoto
- 4D6-30 Preparation of high biocompatibility niosome with beta-sitosterol and anticancer effect of the nano-drug deliverly system (nano-DDS) loaded with manganeseporphyrin. (Tokyo Univ. of Science) SAGAWA, Takahiro; KONDO, Takeshi; YUASA, Makoto
- 4D6-31 Synthesis of lipid modified iron oxide nanoparticles containing fullerene for photodynamic therapy (Nagoya Univ.; Nara Inst. of Sci. Technol.) ISHIBASHI, Rena; KATAGIRI, Kiyofumi; KOUMOTO, Kunihito; NOBUSAWA, Kazuyuki; KAWAI, Yoshihiko; IKEDA, Atsushi

# **Energy Conversion ? Optical Function**

Chair: KASATANI, Kazuo (14:20 $\sim$ 15:20)

- \* 14:10-14:20: interval for laptop PC connection.(4D6-33, 4D6-35, 4D6-36, 4D6-37, 4D6-38)
- 4D6-33\* Improvement of the CNT actuator with an ionic liquid by using conductive additives (AIST Health Research Institute) SUGINO, Takushi; KIYOHARA, Kenji; SHIBATA, Yoshiyuki; MUKAI, Ken; ASAKA, Kinji
- 4D6-35 Photoelectric conversion properties of solar cells using Au nanostructured TiO<sub>2</sub> electrodes (RIES-Hokkaido Univ., PRESTO-JST) KOTAKE, Yuki; NISHIJIMA, Yoshiaki; UENO, Kosei; MISAWA, Hiroaki
- 4D6-36 Fabrication of photo-responsive fibers based on hygroscopic polymers (KAST; Tokyo Univ. of Sci.) NAKATA, Kazuya; ISHIKAWA, Yosuke; OCHIAI, Tsuyoshi; MURAKAMI, Taketoshi; FUJISHIMA, Akira
- 4D6-37 Development of wide-range absorbed dye materials for dye-sensitized solar cell (Faculty of Textile Science and Technology, Shinshu Univ.) MASUO, Junya; MORI, Syougo; KIMURA, Mutumi
- 4D6-38 Dye Sensitized Solar Cells sensitized by Push & Pull type Zinc Phthalocyanine Complexes (Faculty of Textile Science and Technology, Shinshu Univ.) NOMOTO, Hirotaka; HAMANAKA, Yohei; GOTO, Ryouta; MORI, Syougo; KIMURA, Muthumi

Chair: UENO, Kosei (15:30~16:10)

- \* 15:20-15:30: interval for laptop PC connection.(4D6-40, 4D6-41, 4D6-42)
- **4D6-40** Two-photon absorption of organic nanoparticles (Yamaguchi Univ.) KASATANI, Kazuo; FUJINO, Takahito; MORITA, Yuki

- 4D6-41 Studies on two-photon absorption property of zethrenes by experimental measurement and its relationship with diradical character by theoretical calculation (AIST; Osaka Univ.) MINAMIDE, Shu; KAMADA, Kenji; OHTA, Koji; YONEDA, Kyohei; KISHI, Ryohei; SHIGETA, Yasuteru; NAKANO, Masayoshi; WU, Tsun-cheng; WU, Yao-ting; HIBI, Daijiro; SHIMIZU, Akihiro: TOBE, Yoshito
- 4D6-42\* Fabrication and Electromagnetic Properties of Thin Film Transistor Including Magnetite Nanoparticles Assemblies as Channel Layers (Kyushu Inst. Tech.; NIMS; Fukuoka Univ.) OKADA, Koichi; IYAMA, Koichiro; KOHIKI, Shigemi; SHIMOOKA, Hirokazu; MITOME, Masanori; KOHNO, Atsushi

# Room D7

Bldg. 11 11-24

# Material Chemistry

# Saturday, March 26, AM

Chair: SAITO, Kenji  $(9:30\sim10:30)$ 

- \* 9:20-9:30: interval for laptop PC connection.(1D7-04, 1D7-07, 1D7-09)
- 1D7-04 Young Scholar Lectures of CSJ Aqueous Solution Approaches for Precise Syntheses of Inorganic Nanomaterials (Keio. Univ.) OAKI, Yuya
- 1D7-07\* Fabrication of novel rare-earth-free glass phosphor (Institute for Chemical Research, Kyoto Univ.) MASAI, Hirokazu; FUJIWARA, Takumi; MATSUMOTO, Syuji; TAKAHASHI, Yoshihiro; TOKUDA, Yomei; YOKO, Toshinobu
- 1D7-09 Synthesis of Nanostructures (rods, arrays) from 16 Rare Earths by Means of Surfactant-Assembly Method (Shimane Univ.; Yamaguchi Univ.; IMS) NISHIYAMA, Katsura; HANAMOTO, Takashi; KOYAMA, Hiroki; SHIGEMATSU, Hirotake; KAJI, Toshihiko; IKETAKI, Kai; HIRAMOTO, Masahiro

Chair: OAKI, Yuya (10:40∼11:30)

- \* 10:30-10:40: interval for laptop PC connection.(1D7-11, 1D7-12, 1D7-13, 1D7-14, 1D7-15)
- 1D7-11 Characterization of Ca-Bi-O OxidesPrepared by Citric Acid Complex Method (Kitakyushu National College of Technology) OBUKURO, Yuki; UEHARA, Takuya; OBATA, Kenji; TAKEHARA, Kenji; MATSUSHIMA, Shigenori
- 1D7-12 Syntheses and photocatalytic properties of potassium niobate nanowires (Faculty of science, Tokyo Univ. of Science) KOGA, Kazunori; SAITO, Kenji; KUDO, Akihiko
- 1D7-13 Photocatalytic properties of nanowired-shaped TT-Nb<sub>2</sub>O<sub>5</sub> doped with transition metals (Faculty of Science, Tokyo Univ. of Science) SAITO, Hiroki; KOGA, Kazunori; SAITO, Kenji; KUDO, Akihiko
- 1D7-14 Syntheses and photocatalytic properties of nanowire-shaped oxide semiconductors (Faculty of Science, Tokyo Univ. of Science, PRESTO/JST) SAITO, Kenji; KUDO, Akihiko
- 1D7-15 Doping Effect of Impurities on Anatase-to-Rutile Phase Transformation (Kitakyushu National College of Technology) DOI, Akane; OBATA, Kenji; MATSUSHIMA, Shigenori; ARAI, Masao

#### Saturday, March 26, PM

Chair: HYONO, Atsushi (12:40~13:40)

- \* 12:30-12:40: interval for laptop PC connection.(1D7-23, 1D7-24, 1D7-25, 1D7-26, 1D7-27)
- 1D7-23 Preparation and their properties of platinum alloy nanoparticles having polyethyleneimine regand (Tokyo Univ. of Science) IMAI, Takanori; ABE, Yoshimoto; GUNJI, Takahiro; ABE, Noritaka
- 1D7-24 Facile Synthesis of Core/Shell-Structured Au/In Nanocomposite Particles Using a Sputter Deposition Technique (Department of Crystalline Materials Science, Nagoya Univ.) OTA, Yasuhiro; SUZUKI, Toshimasa; OKAZAKI, Ken-ichi; SUZUKI, Shushi; SHIBAYAMA, Tamaki; KUWABATA, Susumu: TORIMOTO, Tsukasa
- 1D7-25 Control of Aggregation Structures of Gold Nanoparticles by Surface Anchoring of Liquid Crystals (Ritsumeikan Univ.) KURANARI, Asuna; OTA, Kouji; YOSHIOKA, Yasunori; YAMAMOTO, Keitarou; TSUTSUMI, Osamu
- 1D7-26 Generation of the gold nano clusters on the clay surfaces utilizing Photosensitized Template Reduction Method (Tokyo metropolitan Univ.; Takagi Lab.) FUJIMURA, Takuya; MISAKI, Yoshinari; SHIMADA, Tetsuya; TACHIBANA, Hiroshi; INOUE, Haruo; MASUI, Dai; TAKAGI, Shinsuke
- 1D7-27\* Liquid-Crystalline Organic-Inorganic Hybrid Dendrimers: Characterization of Self-Organized Structures of Dendron-Modified Gold Nanoparticles (IMRAM Tohoku Univ.; The Univ. of Sheffield) MATSUBARA, Masaki; KANIE, Kiyoshi; ZENG, Xiangbing; FENG, Liu; UNGAR, Goran; MURAMATSU, Atsushi

Chair: GUNII, Takahiro (13:50~14:50)

- \* 13:40-13:50: interval for laptop PC connection.(1D7-30, 1D7-31, 1D7-32, 1D7-33, 1D7-34)
- 1D7-30 Self-Organized Structure of Dendron-Modified CdS Nanoparticles: Effect of Modification Amount of Dendrons (IMRAM, Tohoku Univ.) YABUKI, Jun; KANIE, Kiyoshi; MATSUBARA, Masaki; TANAKA, Itaru; NAKAYA, Masafumi; MURAMATSU, Atsushi
- 1D7-31 Structure Control of Pt-Supported CdS nanoparticle photocatalysts (Univ. of Tsukuba) KANAKUBO, Ryo; SARUYAMA, Masaki; KANEHARA, Masayuki; TERANISHI, Toshiharu
- 1D7-32 Quick synthesis of CdTe nanocrystals in ionic liquids (Graduate School of Materials Science, Nara Institute of Science and Technology) HAYAKAWA, Yu; NONOGUCHI, Yoshiyuki; NAKASHIMA, Takuya; KAWAI, Tsuyoshi
- 1D7-33 Withdrawn
- 1D7-34\* Microstructure of non-oxidized copper particles prepared from CuSO<sub>4</sub> (Faculty of Engineering, Hokkaido Univ.) YONEZAWA, Tetsu; NARUSHIMA, Takashi; HYONO, Atsushi; NISHIDA, Naoki

Chair: SATO, Norifusa (15:00 $\sim$ 15:50)

- \* 14:50-15:00: interval for laptop PC connection.(1D7-37, 1D7-38, 1D7-39, 1D7-40, 1D7-41)
- 1D7-37 Phase-selective synthesis of nickel sulfide and nickel phosphide by hot soap technique (Osaka Prefecture Univ.) ASO, Keigo; HAYASHI, Akitoshi; TATSUMISAGO, Masahiro
- **1D7–38** Fabrication of fct-FePd/α-Fe Nanocomposite Magnets from Compositionally Tuned Pd/γ-Fe<sub>2</sub>O<sub>3</sub> Heterostructured Nanoparticles (Univ. of Tsukuba) TADA, Kunio; KANEHARA, Masayuki; TERANISHI, Toshiharu
- 1D7-39 Preparation of hybrid nanoparticles consisting of polysaccharide nanogels withiron oxide for biomedical applications (Nagoya Univ.; Inst. of Biomater. and Bioeng., Tokyo Medicaland Dental Univ.; Kyoto Univ.) OHTA, Keiko; KATAGIRI, Kiyofumi; KOUMOTO, Kunihito; SASAKI, Yoshihiro; KUROSU, Kei; AKIYOSHI, Kazunari
- 1D7-40<sup>#</sup> Synthesis of Fe<sub>2</sub>O<sub>3</sub> Nanoparticles by Hydrothermal-Biosynthesis method and their Characterization (Okayama Univ.; Kagoshima Univ.) AHMMAD, Bashir; KURODA, Yasushige; OHKUBO, Takahoro; KURAWAKI, Junichi
- 1D7-41 Size control of AgInS<sub>2</sub> Nanoparticles by the Size-selective Photoetching Technique and their Photochemical Properties (Nagoya Univ.) TADA, Masaki; KAMEYAMA, Tatsuya; OKAZAKI, Ken-ichi; KUWABATA, Susumu; TORIMOTO, Tsukasa

Chair: YAMADA, Teppei (16:00∼17:00)

- \* 15:50-16:00: interval for laptop PC connection.(1D7-43, 1D7-44, 1D7-46, 1D7-49)
- 1D7-43 Preparation and Electro-Optic Properties of Liquid Crystal Displays Doped with Poly(cyclodextrin)-Stabilized Oxide Nanoparticles (Tokyo Univ. of Science, Yamaguchi) SHIRAISHI, Yukihide; SAWAI, Hiroya; KOBAYASHI, Shunsuke; TOSHIMA, Naoki
- 1D7-44\* Eu doping into quantum size titanium oxide using dendrimer precursors (Tokyo Tech.) SATOH, Norifusa; YAMAMOTO, Kimihisa
- 1D7-46\*† Adsorption Properties of PVP-protected Rh Nanoparticles with Controlled Morphology on Oxide Supports (Univ. of Tsukuba) IKEDA, Takahiro; KANEHARA, Masayuki; TERANISHI, Toshiharu
- 1D7-48 The effect of temperature and anion on the size of Aunanoparticles prepared in ionic liquids by sputter deposition (Chiba Univ. Graduate School of Advanced Integration Science) ONISHI, Kei; HATAKEYAMA, Yoshikiyo; KATO, Jun-ichi; NISHIKAWA, Keiko

Chair: SATOH, Norifusa (17:10 $\sim$ 18:10)

- \* 17:00-17:10: interval for laptop PC connection.(1D7-50, 1D7-52, 1D7-54, 1D7-55)
- 1D7-50\* Bottom-up synthesis of metallic nanoparticle arrays and their plasmonic properties (AIST Research Center for Photovoltaics) MIZUNO, Hidenori; KONDO, Michio
- 1D7-52\*† Syntheses and Hydrogen-Storage Properties of Nobel Solid-Solution Type Alloy Nanoparticles (Kyoto Univ., Graduate School of Science) KUSADA, Kohei; KOBAYASHI, Hirokazu; KITAGAWA, Hiroshi
- 1D7-54 Synthesis of dendrimer-encapsulated Pt subnanoparticle and quantify its catalytic activity of oxygen reduction reaction. (Chem. Res. Lab, Tokyo Ins Tech) HONGO, Yushi; IMAOKA, Takane; YAMAMOTO, Kimihisa
- 1D7-55 Synthesis and in vivo Evaluation of Biocompatible and Size-controlled Gd<sub>2</sub>O<sub>3</sub> Nanoparticles for Photoacoustic and MR Imaging (Kyoto Univ.) KONDO, Teruyuki; KAMISUGI, Ryota; KIMURA, Yu; TOSHIMITSU, Akio; TABATA, Yasuhiko; MATSUDA, Tetsuya; NARAZAKI, Michiko

# Sunday, March 27, PM

Chair: AKIYOSHI, Kazunari (13:00∼14:00)

\* 12:50-13:00: interval for laptop PC connection.(2D7-25)

2D7-25 CSJ Award for Creative Works Development and Molecular Mechanism of High Modulus and High Toughness Double-Network Hydrogels (Faculty of Advanced Life Science, Hokkaido Univ.) GONG, Jian Ping

- Chair: FUJIGAYA, Tsuyohiko (14:10~15:10)
- \* 14:00-14:10: interval for laptop PC connection.(2D7-32, 2D7-33, 2D7-34, 2D7-36, 2D7-37)
- 2D7-32 Comparison of hydrothermal stabilities of intercellular matrix between bast ribbon and core parts in kenaf stem (Kyoto Municipal Institute of Industrial Technology and Culture, Graduate of School of Gunma Univ.) MINAMI, Hideaki; NISHIUCHI, Shigenori; KAWAHARA, Yutaka
- 2D7-33 Molecular design and synthesis of heparin mimics and its functional evaluation (Tokyo Univ. of science) KUNINAKA, Mizuki; KONDO, Takeshi; YUASA, Makoto
- **2D7-34\***<sup>†</sup> Preparation of Protein Crosslinked Nanogel (Inst. of Biomaterials and Bioengineering, Tokyo Medical and Dental Univ.) TSUCHIDO, Yuji; SASAKI, Yoshihiro; AKIYOSHI, Kazunari
- 2D7-36 Non-woven Fabric of Biodegradable Poymer Nanofibersfabricated by Electrospinning(5) (Niihama National Col. of Tech.; Mikawa Tex. Re. Insti.) WADA, Shinya; AONO, Ryota; NAKAGAWA, Katsuhiko; TSUTSUMI, Chikara; MABUCHI, Michiaki; SATOH, Yoshihiro
- 2D7-37 Photophysical properties and structure of Ln(3) chelate-doped DNA-lipid complex (Faculty of Engineering, Chiba Univ.) SAGARA, Amika; FUKABORI, Mayu; YUKIMOTO, Tomoyoshi; NAKAMURA, Kazuki; KOBAYASHI, Norihisa

Chair: KOBAYASHI, Norihisa (15:20 $\sim$ 16:20)

- \* 15:10-15:20: interval for laptop PC connection.(2D7-39, 2D7-40, 2D7-42, 2D7-44)
- 2D7-39 Vapor-phase Polymerized Poly(thiophene)/acceptor Compositesfor Photocurrent Conversion (Dept of Appl. Chem., Waseda Univ.) MINAGAWA, Kaoru; SUGA, Takeo; NISHIDE, Hiroyuki
- 2D7-40\*† Fabrication and characterization of porous polybenzoxazole films for low-k materials (Kyushu Univ.) FUKUMARU, Takahiro; FUJIGAYA, Tsuvohiko: NAKASHIMA. Naotoshi
- 2D7-42\*\* Supercapacitive Energy Storage by Conjugated Microporous Polymers (PRESTO, JST; Institute for Molecular Science) KOU, Yan; JIANG, Donelin
- 2D7-44 Preparation of Poly(3,4-ethylenedioxythiophene)nanoparticles in Supercritical Carbon Dioxide on a massive scale and its investigation to conductive thin film (Tokyo Univ. of Science) YAMASHITA, Tatsuya; KONDO, Takeshi; YUASA, Makoto

Chair: NAKAMURA, Kazuki (16:30~17:40)

- \* 16:20-16:30: interval for laptop PC connection.(2D7-46, 2D7-47, 2D7-48, 2D7-50, 2D7-52)
- 2D7-46 Preparation of electrode modified with aminium cation-radical with the aim of detecting active oxygen (Tokyo Univ. of Science) NISHIURA, Shin; KONDO, Takeshi; YUASA, Makoto
- 2D7-47 Study on particle size-controlled synthesis of polymer nanoparticles using tandem acoustic emulsification (Tokyo Tech; Yokohama National Univ.) KOJIMA, Maya; NAKABAYASHI, Koji; AMEMIYA, Fumihiro; FUCHIGAMI, Toshio; ATOBE, Mahito
- 2D7-48\*\* Synthesis and Photofunctions of Novel Microporous Conjugated Polymers (PRESTO, JST; Institute for Molecular Science) XU, Yanhong; JIANG, Donglin
- 2D7-50\* Synthesis of room-temperature ionic liquids based on cubic silses-quioxanes (Kyoto Univ.) TANAKA, Kazuo; ISHIGURO, Fumiyasu; CHUJO, Yoshiki
- 2D7-52 Construction of 3D network polymer from PCP as template. (Faculty of Science, Hokkaido Univ.) ISHIWATA, Takumi; FURUKAWA, Yuki; SUGIKAWA, Kota; NAGATA, Syunjiro; KOKADO, Kenta; SADA, Kazuki

# Monday, March 28, AM

Chair: MATSUMOTO, Kazuhiko (9:30  $\sim$ 10:30)

- \* 9:20-9:30: interval for laptop PC connection.(3D7-04, 3D7-06, 3D7-07, 3D7-08, 3D7-09)
- **3D7-04\*** One-step Liquid-phase Synthesis of Carbon Nanomaterials and its Applications (Graduate School of Chem. Sci. and Tech., Tokyo Univ. of Sci.; Tokyo Natl. Col. of Tech.) YAMAGIWA, Kiyofumi; KIKITSU, Tomoka; YAMASHITA, Shunsuke; MOTOMURA, Kenichi; SHIROISHI, Hidenobu; AYATO, Yusuke; KUWANO, Jun
- 3D7-06 Synthesis of Carbon Nanotube by Microwave Heating: Development of Metal Nano Particle Method (Shinshu univ.) TAKAGI, Yasufumi; TAKAGAKI, Yusaku; SHIMIZU, Masahiro; TAUCHI, Risa; NGUYEN TRAN, Huy Danh; OHTA, Kazuchika
- 3D7-07 Synthesis of carbon material with slit-type micropore (Faculty of Engineering, Chiba Univ.) SUZUKI, Yukiko; YAMADA, Yasuhiro; SODESAWA, Toshiaki; SATO, Satoshi; MATSUO, Yoshiaki
- 3D7-08 Structure of activated carbons prepared under magnetic fields (Fac. Sci., Shinshu Univ.) HAMASAKI, Atom; YAMAMOTO, Shou; NISHIHARA, Yoshitaka; SADATOU, Toyonari; SAKAGUCHI, Ayumi; OZEKI, Sumio
- 3D7-09 Structure of nano carbons prepared under high magnetic fields and their orientation (Shinshu Univ.) SAKAGUCHI, Ayumi; HAMASAKI, Atom; OZEKI, Sumio

Chair: YAMADA, Yasuhiro (10:40∼11:30)

- \* 10:30-10:40: interval for laptop PC connection.(3D7-11, 3D7-12, 3D7-13, 3D7-14, 3D7-15)
- 3D7-11 Graphite fluoroaluminate intercalation compounds (Graduate School of Energy Science, Kyoto Univ.) TAKAGI, Kosuke; MATSUMOTO, Kazuhiko; HAGIWARA, Rika
- 3D7-12 Intercalation of Magnesium into Graphite-like Layered Material of Composition BC<sub>2</sub>N by Vapor Phase Reaction (Osaka Electro-Communication Univ., Kawaguchi Laboratory) KURASAKI, Akihiro; KAWAGUCHI, Masayuki
- 3D7-13 Effect of the energy of irradiated light for the preparation of carbon thin-films from silylated graphite oxide (Univ. of Hyogo) IWASA, Kenshiro; MATSUO. Yoshiaki
- 3D7-14 One-pot extraction of highly-enriched (6,5) single walled carbon nanotubes using a fluorine-based copolymer (Kyushu Univ.) OZAWA, Hiroaki; IDE, Natsuko; FUJIGAYA, Tsuyohiko; NIIDOME, Yasuro; NAKASHIMA, Naotoshi
- 3D7-15 Fabrication of optically active functionalized diamond powder and its chiral recognition behavior (Natl. Inst. of AIST; Kyushu Inst. of Technol.) NAKAMURA, Takako; OHANA, Tsuguyori; HAGIWARA, Yuta; TSUBOTA. Toshiki

# Monday, March 28, PM

Chair: MORISAKI, Yasuhiro (12:40~14:00)

- \* 12:30-12:40: interval for laptop PC connection.(3D7-23, 3D7-24, 3D7-26, 3D7-27, 3D7-29)
- **3D7-23** Examination of Optical Properties for Organic-Silocon Hybrid Materials (TOYOTA CENTRAL R&D LABS., INC.) SUGIYAMA, Yusuke; OKAMOTO, Hirotaka; MAEGAWA, Yoshifumi; KUMAI, Yoko; NAKANO, Hideyuki
- 3D7-24\*† Surface-Assisted Alignment Control of Columnar Liquid Crystalline Structure and Application to Mesoporous Silica Film with Vertical Alignment (Graduate School of Engineering, Nagoya Univ.) HARA, Mitsuo; NAGANO, Shusaku; SEKI, Takahiro
- 3D7-26 Functionalization of Silica Surface by Tetrahydroxyporphyrinvia Si-O Linkages (Univ of Doshisha) FURUTA, Nao; MINAMIJIMA, Nagisa; WAKUNAMI, Shintaro: MIZUTANI, Tadashi
- 3D7-27\* Functionalization of Nano-porous Alumina Membranes by Chemical Surface Modification with Organosilicon Compounds (Grad. Sch. Eng., Gunma Univ.) KAKIAGE, Kenji; YAMAMURA, Masaki; UNNO, Masafumi; KYOMEN, Toru; HANAYA, Minoru
- 3D7-29\* Fabrication of visible light response TiO<sub>2</sub> photocatalyst thin film by anodic oxidation and its application (Tohoku Univ.; Osaka Pref. Univ.; Waseda Univ.) MIZUKOSHI, Yoshiteru; KOMAI, Yosuke; ASAKA, Ryosuke; IMAMURA, Keisuke; NISHIMURA, Rokuro; SAITO, Yoshiyuki; MASAHASHI, Naoya

Chair: NAGANO, Shusaku (14:10 $\sim$ 15:30)

- \* 14:00-14:10: interval for laptop PC connection.(3D7-32, 3D7-34, 3D7-35, 3D7-36, 3D7-38)
- 3D7-32\* Spontaneous formation of nano- to micrometer-scale architectures by scaffolding materials of giant ring-shaped polyoxomolybdates (Ritsumeikan Univ.) UNO, Kenjiro; MUTO, Makoto; TSUTSUMI, Osamu
- 3D7-34 Hybrid Materials Composed of Giant Ring-Shaped Polyoxomolyb-dates and Liquid-Crystalline Organic Molecules (Ritsumeikan Univ.) WAKANA, Sho; MUTO, Makoto; UNO, Kenjiro; TSUTSUMI, Osamu
- 3D7-35 Synthesis of novel amphoteric Porphyrin for 3-D structure and its Porphyrin/Clay complexes formation behavior with Nano Layered Compound (Tokyo metropolitan Univ.) YOGO, Yuko; SHIMADA, Tetsuya; MASUI, Dai; TACHIBANA, Hiroshi; INOUE, Haruo; TAKAGI, Shinsuke
- 3D7-36\* Low-temperature synthesis of apatite via a Ca complex of aspartic acid and product dependency on reaction time (Kogakuin Univ.) MOCHIZUKI, Chihiro; HARADA, Yu; SATO, Mitsunobu
- 3D7-38\*† In-situ detection of guest molecules using SERS-active porous coordination polymers (Graduate School of Science, Hokkaido Univ.) SUGIKAWA, Kouta; FURUKAWA, Yuki; ISHIWATA, Takumi; NAGATA, Shunjiro; KOKADO, Kenta; SADA, Kazuki

Chair: TSUTSUMI, Osamu (15:40~17:00)

- \* 15:30-15:40: interval for laptop PC connection.(3D7-41, 3D7-43, 3D7-44, 3D7-46, 3D7-48)
- 3D7-41\* Fabrication of "Soft"-Brainmaterials: Designable Control of Template-Space using Wrinkle Structure (Tokyo Univ. of Science; Center for Colloid and Interface Science (CCIS)) ENDO, Hiroshi; TAMURA, Masahiro; MIZUNO, Takahiro; KONO, Fumihiko; NAKAO, Hidenobu; KAWAI, Takeshi
- 3D7-43 Transparent and Strong Cellulose Thin Film Prepared from an Ionic Liquid solution (Nara Inst. Sci. Tech.) NAKASHIMA, Takuya; KOTOV, Nicholas A
- 3D7-44\* Preparation of optically transparent flexible plastics reinforced with chitin nanofibers (Tottori Univ.) IFUKU, Shinsuke; MOROOKA, Shin; MORIMOTO, Minoru; SAIMOTO, Hiroyuki
- 3D7-46\* Composite Structure by Metal-polyiodide, In, within Hydrophilic Polymer [IV]; Charge Transfer and Dynamic Amphiphilicity with Polyiodide,

for Diffusion on Iodine-doping. (Kyoto Univ.) KAWAGUCHI, Akio

**3D7-48** Morphological control of block copolymer surface micelles/metal nanoparticles hybrid LB film by cospreading method (Graduate School of Engineering Nagoya Univ.) GOTO, Katsuaki; NAGANO, Shusaku; SEKI, Takahiro

Chair: ENDO, Hiroshi (17:10~18:20)

- \* 17:00-17:10: interval for laptop PC connection.(3D7-50, 3D7-52, 3D7-53, 3D7-55, 3D7-56)
- 3D7-50\* Preparation and Physical Properties of Liquid Crystal Sol Containing Pd Nanoparticles (Tokyo Univ. of Science Yamaguchi) TOSHIMA, Naoki; NISHIDA, Naoto; TOKUNAGA, Hideaki; PARVATKAR-DESHMUKH, Giriia
- **3D7-52** Synthesis of dodecyl modified dendric polyphenylazomethineand its self-assembly property (Tokyo Institute of Technology) AZUMA, Keisuke; OCHI, Yousuke; YAMAMOTO, Kimihisa
- 3D7-53\* Synthesis of Novel Organic Fluorescent Dyes Based on Indigo (Konan Univ.) MIYAKE, Junpei; WATANABE, Junji; IKEDA, Yoshiyuki 3D7-55\* Preparation and Reactions of Metallated Pentacene Derivatives (Catalysis Research Center, Hokkaido Univ.; Aichi Univ. of Education.)
- JIA, Zhiying; SONG, Zhiyi; NAKAJIMA, Kiyohiko; TAKAHASHI, Tamotsu 3D7-56 Hybridization of conjugated polymers possessing amide side chains (Kyoto Univ.) TSUJI, Yuichi; MORISAKI, Yasuhiro; CHUJO, Yoshiki

# Tuesday, March 29, AM

Chair: INAGAKI, Shinji (9:00 ∼9:50)

- \* 8:50-9:00: interval for laptop PC connection.(4D7-01, 4D7-02, 4D7-03, 4D7-04, 4D7-05)
- 4D7-01 Preparation of Titania Thin Layers Containing Silver Particles by the Sol-gel Method and their Properties (Kochi National College of Tech. Dept. Matr. Sci. Eng.) KADOTA, Syouichi; TSUNEISHI, Taku; OKABAYASHI, Minahiro
- 4D7-02 Preparation of Silica-titania Thin Layers Containing Gold Particles by the Sol-gel Method and their Properties. (Kochi National College of Tech. Dept. Matr. Sci. Eng.) TSUNEISHI, Taku; KADOTA, Syouichi; OKABAYASHI, Minahiro
- 4D7-03 Synthesis of a Silicon Carbide-Based Ceramic with Poly[(silylene)-1,3-butadiynylene] as a Precursor (Grad. Sch. Eng., Gunma Univ.; Advanced Institute of Materials Science) ICHIKAWA, Keisuke; KYUSHIN, Soichiro; OKAMURA, Kiyohito; SUZUKI, Kenji
- 4D7-04 Synthesis and hydrolysis of an alkoxysiloxane oligomer (Si[OSiCH = CH<sub>2</sub>(OMe)<sub>2</sub>]<sub>4</sub>) (School of Science and Engennering, Waseda Univ.) TAMAI, Misa; TACHIBANA, Hiroki; WAKABAYASHI, Ryutaro; KURODA, Kazuyuki
- 4D7-05 Preparation of cage silsesquioxanes from water glass (Tokyo Univ. of Science) SHIODA, Takahiro; ABE, Yoshimoto; GUNJI, Takahiro; ABE, Noritaka

Chair: YAMAUCHI, Yusuke (10:00 $\sim$ 10:40)

- \* 9:50-10:00: interval for laptop PC connection.(4D7-07, 4D7-08, 4D7-09, 4D7-10)
- 4D7-07 Synthesis and characterization of linear oligosiloxanes using Wilk-inson's catalyst (Tokyo Univ. of Science) KONDO, Natsuko; ABE, Yoshimoto; GUNJI, Takahiro; ABE, Noritaka
- 4D7-08 Synthesis and characterization of polysilsesquioxane having arylsulfonic acid as side chain (Tokyo Univ. of Science) YAMAMOTO, Kazuki; ABE, Yoshimoto; GUNJI, Takahiro; ABE, Noritaka
- 4D7-09 Preparation of shape controlled AgBr photocatalysts by use of emulsion (Toyohashi Univ. of Technology) KOBAYASHI, Bungaku; OHKITA, Hironobu; MIZUSHIMA, Takanori; KAKUTA, Noriyoshi
- 4D7-10 Synthesis and characterization of 1,10-phenanthrolineplatinum complexes (Tokyo Univ. of Science) SHIMURA, Yusuke; ABE, Yoshimoto; GUNJI, Takahiro; ABE, Noritaka

Chair: GUNJI, Takahiro (10:50 $\sim$ 11:40)

- \* 10:40-10:50: interval for laptop PC connection.(4D7-12, 4D7-13, 4D7-14, 4D7-15, 4D7-16)
- 4D7-12 Semiconductive properties of the transparent cuprous oxide thin film of p-type fabricated by using the molecular precursor method. (Kogakuin Univ.; Coordination Engineering Lab.) SUZUKI, Tatsuya; NAGAI, Hiroki; HARA, Hiroki; MOCHIZUKI, Chihiro; TAKANO, Ichiro; HONDA, Tohru; SATO. Mitsunobu
- 4D7-13 Electrochemical synthesis of thin film containing europium (Hokkaido Univ.) KUMAGAI, Mina; MIYATA, Kohei; FUSIMI, Kouji; HASEGAWA, Yasuchika
- 4D7-14 Preparation of mesostructured organosilica films from newly designed oganoallylsilanes with electroactive organic bridges (Toyota Central R&D Labs., Inc.; JST/CREST) MAEGAWA, Yoshifumi; MIZOSHITA, Norihiro; TANI, Takao; INAGAKI, Shinji
- 4D7-15 Synthesis of Mesoporous Pt-Au Alloy Films with Giant Mesopores by Using Block Copolymers (Faculty of Science and Engineering, Waseda Univ.; Waseda Univ., Kagami Memorial Lab.; World Premier International (WPI) Research Center for Materials Nanoarchitectonics (MANA); PREST.JST) YAMASHITA, Hiroaki; TONEGAWA, Akihisa; YAMAUCHI, Yusuke;

KURODA, Kazuyuki

4D7-16 Preparation and characterization of silica-based thin films on Al<sub>2</sub>O<sub>3</sub> films with a roughness by the sol-gel method. (Osaka Prefecture Univ.) TADANAGA, Kiyoharu; MORI, Keisuke; TATSUMISAGO, Masahiro

Chair: TADANAGA, Kivoharu (11:50~12:40)

- \* 11:40-11:50: interval for laptop PC connection.(4D7-18, 4D7-20, 4D7-21)
- 4D7-18\* Fabrication of Large-Area Au Nanoparticle 2D-Arrays as Near-Field Light Source (NIMS) ISOZAKI, Katsuhiro; OCHIAI, Takao; TAGUCHI, Tomoya; NITTOH, Koh-ichi; MIKI, Kazushi
- 4D7-20 Characterization of wetting properties of porous TiO2 layer formed by hydrothermal treatment. (Graduate School of Environmental Science, Okayama Univ.) BECCHAKU, Michiaki; NISHIMOTO, Shunsuke; KAMESHIMA, Yoshikazu; MIYAKE, Michihiro
- 4D7-21\*\* Conductivity and photocurrent density of Ag-nanoparticles-Titania alloy thin film (Kogakuin Univ.) DANIEL, Likius Shipwiisho; NAGAI, Hiroki; AOYAMA, Sohei; HARA, Hiroki; MOCHIZUKI, Chihiro; TAKANO, Ichiro; HONDA, Tohru; SATO, Mitsunobu

# Room D8

Bldg. 11 11-25

# Physical Organic Chemistry -Structures and Properties-

# Saturday, March 26, AM

#### Molecular Recognition

Chair: SHINODA, Satoshi (9:00 ∼10:10)

- \* 8:50-9:00: interval for laptop PC connection.(1D8-01, 1D8-02, 1D8-03, 1D8-04, 1D8-05, 1D8-06, 1D8-07)
- 1D8-01 Synthesis and gellation ability of tris-urea compound with hydrophilic substituents (Shizuoka Univ.) HIGASHI, Daisuke; JINNO, Yuki; YAMANAKA, Masamichi
- 1D8-02 Development of organic synthesis in supramolecular gel (Shizuoka Univ.) AMAKATSU, Mawo; AOYAMA, Ryohei; YAMANAKA, Masamichi
- 1D8-03 Synthesis of Chiral Ethylenediamine Derivatives and Mass Spectrometric Detection of its Metal Complex (Kansai Univ.; OMTRI) NAKAKOJI, Takashi; SATO, Hirofumi; KAWAASAKI, Hideya; ARAKAWA, Ryuichi; SHIZUMA, Motohiro
- **1D8-04** Encapsulation of Fullerene in Nanospace of Chiral π-Tubes and Its Functionalization (Kinki Univ. Faculty of Science and Engineering) KITANO, Daiki; NAKAHODO, Tsukasa; FUJIHARA, Hisashi
- **1D8-05** Encapsulation and Release of Molecule and Inorganic Nanoparticles in Water-Soluble  $\pi$ -Nanotubes (Kinki Univ. Faculty of Science and Engineering) FUJIMOTO, Nobuyuki; NAKAHODO, Tsukasa; FUJIHARA, Hisashi
- **1D8-06** Control of Swelling Ability of Polyelectrolyte Gels through Complexation of π-Conjugated Acyclic Anion Receptors (Graduate School of Engineering, Kyushu Univ.) ISEDA, Kazuya; HAKETA, Yohei; KOKADO, Kenta; MAEDA, Hiromitsu; SADA, Kazuki
- 1D8-07 Redox Switchable Supramolecular Complex between Bisporphyrin Cleft and Electron-Deficient Aromatic Guest (Hiroshima Univ.) IKEDA, Toshiaki; WATANABE, Akihide; OSHITA, Tomoko; HAINO, Takeharu

Chair: YAMANAKA, Masamichi (10:20~11:20)

- \* 10:10-10:20: interval for laptop PC connection.(1D8-09, 1D8-10, 1D8-11, 1D8-12, 1D8-13, 1D8-14)
- 1D8-09 Chirality Switching of Lanthanide Complexes by Coordination of Anions (Graduate Schools of Science, Osaka City Univ. and JST, CREST) SHINODA, Satoshi; MISAKI, Hitomi; TSUKUBE, Hiroshi
- 1D8-10 Selective detection of dihydrogen phosphate anion by a tetraamide-based receptor bearing isoquinolines (Yamagata Univ.) KONDO, Shin-ichi; TAKAI, Ryunosuke
- 1D8-11 Preparation of Soft Particles Fabricated from Diboronic Acid with Tetraol and Its Morphology (Tokyo Metropolitan Univ.) NISHIYABU, Ryuuhei: MATSUSHIMA, Yusuke: TERAOKA, Shiori: KUBO, Yuii
- 1D8-12 Positive Allosteric Effect in the Complex Formation between Cyclooctapyrrole Containing Spacer and Arginine Derivative (Kobe Univ.) NIKKUNI, Yoshiko; RINTURUOTO, Yuha, Mikaeru; SETSUNE, Jun-ichiro
- 1D8-13 Double-Activated Reactions with Self-Activated Supramolecular Complexes. (Graduate School of Science, Kobe Univ.) KAWAKAMI, Kazumitsu; SEI, Yoshihisa; YAMAGUCHI, Kentaro; TSUDA, Akihiko
- 1D8-14 Development of asymmetric catalyst that can fix the substrate using hydrogen bonding (Dep. of Chemistry, Fac. of Science, Kanagawa Univ.) OHTSUKA, Shota; KIHARA, Nobuhiro

Chair: KONDO, Shinichi (11:30∼12:30)

- \* 11:20-11:30: interval for laptop PC connection.(1D8-16, 1D8-17, 1D8-18, 1D8-19, 1D8-20, 1D8-21)
- 1D8-16 Development of length-selective acylation catalyst using hydrogenbonding between amide (Dep. of Chemistry, Fac. of Science, Kanagawa Univ.) TSUZUKI, Noriaki; KIHARA, Nobuhiro
- **1D8-17** Synthesis and Optical Properties of Cyclic N2O2-type Bis-dipyrrin Having an O6 Recognition Site (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) DAICHO, Manami; YAMAMURA, Masaki; SAKAMOTO, Naoya; NABESHIMA, Tatsuya
- 1D8-18 Conformation and Functions of Alternating Amphiphilic Compounds in Liposomal Membranes (IMRAM, Tohoku Univ) SHIMA, Tatsuya; MURAOKA, Takahiro; KINBARA, Kazushi
- 1D8-19 Response capabilities of water-soluble semiconductor clusters having inner hydrophobic binding sites (Hokkaido Univ.) FUKUNAGA, Naoto; SHICHIBU, Yukatsu; KONISHI, Katsuaki
- 1D8-20 Preparation of Chiral Hydrindacene-dimer and Their Assembling Properties (Department of Chemistry, Faculty of Science, Hokkaido Univ.; JST PRESTO) KAWAI, Hidetoshi; HATTORI, Ayako; FUJIWARA, Kenshu; SUZUKI, Takanori
- 1D8-21 Anionic Clusters from Anion-Responsive Covalently Linked and Metal-Bridged Oligomers (Institute of Science and Engineering, Ritsumeikan Univ.; PRESTO, JST) MAEDA, Hiromitsu; KITAGUCHI, Kanako

# Saturday, March 26, PM

Chair: YAMAMURA, Masaki (13:40∼14:40)

- \* 13:30-13:40: interval for laptop PC connection.(1D8-29, 1D8-30, 1D8-31, 1D8-32, 1D8-33, 1D8-34)
- 1D8-29 Self-Sortable Dimeric Assemblies by Anion Recognition (Institute of Science and Engineering, Ritsumeikan Univ.; PRESTO, JST) MAEDA, Hiromitsu; KINOSHITA, Kota
- 1D8-30 Anion-Driven 3D Clusters Based on Trefoil-Shaped Receptor Trimer (Institute of Science and Engineering, Ritsumeikan Univ.; PRESTO, JST) MAEDA. Hiromitsu: SHIRAL Tomohiro
- 1D8-31 Fluorescein-Spiropyran Conjugate as a Colorimetric Probe for Cyanide Anion in Aqueous Media (Osaka Univ.) DOI, Takayuki; SUMIYA, Shigehiro; SHIRAISHI, Yasuhiro; HIRAI, Takayuki
- 1D8-32 Development of Solid-State Fluorescence Sensing Materials with Phenol Derivatives (TUS; NIMS) AKAMATSU, Masaaki; OKAMOTO, Ken; MORI, Taizo; SAKAI, Hideki; ABE, Masahiko; HILL, Jonathan; ARIGA, Katsuhiko
- 1D8-33 Emission of diaminopyridyltetrazine in stepwise complex formation with zinc ions (Nara Inst. Sci. Tech.) MITSUI, Akihito; YUASA, Junpei; KAWAI, Tsuyoshi
- **1D8-34** Stabilization of Amidiniumu-Carboxylate Salt Bridges by using Cation-pi Interactions (Kyoto Institute of Technology) KUSUKAWA, Takahiro; FUJITA, Tomoki; TANAKA, Syugo; HARADA, Toshiro

Chair: KAWAI, Hidetoshi (16:50 $\sim$ 18:00)

- \* 16:40-16:50: interval for laptop PC connection.(1D8-48, 1D8-49, 1D8-50, 1D8-51, 1D8-52, 1D8-53)
- **1D8-48** Carboxylic Acid Recognitions and Fluorescence Properties of 1,8-Diamidino anthracene (Kyoto Institute of Technology) KUSUKAWA, Takahiro; TAKESHITA, Syouta; HARADA, Toshiro
- 1D8-49 Preparation of Supramolecular Slimes Capable of Adsorbing Heavy Metal Ion (Tokyo Metropolitan Univ.) NISHIYABU, Ryuhei; ITO, Katsunori; DAVIES, I.R.; KUBO, Yuji
- 1D8-50 Preparation of a Supramolecular Slime which Serves as a Fluorescent Chemosensor (Tokyo Metropolitan Univ.) NISHIYABU, Ryuhei; KOBAYASHI, Hiroyasu; KUBO, Yuji
- 1D8-51 Anti-Markovnikov Photo-hydration of Alkynes with Photo-responsive M<sub>6</sub>L<sub>4</sub> Coordination Hosts (Grad. School of Engineering, The Univ. of Tokyo) TAKEZAWA, Hiroki; MURASE, Takashi; FUJITA, Makoto
- 1D8-52 Catalytic Knoevenagel Condensation within a Self-assembled M<sub>6</sub>L<sub>4</sub> Cage (Grad. School of Engineering, The Univ. of Tokyo; CREST) NISHIJIMA, Yuki; MURASE, Takashi; FUJITA, Makoto
- 1D8-53\* Highly Selective Oligosaccharide Sensing by Curdlan Receptor in Aqueous Media (Graduated School of Engineering, Osaka Univ.) FUKUHARA, Gaku; INOUE, Yoshihisa

# Sunday, March 27, AM

# Molecular Recognition

Chair: IKEDA, Toshiaki (9:00  $\sim$ 10:00)

- \* 8:50-9:00: interval for laptop PC connection.(2D8-01, 2D8-02, 2D8-03, 2D8-04, 2D8-05, 2D8-06)
- 2D8-01 Self-Assembly of Pyridyl-Cavitand and Isophthalic Acid Linker Bearing Azo-Dendron into a Photoresponsive Hydrogen-Bonded Capsule (Shizuoka Univ.) TOGARI, Yuka; KOBAYASHI, Kenji
- 2D8-02 Self-Assembled Boronic Ester Cavitand Capsule: Correlation between Various Bis(catechol)-Linkers and Guest-Encapsulation (Shizuoka Univ.) ISHIGAMI, Asumi; KOBAYASHI, Kenji
- 2D8-03 Self-Assembled Boronic Ester Cavitand Capsule: Guard Nanocontai-

- ner of Anthracene Derivatives (Shizuoka Univ; Hamamatsu Photonics) HIRUMI, Yohei; SUZUKI, Kengo; KOBAYASHI, Kenji
- 2D8-04 The allosteric binding of alcohols toward cage-like porphyrinoid of C<sub>3h</sub> symmetry (Department of Chemistry, Graduate School of Science, Kobe Univ.) ARIGA, Tsutomu; SETSUNE, Jyun ichiro
- 2D8-05 Synthesis and ligand binding behavior of the mixed arm cryptands having dipyrrylpyridine parts (Department of Chemistry, Graduate School of Science, Kobe Univ.) YAMATO, Kyohei; SETSUNE, Jun-ichiro
- 2D8-06 Solvent effect on the anion binding of cryptand-like porphyrin analogue (kobe Univ.,faculty of nature science) SAVUKYNAS, Vaidas; SETSUNE, Jun-ichiro

#### Sunday, March 27, PM

Chair: KOBAYASHI, Kenji (13:00∼14:00)

- \* 12:50-13:00: interval for laptop PC connection.(2D8-25, 2D8-26, 2D8-27, 2D8-28, 2D8-29, 2D8-30)
- 2D8-25 Helical self-assembly of chiral tris(phenylisoxazolyl)benzene possessing perylenebisimide (Hiroshima Univ.) MASUDA, Tetsuya; IKEDA, Toshiaki; HAINO, Takeharu
- 2D8-26 Chirality Sensing of DNA with a Polyacetylene (Graduate School of Science, Kobe Univ.) TSUJIMOTO, Yuya; MAEDA, Katsuhiro; YASHIMA, Eiji; TSUDA, Akihiko
- 2D8-27 Twist-Induction of Giant Cyclic Oligopyrroles with DNA (Graduate School of Science, Kobe Univ.) IE, Machiko; SETSUNE, Jun-ichiro; TSUDA, Akihiko
- 2D8-28 Spectroscopic Visualization of Fluidic Flows using an Anthracene Nanofiber. (Graduate School of Science, Kobe Univ.) ANDO, Yasunari; TSUDA, Akihiko
- 2D8-29 Dynamic Behavior of Counter Anions around Pd(II) Centers in an Octahedron-Shaped Self-Assembled Metallo-Capsules (The Univ. of Tokyo) KONDO, Hirotaka; HIRAOKA, Shuichi
- 2D8-30 Modification of Inner Space of Self-Assembled Metallo-Capsules with Phosphane Ligands by Site-Selective Ligand Exchanges (The Univ. of Tokyo) NARUMI, Masatoshi; HIRAOKA, Shuichi

Chair: AKAZOME, Motohiro (14:10∼15:10)

- \* 14:00-14:10: interval for laptop PC connection.(2D8-32, 2D8-33, 2D8-34, 2D8-35, 2D8-37)
- 2D8-32 Asymmetric induction of calix[4]arene-based triple-stranded helicate by complexation of chiral guest (Hiroshima Univ.) SADAHIRO, Tatsuya; SHIO, Hidemi; HAINO, Takeharu
- 2D8-33 Supramolecular Polymer Constructed by Optically Active Calix[5] arene Host and Dumbbellshaped Fullerene (Hiroshima Univ.) KASHIHARA, Kouki; IKEDA, Toshiaki; HAINO, Takeharu
- 2D8-34 Investigation of Saccharide-Linked Ethynylpyridine Oligomers with Long Alkyl Chains (Graduate School of Pharmaceutical Sciences, Univ. of Toyama) MAKIDA, Hiroki; OHISHI, Yuki; ABE, Hajime; INOUYE, Masahiko
- 2D8-35\*† Development of Ethynylpyridine Oligomers that Retain their Helical Structures after Removal of the Saccharide Templates (Graduate School of Pharmaceutical Sciences, Univ. of Toyama) KAYAMORI, Fumihiro; ABE, Hajime; INOUYE, Masahiko
- 2D8-37<sup>†</sup> Design and synthesis of a hetero-stranded double helix composed of m-diethynylbenzene-based complementary molecularstrands stabilized by amidinium-carboxylate salt bridges (Graduate School of Engineering, Nagoya Univ.) YAMADA, Hidekazu; WU, Zong-quan; FURUSHO, Yoshio; YASHIMA, Eiji

Chair: HIRAOKA, Shuichi (15:20 $\sim$ 16:20)

- \* 15:10-15:20: interval for laptop PC connection.(2D8-39, 2D8-41, 2D8-42, 2D8-44)
- 2D8-39\*† Synthesis of Stimulus Responsive Organogels through Complementary Double Helical Supramolecular Polymer Formation and Their Chiral Amplification Behavior (Graduate School of Engineering, Nagoya Univ.) BANNO, Motonori; WU, Zong-quan; FURUSHO, Yoshio; YASHIMA, Eiji
- 2D8-41 Double Helix Formation of Achiral Carboxylic Acid Dimers Bearing m-Terphenyl-based Backbones and Chirality Induction with Chiral Amines (Graduate School of Engineering, Nagoya Univ.) MAKIGUCHI, Wataru; KOBAYASHI, Shinzo; FURUSHO, Yoshio; YASHIMA, Eiji
- **2D8-42\*** Synthesis and Saccharide Recognition of Poly(*meta*-ethynylpyridine)s with Cu(II)-coordinating Side Chains (Graduate School of Pharmaceutical Sciences, Univ. of Toyama) TAKASHIMA, Shunsuke; ABE, Hajime; INOUYE, Masahiko
- 2D8-44 Synthesis and Saccharide Recognition of Macrocyclic Ethynylpyridine Oligomers (Graduate School of Pharmaceutical Sciences, Univ. of Toyama) CHIDA, Yusuke; ABE, Hajime; INOUYE, Masahiko

Chair: TSUDA, Akihiko (16:30 $\sim$ 17:30)

- \* 16:20-16:30: interval for laptop PC connection.(2D8-46, 2D8-47, 2D8-48, 2D8-49, 2D8-50, 2D8-51)
- 2D8-46 Guest encapsulation of hybrid supramolecular capsule (Faculty of Science, Shizuoka Univ.) NITO, Yuki; KAWAHARADA, Masashi; FUJII, Hiromitsu; KOBAYASHI, Kenji; YAMANAKA, Masamichi
- 2D8-47 Structural alteration of the hybrid supramolecule capsule by the guest

- molecule encapsulation (Shizuoka Univ.) KAWAHARADA, Masashi; KOBAYASHI, Kenii: YAMANAKA, Masamichi
- 2D8-48 Syntheses of Cyclic Trimers of 2-(2-Aminophenoxy)alkanoic Acid and Binding of Quaternary Ammonium Compounds to Their Bowl-Shaped Structure (Graduate School of Engineering, Chiba Univ.) AKAZOME, Motohiro: KEICHO. Kazuaki: MATSUMOTO. Shoii
- 2D8-49 Molecular Recognition of Quaternary Ammonium Compounds Using Cyclic Trimers of 2-(3-Aminophenoxy)alkanoic Acid with a Bowl-Shaped Structure (Graduate School of Engineering, Chiba Univ.) AKAZOME, Motohiro: HAMADA, Norihiro: MATSUMOTO, Shoii
- 2D8-50 Selective Metal Ion Recognition by Self-assembled Tripodal Tricar-boxylic Acid (Shizuoka Univ.) MINODANI, Shoichi; YAMANAKA, Masamichi
- **2D8-51** Molecular Recognition By Tris-urea Compound (Shizuoka univ.) FUJII, Hiromitsu; YAMANAKA, Masamichi

# Monday, March 28, AM

# Molecular Recognition

Chair: HAINO, Takeharu (9:00 ∼10:00)

- \* 8:50-9:00: interval for laptop PC connection.(3D8-01, 3D8-02, 3D8-03, 3D8-05)
- 3D8-01 Molecular Recognition Behavior of 'Texas-sized' Cyclic Tris(spiroborate)s (Dept. of Chem. Konan Univ.) MITANI, Natsuyo; DANJO, Hiroshi; KAWAHATA, Masatoshi; YAMAGUCHI, Kentaro; MIYAZAWA, Toshifumi
- **3D8-02** Formation Behavior of Inclusion Complexes between Cyclodextrins and Poly(methacrylic acid)s in Water (Osaka Univ.) KIDA, Toshiyuki; MIURA, Takashi; AKASHI, Mitsuru
- 3D8-03\*† Formation of Anion-Driven Helical Structures (Institute of Science and Engineering, Ritsumeikan Univ.; PRESTO, JST) HAKETA, Yohei; MAEDA, Hiromitsu
- **3D8-05\*** Synthesis and Application of Novel Rotaxanes by Utilizing Properties of Main Group Elements (Tokyo Institute of Technology) DOMOTO, Yuya; SASE, Shohei; GOTO, Kei

Chair: GOTO, Kei (10:10∼11:10)

- \* 10:00-10:10: interval for laptop PC connection.(3D8-08, 3D8-09, 3D8-10, 3D8-11, 3D8-12, 3D8-13)
- **3D8-08** Synthesis of a Fluorescent Cavitand with Diazaborolylbenzonitrile Moieties (Tokyo Metropolitan Univ.) OKUYAMA, Sachiko; OTSUKA, Kaoru; NISHIYABU, Ryuhei; KUBO, Yuji
- 3D8-09 The approach toward polycatenane: Synthesis of macrocyclic monomer bearing 2,3-disubstituted butadiene moieties. (Dep. of Chemistry, Fac. of Science, Grad. of Kanagawa Univ.) KAWAI, Masatoshi; KIHARA, Nobuhiro
- 3D8-10 Synthesis and property of rotaxane for the one directional translation of wheel (Dep. of Chemistry, Fac. of Science, Grad. of Kanagawa Univ.) NISHIYAMA, Junya; MAKITA, Yoshimasa; KIHARA, Nobuhiro
- **3D8-11** Fluorescent sensing for mandelic acid enantiomers using chiral Schiffbase macrocycles. (Kansai Univ.) TSUCHITANI, Takeshi; TANAKA, Kaichi
- 3D8-12 Emission color change of ethynylquinoline derivative by complexation with zinc ion (Nara Inst. Sci. Tech.) YAMADA, Masataka; YUASA, Junpei; KAWAI, Tsuyoshi
- **3D8-13** Detection of Water in Organic Solvents by Photo-Induced Electron Transfer (PET) Characteristics of Anthracene-Boronic Acid Ester (Hiroshima Univ.) MATSUGASAKO, Ai; SUMOMOGI, Minako; OOYAMA, Yousuke; KOMAGUCHI, Kenji; IMAE, Ichiro; HARIMA, Yutaka

Chair: KIHARA, Nobuhiro (11:20~12:30)

- \* 11:10-11:20: interval for laptop PC connection.(3D8-15, 3D8-16, 3D8-17, 3D8-18, 3D8-19, 3D8-20, 3D8-21)
- **3D8-15** Chiral Structure Control of PseudomacrocyclicTerpyridineHost by Cation Recognition (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) SATO, Futoshi; YAMAMURA, Masaki; NABESHIMA, Tatsuya
- 3D8-16 Synthesis and Molecular Recognition of Novel Cleft Host Having Terpyridine Platinum(II) Complexes (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) HASEGAWA, Yuki; YAMAMURA, Masaki; AKINE, Shigehisa; NABESHIMA. Tatsuva
- **3D8-17** Optical Resolution of *anti-O,O* Dicarboxymethylcalix- and thiacalix [4]arenes by the Fractional Crystallization (Ishinomaki Senshu Univ.) HOSHI, Yusuke; YAMAGUCHI, Hitomi; NARUMI, Fumitaka
- **3D8-18** Photoisomerization Behavior of Macrocyclic Catecholate Complexes Bearing Azobenzene Moieties (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) OKAZAKI, Yuki; YAMAMURA, Masaki; NABESHIMA, Tatsuya
- 3D8-19 Conformational Conversion of Calix[6]arene Having Electron-donating Groups by Guest Recognition (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) KUSAMA, Daisuke; AKINE, Shigehisa; NABESHIMA, Tatsuya
- **3D8–20** Practical synthesis of *N,O*-hybrid calix[4]arenes via Ullmann-type reaction (Graduate School of Engineering, Tohoku Univ.) NAKAMURA, Yuka; TANAKA, Shinya; MOROHASHI, Naoya; HATTORI, Tetsutaro
- 3D8-21 Creation of Resorcinarene Hexameric Capsule with Chiral Cavity in

Fluorous Solvent and Their Application to Optical Resolution (College of Industrial Technology, Nihon Univ.) HAKAMATA, Yusuke; ICHIKAWA, Havato: SHIMIZU. Shoichi

# Monday, March 28, PM

Chair: MOROHASHI, Naoya (13:40~14:40)

- \* 13:30-13:40: interval for laptop PC connection.(3D8-29, 3D8-30, 3D8-31, 3D8-33)
- 3D8-29 2-Aminotryptanthrin Derivatives with Pyrene as FRET-based Fluor-escent Chemosensors for Metal Ions (Hirosaki Univ.) MAE, Masataka; KAWAKAMI, Jun; KIKUCHI, Kenta; SOMA, Arisa; ITO, Shunji
- 3D8-30 A Coumarin-Spiropyran Conjugate as a Fluorescent Probe for Selective Cyanide Ion Detection in Aqueous Media (Osaka Univ.) SUMIYA, Shigehiro; SHIRAISHI, Yasuhiro; HIRAI, Takayuki
- 3D8-31\*† Preparation of Cyclic Daisy Chains based on Imine-bridged Rotaxane and Their Switching Properties (Department of Chemistry, Faculty of Science, Hokkaido Univ.) SUGINO, Hiroyoshi; KAWAI, Hidetoshi; UMEHARA, Takeshi; FUJIWARA, Kenshu; SUZUKI, Takanori
- 3D8-33\* Formation of Homochiral Two-Dimensional Porous Molecular Networks (Graduate School of Engineering Science, Osaka Univ.; K.U. Leuven) TAHARA, Kazukuni; GHIJSENS, Elke; YAMAGA, Hiroyuki; INUKAI, Koji; DE FEYTER, Steven; TOBE, Yoshito

Chair: UEDA, Kazumasa (14:50~15:40)

- \* 14:40-14:50: interval for laptop PC connection.(3D8-36, 3D8-37, 3D8-38, 3D8-39, 3D8-40)
- 3D8-36 Chiral Induction of Two-Dimensional Porous Molecular Networks via Hierarchical Structural Recognition (Graduate School of Engineering Science, Osaka Univ.; K.U. Leuven) YAMAGA, Hiroyuki; TAHARA, Kazukuni; GHIJSENS, Elke; INUKAI, Koji; DE FEYTER, Steven; TOBE, Yoshito
- **3D8-37** Construction of Two-Dimensional Pore with Fluorinated Alkyl Groups (School of Engineering Science, Osaka Univ.) KATAYAMA, Keisuke; TAHARA, Kazukuni; TOBE, Yoshito
- **3D8-38**<sup>†</sup> Inclusion of Abeta Peptide within an M<sub>12</sub>L<sub>24</sub> Palladium Sphere (School of Engineering, The Univ. of Tokyo: CREST) FUJITA, Daishi; SATO, Sota; YAGI, Maho; YAMAGUCHI, Takumi; KATO, Koichi; FUJITA, Makoto
- 3D8-39 Structural and electronic properties of chirality-induced molecular assemblies of [5]-helicene derivatives (Faculty of science and technology, Keio Univ.) KOUGO, Ryouko; SAKAI, Hayato; MIURA, Tomoaki; HASOBE, Taku
- 3D8-40 Determination of Configuration of Double Bond Isomers Having C2 Symmetry (School of Engineering, The Univ. of Shiga Prefecture; Institute of Multidisciplinary Research of Advanced Materials, Tohoku Univ.; Tohoku Pharmaceutial Univ.) TIAN, Anna; INOUE, Yoshinori; MATSUMOTO, Takatoshi; TAKESHITA, Mitsuhiro; KIJIMA, Tatsurou; WATANABE, Masataka; KUMAGAI, Tsutomu

Chair: KAWAI, Hidetoshi (15:50 $\sim$ 16:40)

- \* 15:40-15:50: interval for laptop PC connection.(3D8-42, 3D8-43, 3D8-44, 3D8-45, 3D8-46)
- 3D8-42 Syntheses and Crystal Structures of Halogen Atom and Carbonyl Substituted Tetrathiafulvalenothioquinone(or quinone)-1,3-dithiolemethide (Fac. of Eng., Shizuoka Univ.) UEDA, Kazumasa; SUZUKI, Kenta; TACHIKAWA, Shota
- 3D8-43 Emission control of Europiumu(III) complexes by color change of thermochromic materials. (Faculty of engineering, Chiba Univ.) KOBAYASHI, Yukino; KANAZAWA, Kenji; NAKAMURA, Kazuki; KOBAYASHI, Norihisa
- **3D8-44** Substituent Effect on Supramolecular Organization of Bis(Crowned Benzimidazole) (Tokyo Univ. of Science) ASAKURA, Hiroki; TANAKA, Kazuo; SATAKE, Akiharu
- **3D8-45** Kinetic and thermodynamic control in the self-assembly of  $M_nL_{2n}$  platinum spherical complexes (School of Engineering, The Univ. of Tokyo; CREST) TAKAHASHI, Asana; FUJITA, Daishi; SATO, Sota; FUJITA, Makoto
- 3D8-46 Construction of Various Secondary Structure Motifs by Metal-induced Folding of Artificial Oxime-peptides (Grad. School of Science, The Univ. of Tokyo) MATSUOKA, Koji; TASHIRO, Shohei; SHIONOYA, Mitsuhiko

# Tuesday, March 29, AM

Chair: 00YAMA, Yousuke  $(9:00 \sim 10:00)$ 

- \* 8:50-9:00: interval for laptop PC connection.(4D8-01, 4D8-02, 4D8-03, 4D8-05)
- 4D8-01 Photochromism of Organic Solid-Solution with N-Salicylideneanilines (Kyushu Univ.) SHINTO, Hiroki; KAWATO, Toshio; ITO, Yoshio
- **4D8-02** Synthesis and Photophysical Properties of π-Sufficient Heteroaromatic Compounds Fused Naphthalimide Unit as Novel Solvatochromic Fluorophores (Faculty of Chemistry, Materials and Bioengineering, Kansai Univ.) NISHIDA, Hiroaki; MIKAWA, Takuya; OTONO, Motohiro; UMEDA, Rui; NISHIYAMA, Yutaka

- 4D8-03\* Unsymmetrically Substituted Hexaphenylethane Derivatives with Point Chirality: Efficient Synthesis by Using Flow Microreactor and Unique Electrochromic Behavior (Hokkaido Univ.) ISHIGAKI, Yusuke; KAWAI, Hidetoshi; FUJIWARA, Kenshu; SUZUKI, Takanori; NAGAKI, Aiichiro; YOSHIDA, Jun-ichi
- 4D8-05\*† Multicolor Photoluminescence from Tripodal Ionic Liquid Crystals
  (The Univ. of Tokyo) TANABE, Kana; SUZUI, Yuko; HASEGAWA,
  Miki: KATO, Takashi

Chair: NAKANO, Hideyuki (10:10∼11:10)

- \* 10:00-10:10: interval for laptop PC connection.(4D8-08, 4D8-09, 4D8-10, 4D8-11, 4D8-12, 4D8-13)
- 4D8-08 Vapochromism of 10-(4-Phenylphenoxy)decylphosphonic Acid Ester-Silica Composite (Interdisciplinary Graduate School of Scienceand Engineering, Tokyo Institute of Technology; ChemicalResources Laboratory, Tokyo Institute of Technology) YAMAZAKI, Masahiro; MAKIOKA, Yoshikazu; TANIGUCHI, Yuki
- 4D8-09 Chromism of Planar Ni(II) Complexes Induced by Inclusion within an Organic-Pillared Coordination Cage (Grad. School of Engineering, The Univ. of Tokyo; CREST) OSUGA, Takafumi; ONO, Kosuke; MURASE, Takashi; KATO, Tatsuhisa; FUJITA, Makoto
- 4D8-10 Mechanofluorochromism of D-pi-A Fluorescent Dyes:Carbazole-type Fluorescent Dyes (Hiroshima Univ.) YAMAGUCHI, Naoya; NAGANO, Tomoya; INOUE, Shogo; OOYAMA, Yousuke; KOMAGUCHI, Kenji; IMAE, Ichiro; HARIMA, Yutaka
- 4D8-11 Solid-State Emissions of Novel Benzoquinoline Derivaives in Response to External Stimuli (Graduate School of Parmaceutical Sciences, Kyushu Univ.) ABE, Yuichiro; KARASAWA, Satoru; KOGA, Noboru
- 4D8-12 Complexation of the Bis-naphthyridine Derivative with Metal Ions and Emission Properties of Their Complexes (Graduate School of Parmaceutical Sciences, Kyushu Univ.) SAKAMOTO, Shunsuke; ABE, Yuichiro; KARASAWA, Satoru; KOGA, Noboru
- 4D8-13 Fluorescence Properties of Pyrazine Boron Complexes Bearing a Iminoketone Ligand (Fac. Eng., Gifu Univ.) KUBOTA, Yasuhiro; TSUZUKI, Toshihiro; FUNABIKI, Kazumasa; MATSUI, Masaki

Chair: SUZUKI, Takanori (11:20 $\sim$ 12:20)

- \* 11:10-11:20: interval for laptop PC connection.(4D8-15, 4D8-16, 4D8-17, 4D8-18, 4D8-19, 4D8-20)
- 4D8-15 Solid-State Properties of Terthiophene Dimers Linked by Two Alkyl Chains (Department of Chemistry, Graduate School of Science, Nagoya Univ.) NAKAKURA, Ken; SAITO, Shohei; YAMAGUCHI, Shigehiro
- 4D8-16 Photophysical properties of 2,5-diamino-1,4-diaroylbenzenes (Grad. Sch. Eng., Kyoto Univ.) ASAI, Yuiga; SHIMIZU, Masaki; HIYAMA, Tamejiro
- 4D8-17 Photophysical properties of 2,3-diarylindene derivatives (Grad. Sch. Eng., Kyoto Univ.) SHIMIZU, Masaki; TOMIOKA, Yosuke; YAMATANI, Akinori; ASAI, Yuiga; HIYAMA, Tamejiro
- 4D8-18 Fluorescence Characteristics of 4-[Bis(4-methylphenyl)amino]benzal-dehyde in Different Environments (Muroran Inst. Tech., Osaka Univ.) MIZUGUCHI, Kei; OINUMA, Kaname; KAGEYAMA, Hiroshi; NAKANO, Hideyuki
- 4D8-19 Fluorometric Sensing of Melamine with Aggregation Induced Emission-Active Tetraphenylethene (Tokyo Institute of Technology, Chemical Resources Laboratory; Tokyo Univ. of Science, Faculty of Science and Technology) NAKAMURA, Mitsutaka; SANJI, Takanobu; TANAKA, Masato; ITAGAKI, Shotaro; GUNJI, Takahiro
- 4D8-20 Fluorometric Sensing of Biogenic Amines with Aggregation Induced Emission-Active Tetraphenylethene (Tokyo Institute of Technology, Chemical Resources Laboratory) NAKAMURA, Mitsutaka; SANJI, Takanobu; TANAKA, Masato

# Tuesday, March 29, PM

Chair: ONO, Katsuhiko (13:30~14:30)

- \* 13:20-13:30: interval for laptop PC connection.(4D8-28, 4D8-29, 4D8-30, 4D8-31, 4D8-32, 4D8-33)
- 4D8-28 Synthesis and Optical Properties of Compounds Connecting Two Diimidazo[1,2-a:2',1'-c]quinoxalines at Their 3 Positions with Linkers (Graduate School of Engineering, Chiba Univ.) MATSUMOTO, Shoji; BATMUNKH, Erdenebolor; AKAZOME, Motohiro
- 4D8-29 Synthesis and Optical Properties of Benzoimidazo[1,2-a]imidazo[2,1-c] quinoxaline Derivatives (Graduate School of Engineering, Chiba Univ.) MATSUMOTO, Shoji; SAKAMOTO, Keisuke; AKAZOME, Motohiro
- **4D8-30** Aggregation-Induced Emission System Based on Benzothiadiazole Dyes (Kurume National College of Technology) IKEDA, Kei; ISHII, Tsutomu
- 4D8-31 Novel Fluorescent Characters of Tetrabenzofluorene Bearing p-Nitrophenyl Groups (Grad. School of Eng., Univ. of Hyogo) UEDA, Yoshiaki; KITAMURA, Chitoshi; KAWASE, Takeshi; IKEDA, Hiroshi; YOSHIMOTO, Yuichi; MIZUNO, Kazuhiko
- 4D8-32 Preparation and optical properties of novel pi-conjugatemolecules based on imidazolium (Nara Inst. Sci. Tech.) INOUCHI, Toshifumi; TOBA, Masaya; NAKASHIMA, Takuya; KAWAI, Tsuyoshi
- 4D8-33 Synthesis and Properties of Benzodifuran Derivatives Bearing Pyridine

Moieties (Univ. of Toyama) HAYASHI, Naoto; NISHIGAKI, Shota; ITO, Miho; YOSHINO, Junro; HIGUCHI, Hiroyuki

Chair: MATSUMOTO, Shoji (14:40~15:30)

- \* 14:30-14:40: interval for laptop PC connection.(4D8-35, 4D8-36, 4D8-37, 4D8-38)
- 4D8-35 Specific Emisson Property of Perylenediimide by Formation of [1] Rotaxane (Osaka Univ.) FUKUI, Yu; TAKASHIMA, Yoshinori; YAMAGUCHI, Hiroyasu; HARADA, Akira
- 4D8-36 Synthesis and UV-vis Absorption Properties of Dipyrrinato Iridium Complexes (Nagoya Institute of Technology, Institute for Molecular Science) NAKAYAMA, Takashi; TOMURA, Masaaki; ONO, Katsuhiko
- 4D8-37 Synthesis and Properties of Polyfluorene Derivatives Containing Phenazasiline and Electron Acceptor (Nagoya Institute of Technology) KOBAYASHI, Takuji; SATO, Yumi; ONO, Katsuhiko
- 4D8-38\* Formation of bis(4-pyridinyl)ethane assemblies around the lanthanide aqua complexes and their photocycloaddition reactions. (Kanagawa Univ.) ORISAKU, Keiko; KOIDE, Yoshihiro; ISOZAKI, Takahiro; YAMASHITA, Shinya

# Room E1

Bldg. 11 11-34

# Polymer

# Saturday, March 26, AM

Chair: ASAKAWA, Masumi  $(9:00\sim 10:00)$ 

- \* 8:50-9:00: interval for laptop PC connection.(1E1-01, 1E1-02, 1E1-03, 1E1-04, 1E1-05, 1E1-06)
- 1E1-01\* Synthesis of dimeric and polymeric thioether containing cinchona ammonium salts as chiral organocatalyst (TUT; Itsuno, Haraguchi laboratory) AHAMED, Parbhej; HARAGUCHI, Naoki; ITSUNO, Shinichi
- 1E1-02 Asymmetric transfer hydrogenation of cyclic sulfonimine with polymer-supported chiral catalyst 5 (TUT; Itsuno, Haraguchi laboratory) SUGIE, Haruki; HARAGUCHI, Naoki; ITSUNO, Shinichi
- 1E1-03 Synthesis of polymeric MacMillan catalysts formation by means of ionic bond and their application inasymmetric Diels-Alder reaction (Toyohashi Univ. of Technology) TAKEMURA, Yu; HARAGUCHI, Naoki: ITSUNO Shinichi
- **1E1-04** Efficient Synthesis of Glycosylated Polyphenol using Biomimetic Catalyst (Graduate School of Engineering, Chiba Univ.) FUKUSHIMA, Haruka; KOHRI, Michinari; TANIGUCHI, Tatsuo; NAKAHIRA, Takayuki
- 1E1-05 Some catalytic activities of Human antigenase (Applied chemistry, Research Promotion Project, Oita Univ.) SASANO, Yasuyuki; HIROTA, Katuki; TAKAMOTO, Mai; HIHUMI, Emi; UDA, Taizou
- **1E1-06** Synthesis of main-chain ionic chiral polymers and their application in asymmetric catalysis. (Toyohashi Univ. of Technology) ASAI, Ayumu; HARAGUCHI, Naoki; ITSUNO, Shinichi

Chair: KANEKO, Takashi (10:10~11:10)

- \* 10:00-10:10: interval for laptop PC connection.(1E1-08, 1E1-09, 1E1-11, 1E1-12, 1E1-13)
- **1E1-08** synthesis of main-chain ionic polymer containingquaternary cinchonidium salt. (Toyohashi Univ. of Technology) KOBAYASHI, Asami; HARAGUCHI, Naoki; ITSUNO, Sinichi
- **1E1-09\*** Metal Coordinated Organic Nanotubes as a Heterogeneous Oxidation Catalyst (NTRC, AIST) AOYAGI, Masaru; CHATTOPADHYAY, Tanmay; KOGISO, Masaki; ASAKAWA, Masumi; SHIMIZU, Toshimi
- 1E1-11 Syntheses of High-Molecular Weight Poly(TEMPO-substituted methacrylate) and Related Block Copolymers by Anionic Polymerization (Dept of Appl. Chem., Waseda Univ.) OMATA, Hajime; SUKEGAWA, Takashi; OYAIZU, Kenichi; NISHIDE, Hiroyuki
- **1E1-12** Synthesis and Electrochemical Properties of TEMPO/aniline-substituted Polynorbornene (Dept of Appl. Chem., Waseda Univ.) TATSUHIRA, Hanae; HARAGUCHI, Kentaro; OYAIZU, Kenichi; NISHIDE, Hiroyuki
- 1E1-13 Synthesis and Electrochemical Properties of Radical Polymer Bearing Charge-Neutralizing Anionic Group. (Dept of Appl. Chem., Waseda Univ.) KOYANO, Masafumi; YAKUSHIJI, Hiroki; OYAIZU, Kenichi; NISHIDE, Hiroyuki

Chair: KATO, Fumiaki (11:20~12:20)

- \* 11:10-11:20: interval for laptop PC connection.(1E1-15, 1E1-16, 1E1-17, 1E1-18, 1E1-19, 1E1-20)
- 1E1-15 Preparation and characterization of polymer electrolytes based on polystyrene-polyether-polystyrene ABA block copolymers. (Yokohama National Univ.) INUZUKA, Riko; NAKAZAWA, Eiji; KOKUBO, Hisashi; DOKKO, Kaoru; WATANABE, Masayoshi
- 1E1-16 Synthesis and electrical properties of TTF-pendant polymers (Graduate School of Engineering, Kyoto Univ.) MATSUMOTO, Takuya; TANAKA, Kazuo; CHUJO, Yoshiki

- **1E1-17** Synthesis of Novel Conjugated Polymers Containing Isothianaphthene in the Backbone and Application to Organic Field-Effect Transistors (Kyoto Univ.; iCeMS) HIROSE, Kohei; UMEYAMA, Tomokazu; MATANO, Yoshihiro; ONO, Noboru; IMAHORI, Hiroshi
- **1E1-18** Synthesis of polyphenylene-based polymer electrolytes by catalyst transfer polycondensation (II) -Molecular weight control of hydrophilic-hydrophobic block copolymers- (Department of Materials and Life Sciences, Sophia Univ.) UMEZAWA, Kensuke; FUJITA, Masahiro; TAKEOKA, Yuko: RIKUKAWA. Masahiro
- 1E1-19 Synthesis of Poly(1,8-naphthyleneethynylene-9,10-anthryleneethynylene) Bearing Phenoxy Residues and Its Dimer Model (Graduate Schoolof Sci. & Tech., Niigata Univ.; N-Chem, Niigata Univ.; CTR, Niigata Univ.; VBL, Niigata Univ.; CIA, Niigata Univ.) TSUKAMOTO, Keita; OHISHI, Tomoyuki; KAKIHANA, Yuriko; TERAGUCHI, Masahiro; AOKI, Toshiki; KANEKO, Takashi
- 1E1-20 Synthesis of a poly(1,3-phenyleneethynylene)-basedchiral polyradical bearing nitro groups and nitronylnitroxideresidues and formation of helical foldamaer (Fuelty of Engineering, Niigata Univ.; Graduate Schoolof Sci. & Tech., Niigata Univ.; N-Chem, Niigata Univ.; CTR, Niigata Univ.; VBL, Niigata Univ.; CIA, Niigata Univ.) HIRONO, Kazuya; KATO, Kiyoaki; OHISHI, Tomoyuki; KAKIHANA, Yuriko; TERAGUCHI, Masahiro; AOKI, Toshiki; KANEKO, Takashi

#### Saturday, March 26, PM

Chair: WATANABE, Masayoshi (13:30~14:30)

- \* 13:20-13:30: interval for laptop PC connection.(1E1-28, 1E1-31, 1E1-32, 1E1-33)
- 1E1-28 Young Scholar Lectures of CSJ Development of a novel self-oscillating polymer system and application to chemical robot (NRI, AIST) HARA, Yuhsuke
- 1E1-31 Memory characteristics of organic thin film transistor fabricated with DNA/lipid complex film as a gate dielectric layer. (The faculty of engineering, Chiba Univ..) MITSUMURA, Yasushi; YUKIMOTO, Tomoyoshi; NAKAMURA, Kazuki; KOBAYASHI, Norihisa; UEMURA, Sei; KAMATA, Toshihide
- 1E1-32 Preparation of Vapor-Phase Polymerized PEDOT/Redox Polymer Composites and their Application to Organic Rechargeable Batteries (Dept of Appl. Chem., Waseda Univ.) MINAMI, Erina; HIBINO, Toshiyasu; SUGA, Takeo; WINTHER-JENSEN, Bjorn; NISHIDE, Hiroyuki
- 1E1-33 Synthesis of Polyquinoneimine Derivatives and Application to an Organic Electrode-Active Material (Dept of Appl. Chem., Waseda Univ.) MUKAI, Takuji; NIIBORI, Yukina; OYAIZU, Kenichi; NISHIDE, Hiroyuki

Chair: UEMURA, Takashi (14:40~15:40)

- \* 14:30-14:40: interval for laptop PC connection.(1E1-35, 1E1-37, 1E1-39, 1E1-40)
- **1E1-35\***† Development of Electric Double-Layer Capacitor-Type Polymer Actuators and Their Driving Mechanism (Yokohama National Univ.) IMAIZUMI, Satoru; OHTSUKI, Yuto; KOKUBO, Hisashi; WATANABE, Masayoshi
- 1E1-37\* Solid-State Polymerization and Electronic Properties of Diacetylene Derivatives with Donor Molecules (Yamagata Univ.) TATEWAKI, Yoko; SHIBUYA, Tadahiro; WATANABE, Koji; ISHII, Shinji; SHIBATA, Hiroki; OKADA, Shuji
- **1E1-39** Preparation of Poly(TEMPO Methacrylate)/Single-Wall Carbon Nanotube Composite (Dept. Appl. Chem. Waseda Univ.) OHTANI, Shota; CHOI, Wonsung; OYAIZU, Kenichi; NISHIDE, Hiroyuki
- **1E1-40** Charge Propagation and Photo-Induced Charge Separation Property of PDIs (Dept of Appl. Chem., Waseda Univ.) MURAOKA, Ken; SAITO, Takakazu; KATO, Fumiaki; OYAIZU, Kenichi; NISHIDE, Hiroyuki

Chair: KOYAMA, Yasuhito (15:50∼16:40)

- \* 15:40-15:50: interval for laptop PC connection.(1E1-42, 1E1-43, 1E1-44, 1E1-45)
- **1E1-42** Synthesis of Viologen/Indoline Dye-Coupled Molecules and Their Photoelectrochemical Properties (Dept of Appl. Chem., Waseda Univ.) SUZUKI, Miu; SANO, Naoki; OYAIZU, Kenichi; NISHIDE, Hiroyuki
- 1E1-43 Intramolecular mobility in conjugated polymers containing carbazole unit (Osaka Univ.) YASUTANI, Yosihiro
- 1E1-44 Supramolecular Complex of a Double-Layer Type Dendrimer with Fullerenes (Tokyo Tech) KURAMOTO, Yasunori; ARUBUREHITO, Ken; YAMAMOTO, Kimihisa
- 1E1-45\*† The morphology control of polyaniline using organic nanotube (NTRC,AIST) HAN, Youn-gyu; AOYAGI, Masaru; KOGISO, Masaki; ASAKAWA, Masumi; SHIMIZU, Toshimi

Chair: ITSUNO, Shinichi (17:00 $\sim$ 18:00)

- \* 16:50-17:00: interval for laptop PC connection.(1E1-49, 1E1-50, 1E1-51, 1E1-52, 1E1-53, 1E1-54)
- **1E1-49** Photoconductive Single Polymer Chains Constrained in Coordination Nanochannels (Kyoto Univ.) UCHIDA, Noriyuki; UEMURA, Takashi; KITAGAWA, Susumu; SEKI, Shu; ASANO, Atsushi
- 1E1-50 Ring-Opening Polymerization of Fluorene Skeleton-containing Spir-ocyclic Carbonate (Dept. of Organic and Polymeric Materials, Tokyo Tech.)

- YAMASHITA, Chika; NAKAZONO, Kazuko; TAKATA, Toshikazu
- 1E1-51 Synthesis and polymerization of hetero-aromatics-containing cardo monomers and the properties of resulting polymers. (Dept. of Organic and Polymeric Materials, Tokyo Inst. of Tech.) OKUDA, Hitoshi; KOYAMA, Yasuhito; TAKATA, Toshikazu
- 1E1-52 Synthesis and Properties of Epoxy Resin for Optical Use Based on a Cardo Structure (Department of Organic and Polymeric Materials, Tokyo Institute of Technology) YI, Zhaozhong; SETO, Ryouta; KOYAMA, Yasuhito: TAKATA, Toshikazu
- **1E1-53** Bulk heterojunction solar cells containing self-organized structures made of Disk-like molecules bearing conjugated side chain (Faculty of Textile Science and Technology, Shinshu Univ.) TAKEMOTO, Keisuke; FUKAWA, Tadashi; KIMURA, Mutsumi; SHIRAI, Hirohusa
- 1E1-54 Syntheses of Rigid Dendrimers based on oxadiazole units (Faculty of Textile Science and Technology, Shinshu Univ.) SUZUKI, Hiroyuki; FUKAWA, Tadashi; KIMURA, Mutsumi

#### Sunday, March 27, AM

Chair: FUKUSHIMA, Takanori (9:00  $\sim$ 10:00)

- \* 8:50-9:00: interval for laptop PC connection.(2E1-01, 2E1-03, 2E1-04, 2E1-05)
- **2E1-01\*** Hetero-deposited polymer nanoassembly for electrochemical charging and photochemical discharging (IMRAM, Tohoku Univ.) MATSUI, Jun; KIKUCHI, Rie; SHIMADA, Tomoka; MIYASHITA, Tokuji
- 2E1-03 Selective reflection in the visible region withthin film of poly (quinoxaline-2,3-diyl)s (Graduate School of Engineering, Kyoto Univ.) TAKAGI, Keisuke; NAGATA, Yuuya; SUGINOME, Michinori
- 2E1-04 Synthesis and optical properties of light-emitting polymeric materials containing fluorene and boron diketonate (Kyoto Univ.; Osaka Gas Chemicals Co., Ltd.) OKAWA, Toshifumi; NAGAI, Atsushi; TANAKA, Kazuo; CHUJO, Yoshiki
- **2E1-05\*** The synthesis and resist property of doublecalixarene (Beryllus) derivatives with pendant photo-chemical reactive groups (Kanagawa Univ.) SEKI, Hiroyuki; KUDO, Hiroto; NISHIKUBO, Tadatomi

Chair: NAGATA, Yuuya (10:10~11:10)

- \* 10:00-10:10: interval for laptop PC connection.(2E1-08, 2E1-10, 2E1-12, 2E1-13)
- **2E1-08\*** Luminescence Properties of Pendant-Type and Main-Chain-Type Organoboron Aminoquinolate Polymers (Graduate School of Engineering, Kyoto Univ.) TOKORO, Yuichiro; NAGAI, Atsushi; TANAKA, Kazuo; CHUJO, Yoshiki
- **2E1-10\*** Responsive Materials by Large-Area Three-Dimensional Molecular Ordering of a Polymer Brush (Univ. of Tokyo; RIKEN) HOSONO, Nobuhiko; KAJITANI, Takashi; FUKUSHIMA, Takanori; AIDA, Takuzo
- 2E1-12 Synthesis and Refractive-index Property of Polyhedral Oligomeric silsesquioxane Derivatives with pendant Bicycloorthoester Groups. (Fac. Eng., Kanagawa Univ.) SUZUKI, Jouji; KUDO, Hiroto; NISHIKUBO, Tadatomi
- 2E1-13 Synthesis and Refractive-index change property of the calixresorcin[4] arene Derivatives with pendant spiroorthoester Groups. (Fac. Eng., Kanagawa Univ.) HAMAGUCHI, Kuniaki; SHIMIZU, Tatsuki; KUDO, Hiroto; NISHIKUBO, Tadatomi

Chair: OYAMA, Toshiyuki (11:20 $\sim$ 12:10)

- \* 11:10-11:20: interval for laptop PC connection.(2E1-15, 2E1-16, 2E1-17)
- 2E1-15 Synthesis of Doublecalixarene Derivative with Pendant Adamantyl Ester Group and Their Application for EUV Resist Materials. (Fac. Eng., Kanagawa Univ.) MORIYAMA, Kazuki; KUDOU, Hiroto; NISHIKUBO, Tadatomi
- **2E1-16** Synthesis and Photo Property of Polymeric Ionic Liquid Film Containing Fluorescent Dye moiety (Department of Chemistry, Biotechnology, and Chemical Engineering, Kagoshima Univ.) YAMAMOTO, Kazuya; WAKIZONO, Satoshi; KADOKAWA, Jun-ichi
- 2E1-17 Young Scholar Lectures of CSJ Development of light-driven functional carbon nanotube-polymer composite (HRI, AIST) MIYAKO, Eijiro

# Sunday, March 27, PM

Chair: SEKI, Takahiro (14:30~15:30)

- \* 14:20-14:30: interval for laptop PC connection.(2E1-34, 2E1-35, 2E1-36, 2E1-38)
- **2E1-34** Synthesis of an Amphiphilic Polythiophene Terminated with an Isothiouronium Unit (Tokyo Metropolitan Univ.) MINAMI, Tsuyoshi; OZAWA, Shunsuke; NISHIYABU, Ryuhei; KUBO, Yuji
- 2E1-35 Synthesis of a Poly(1,3-diketone) via Transformation of a Polyisox-azole and the Characterization of the Polymer (Department of Organic and Polymeric Materials, Tokyo Inst. of Tech.) MATSUMURA, Tohru; YONEKAWA, Morio; LEE, Young-gi; KOYAMA, Yasuhito; TAKATA, Toshikazu
- 2E1-36\* Syntheses of π-Conjugated Polymers with Imidazolium Units in the Main Chain and their Evaluation of Photo and Electrochemical Properties (Nara Inst. Sci. Tech.) TOBA, Masaya; NAKASHIMA, Takuya; KAWAI,

Tsuvoshi

2E1-38\* Polarized Emission of Oriented Bio-based Liquid Crystalline Copolymers derived from Wholly Aromatic Amino Acid (Sch. Mat. Sci., JAIST) KAN, Kai; KANEKO, Daisaku; KANEKO, Tatsuo

Chair: KUDO, Hiroto (15:40~16:40)

- \* 15:30-15:40: interval for laptop PC connection.(2E1-41, 2E1-43, 2E1-45, 2E1-46)
- 2E1-41\*† Photoresponsive molecular spling by continuous structure of cinnamoyl groups (Department of Material Science, Japan Advanced Institute of Science and Technology) YASAKI, Katsuaki; KANEKO, Daisaku; KANEKO, Tatsuo
- **2E1-43\*** Development of negative-tone photosensitive polyimides developable with aqueous alkaline solution by reaction development patterning (Yokohama National Univ.) OYAMA, Toshiyuki; NAKAMURA, Yumiko; TAKAHASHI, Akio
- 2E1-45 Photoresponse in liquid crystalline structure and Morphologies for liquid crystalline azobenzene block copolymers with poly(methylmethacrylate). (Grad. Sch. Eng., Nagoya Univ.) NIMURA, Yuki; NAGANO, Shusaku; SEKI, Takahiro
- 2E1-46 Photo-responsive function of caged polymer-modified liposomes (Grad. Sch. Mater. Sci., Nara Inst. Sci. and Technol.) TSUJI, Yasutaka; YASUHARA, Kazuma; KIKUCHI, Jyun-ichi

Chair: NAGAI, Atsushi (16:50 $\sim$ 17:30)

- \* 16:40-16:50: interval for laptop PC connection.(2E1-48, 2E1-49, 2E1-51)
- **2E1-48** Efficient electron transfer through dendrimer having potential gradient (Tokyo Institute of Technology) KOBAYASHI, Hiroki; IMAOKA, Takane; YAMAMOTO, Kimihisa
- **2E1-49\*** Recognition of Cell Membranes by Amphiphilic Polymers and Their Antimicrobial Activity (Grad. Sch. Mater. Sci., Nara Inst. of Sci. and Technol.) YASUHARA, Kazuma; TSUKAMOTO, Manami; IKEMATSU, Chie; KIKUCHI, Jun-ichi
- 2E1-51 Evaluation of the action mechanism of antimicrobial polymers using giant vesicles (Nara Inst. Sci. and Tech.) TSUKAMOTO, Manami; YASUHARA, Kazuma; KIKUCHI, Jun-ichi

#### Monday, March 28, AM

Chair: MIURA, Yoshiko (9:00  $\sim$ 10:00)

- \* 8:50-9:00: interval for laptop PC connection.(3E1-01, 3E1-02, 3E1-03, 3E1-05)
- **3E1-01** Synthesis of cationic polyhydroxyurethane and complexation of the polymer with DNA (Department of Chemistry and Chemical Engineering, Yamagata Univ.) OCHIAI, Bungo; HANDA, Atsushi
- **3E1-02** Design of Molecular Glues with Bioamputatable Sticky Parts and Their Application to siRNA Delivery to Living Cells (School of Engineering, The Univ. of Tokyo) NEMOTO, Harei; OKURO, Kou; MIYATA, Kanjiro; KATAOKA, Kazunori; AIDA, Takuzo
- 3E1-03\* Hybridization of DNA/Carbon Nanotube Complex with Polycation (Kyushu Univ.) FUJIGAYA, Tsuyohiko; YAMAMOTO, Yuki; KANO, Arihiro; MARUYAMA, Atsushi; NAKASHIMA, Naotoshi
- **3E1-05\*** Development of suface modification of nanoparticles for functional <sup>19</sup>F NMR probes (Graduate School of Engineering, Kyoto Univ.) KITAMURA, Narufumi; TANAKA, Kazuo; CHUJO, Yoshiki

Chair: OCHIAI, Bungo (10:10 $\sim$ 11:10)

- \* 10:00-10:10: interval for laptop PC connection.(3E1-08, 3E1-10, 3E1-11, 3E1-12, 3E1-13)
- 3E1-08\* Biomaterial fabrication of glycopolymers via RAFT living radical polymerization (Kyushu Univ.) MIURA, Yoshiko; TOYOSHIMA, Masavuki
- 3E1-10 Development of signal regulators for functional NMR probes using the effect of paramagnetic relaxation enhancement (Kyoto Univ.) HIRAOKA, Tatsuhiro; KITAMURA, Narufumi; TANAKA, Kazuo; CHUJO, Yoshiki
- 3E1-11 Influence on recognition ability in biomolecular complexes by the addition of POSS (Kyoto Univ.) MURAKAMI, Masahiro; TANAKA, Kazuo; CHUJO, Yoshiki
- 3E1-12 Protein Immobilization onto Membrane of Polymer IncludingHydrophilic or Hydrophobic Segment in the End Group and Characterizationof Membrane Functionality. (Konan Univ.) TERAO, Kazuhisa; MIYAKE, Junpei; WATANABE, Junji; IKEDA, Yoshiyuki
- **3E1-13** New polymer hydrogelators based on L-lysine (Shinshu Univ.) SUGIYAMA, Yoshitaka; SUZUKI, Masahiro; HANABUSA, Kenji

Chair: TANAKA, Kazuo (11:20∼12:20)

- \* 11:10-11:20: interval for laptop PC connection.(3E1-15, 3E1-16, 3E1-18, 3E1-19, 3E1-20)
- **3E1-15** Synthesis of gelators having α-olefinic segment and polymerization of the gels. (Shinshu Univ.) OTOGAWA, Katsutoshi; HANABUSA, Kenji; SUZUKI, Masahiro
- **3E1-16\***<sup>†</sup> Function of Hybrid Hydrogels of Nanogel and Liposomes (Tokyo Medical & Dental Univ.; Global COE; NTT DOCOMO Inc. Research Laboratories) SEKINE, Yurina; MORITANI, Yuki; AKIYOSHI, Kazunari

- 3E1-18 Fabrication of gel electrolytes by gelators containing vinyl group and measurement of ionic conductivities (Shinshu Univ.) NIWA, Saori; SUZUKI, Masahiro; HANABUSA, Kenji
- **3E1-19** Development of poly(dimethylsiloxane) type of gelators and their gelation properties (Shinshu Univ.) TANDOU, Akihiro; SUZUKI, Masahiro; HANABUSA, Kenji
- 3E1-20 Sinthesis of Stimuli-responsive Polysilsesquioxane having phase separation properties. (Nat. Def. Acad.) MIYASAKA, Yohei; YAMAMOTO, Shin-ichi; MORIYA, Osamu

#### Monday, March 28, PM

Chair: HOJO, Hirohiko (13:30∼14:30)

- \* 13:20-13:30: interval for laptop PC connection.(3E1-28, 3E1-29, 3E1-30, 3E1-31, 3E1-32, 3E1-33)
- 3E1-28 Polyelectrolyte Gels equipped with mesogenic group (Depairtment of Chemistry, Faculty of Science, Hokkaidou Univ.) NISHIKORI, Yusuke; ISEDA, Kazuya; KOKADO, Kenta; SADA, Kazuki
- **3E1-29** Synthesis of Aromatic Polymers by Three-Component Coupling Polymerization of Aryl Dihalides, Aryl Diboronic Acids, and Sulfonated Alkynes and Their Application to Polymeric Electrolytes. (Interdisciplinary Graduate School of Science and Engineering, Tokyo Institute of Technology) TSUKUDA, Hideki; TOMITA, Ikuyoshi
- **3E1-30** Fabrication and Characterization of Slide-ring Elastomers (Grad. Sch. Eng., Nagoya Univ.) GOTO, Hiroaki; IMRAN, Abu Bin; TAKEOKA, Yukikazu; SEKI, Takahiro; SAKAI, Yasuhiro; ITO, Kohzo
- 3E1-31 Changing in aggregation form of stimuli-responsive gel particles in solution (Graduate School of Engineering Nagoya Univ.) KONDO, Daiki; GOTO, Hiroaki; IMRAN, Abu Bin; TAKEOKA, Yukikazu; SEKI, Takahiro
- 3E1-32 Poly(dimethylsiloxane)-typed organogelators with L-isolucine and L-valine derivatives. (Shinshu Univ.) SUZUKI, Takeshi; SUZUKI, Masahiro; HANABUSA, Kenji
- 3E1-33 New cell culture materials using supramolecular networks formed by L-lysine hudrogelators (Shinshu Univ.) NASU, Masaki; SUZUKI, Masahiro: TERAMOTO, Akira: ABE, Kouii: HANABUSA, Kenii

Chair: ISHIFUNE, Manabu (14:40 $\sim$ 15:40)

- \* 14:30-14:40: interval for laptop PC connection.(3E1-35, 3E1-37, 3E1-39)
- **3E1-35\*** Development of a Novel Dendrimer Gel (AIST) HARA, Yusuke
- **3E1-37\*** Development of Nanostructured Polymer Electrolytes by Photopolymerization of Ionic Liquid Crystals (The Univ. of Tokyo) YOSHIO, Masafumi; ICHIKAWA, Takahiro; OHNO, Hiroyuki; KATO, Takashi
- 3E1-39\*† Preparation of Composite Films with Lipophilic Polyelectrolytes Working in Non-polar Solvents (Hokkaido Univ.; Osaka Univ.; Hokkaido Univ.) OHTA, Masahiko; ONO, Toshikazu; KOKADO, Kenta; SADA, Kazuki

Chair: NEMOTO, Tadamasa (15:50 $\sim$ 16:50)

- \* 15:40-15:50: interval for laptop PC connection.(3E1-42, 3E1-43, 3E1-44, 3E1-45, 3E1-46, 3E1-47)
- **3E1-42** Radical polymerization of styrene bearing a dithiocarbamate (DC) unit: Preparation, characterization of hyperbranched polystyrene and DC/halogen exchange. (Nissan Chemical Industries, ltd; Institute for Materials Chemistry and Engineering Kyushu Univ.) KOJIMA, Keisuke; TANAKA, Akihiro; CHIKAMA, Katsumi; MUSASHI, Hideki; SUE, Takashi; NAGASHIMA, Hideo
- **3E1-43** Nucleophilic substitution of hyperbranched polystyrene bearing terminal benzylic halides. (Nissan Chemical Industries, ltd; Institute for Materials Chemistry and Engineering Kyushu Univ.) KOJIMA, Keisuke; TANAKA, Akihiro; CHIKAMA, Katsumi; MUSASHI, Hideki; SUE, Takashi; NISHIKATA, Takashi; IGAWA, Kazunobu; NAGASHIMA, Hideo
- 3E1-44 Hyper-branched polystyrenes bearing ammonium salts at the polymer end: Application to a support for nanometal particles. (Nissan Chemical Industries, Itd; Institute for Materials Chemistry and Engineering Kyushu Univ.) KOJIMA, Keisuke; TANAKA, Akihiro; CHIKAMA, Katsumi; MUSASHI, Hideki; SUE, Takashi; NISHIKATA, Takashi; NAGASHIMA, Hideo
- 3E1-45 Incorporation of organic substrates into the chiral hydrophobic fields generated by optically active thermoresponsive polymers and on these polymergrafted graphite surface (Kinki Univ.) UEMUKAI, Toru; ISHIFUNE, Manabu; HAMANAKA, Takahiro; KUDO, Tomoya
- 3E1-46 New Flame Retardant Technique of Polyolefin Resin Using Boric Acid Series Compounds (Kanazawa Institute of Technology) AKAO, Yuya; KUMAGAI, Takenori; TSUYUMOTO, Isao
- 3E1-47 Development of molecularly inprinted polymers crosslinked by non-covalent bondingbetween functional groups (Dep. of Chemistry, fac. of Science, Kanagawa Univ.) KATOH, Masaki; KIHARA, Nobuhiro

Chair: SADA, Kazuki (17:00∼17:40)

- \* 16:50-17:00: interval for laptop PC connection.(3E1-49, 3E1-51)
- **3E1-49\***<sup>†</sup> Fabrication of stimuli-responsive nanomaterials using a polymer wrapping technique with helix-forming polysaccharide derivatives (ISIT, Nanotech. Lab.) SHIRAKI, Tomohiro; TSUCHIYA, Youichi; LE, Thi Ngoc Lien; SHINKAI, Seiji
- **3E1-51\***<sup>†</sup> Self-healing capacities of crystalline polymers end-functionalized with

hydrogen bonding units (IIS, The Univ. of Tokyo) OYA, Nobuhiro; YOSHIE. Naoko

Chair: YAMAMOTO, Shin-Ichi (17:50~18:30)

- \* 17:40-17:50: interval for laptop PC connection.(3E1-54, 3E1-55, 3E1-56, 3E1-57)
- 3E1-54 Preparation of Polystyrene Particles by Enzyme-mediated Miniemulsion Polymerization (Graduate School of Engineering, Chiba Univ.) KOBAYASHI, Ayaka; KOHRI, Michinari; TANIGUCHI, Tatsuo; NAKAHIRA, Takayuki
- 3E1-55 Preparation of Lignopheno-l with Poly(2-ethyl-2-oxazoline) and Its Application for Polymer Composite Materials (TITECH; Konishi Lab.) NEMOTO, Tadamasa; KONISHI, Gen-ichi; FUNAOKA, Masamitsu
- **3E1-56** Periodical nanometer-scale patterning in immiscible polmer-blends thin films (IIS, The Univ. of Tokyo) YOSHIE, Naoko; KODAMA, Shunsuke
- 3E1-57 Synthesis and Charge and Discharge Properties of New Disulfide Polymer (Yonago National College of Technology) TERAMOTO, Eriko; YAMAMOTO, Kohei; TANIFUJI, Naoki

# Room E2

Bldg. 11 11-35

# Polymer

### Saturday, March 26, AM

Chair: TOMITA, Ikuyoshi  $(9:00\sim10:00)$ 

\* 8:50-9:00: interval for laptop PC connection.(1E2-01, 1E2-02, 1E2-03, 1E2-04, 1E2-05, 1E2-06)

- **1E2-01** Radical Polymerization of *N*-acryloyl-2-Oxazolidinone Derivatives at Low Temperatures in the Presence of Optically Active Diols (Department of Chemical Science and Technology, The Univ. of Tokushima) SEKIGUCHI, Saori; HIRANO, Tomohiro; NISHIUCHI, Masaki; UTE, Koichi
- 1E2-02 Synthesis of poly(vinylene-arsine)- platinum(II) complexes and their optical properties (Kyoto institute of technology) ABE, Koushi; NAKA, Kensuke
- 1E2-03 Reversible crosslinking of polymer bearing hydrazide side chain by only oxidation reaction. (Dep. of chemistry, Fac. of Science, kanagawa Univ.) NAGASHIMA, Kentaro: KIHARA, Nobuhiro
- 1E2-04 Stnthesis of 4-Iodotetrahydropyran-Containing Polymers via Prins Cyclization (Tokyo Institute of Technology) TAKEI, Naoko; INAGI, Shinsuke; FUCHIGAMI, Toshio
- 1E2-05 Synthesis and Properties of Helical Polyisocyanides with Pyrenyl Pendants (Grad. Sch. Sci., Osaka Univ.) SEKINE, Tomoko; TOKUHARA, Shingo; ONITSUKA, Kiyotaka
- 1E2-06 Synthesis and Properties of Polyisocyanides Having Crown Ether Pendants (Grad. Sch. Sci., Osaka Univ.) TOKUHARA, Shingo; SEKINE, Tomoko; ONITSUKA, Kiyotaka

Chair: NAKA, Kensuke  $(10:10\sim11:10)$ 

- \* 10:00-10:10: interval for laptop PC connection.(1E2-08, 1E2-09, 1E2-10, 1E2-12, 1E2-13)
- **1E2–08** Living radical copolymerization of acrylates and  $\alpha$ ,  $\alpha$ -dialkylethylenes using heavier organoheteroatom chain transfer agents. (ICR, Kyoto Univ.; CREST, JST) MISHIMA, Eri; TAMURA, Tomoki; YAMAGO, Shigeru
- **1E2-09** Organoheteroatom-mediated living radical polymerizationand radical coupling reaction of isoprene (ICR, Kyoto Univ.; CREST, JST) NAKAMURA, Yasuyuki; TOMITA, Sora; YAMAGO, Shigeru
- **1E2-10\*** Precise Synthesis of ω-End Functionalized Polymer Using the Heteroatom-Metal Exchange Reactions of Organotellurium, Organostibine, and Organobismuthine Compounds (Institute for Chemical Research, Kyoto Univ.) KAYAHARA, Eiichi; YAMADA, Hiroto; YAMAGO, Shigeru
- **1E2–12** Synthesis of Functional  $\pi$ -Conjugated Polymers by Three-Component Coupling Polymerization of Thioboranes, Terminal Diynes, and Aromatic Dihalides. (Interdisciplinary Graduate School of Science and Engineering, Tokyo Institute of Technology) ISOBE, Kousuke; TOMITA, Ikuyoshi
- 1E2-13<sup>†</sup> Novel Ruthenium-Catalyzed Coupling Polymerization of Pyridine Derivatives and Aryl Dihalides through C-H Bonds Activation Process (Interdisciplinary Graduate School of Science and Engineering, Tokyo Institute of Technology) KAWAMITSU, Shoichi; TOMITA, Ikuyoshi

Chair: INAGI, Shinsuke (11:20 $\sim$ 12:20)

- \* 11:10-11:20: interval for laptop PC connection.(1E2-15, 1E2-16, 1E2-17, 1E2-18, 1E2-19, 1E2-20)
- 1E2-15 Syntheses of POSS-containing hyper branched polymers (Kyoto institute of technology) IRIE, Yasuyuki; NAKA, Kensuke
- 1E2-16 Synthesis of Ladder Cyclic Oligomer by the Dynamic Covalent Chemical Reaction of Resorcinol and 1,6-hexanedial. (Fac. Eng., Kanagawa Univ.) SATOU, Tomoharu; KUDO, Hiroto; NISHIKUBO, Tadatomi

- **1E2-17** Synthesis of Well-defined Star-shaped Polystyrenes Using Noria Derivatives as a Core and Their Fanctionality. (Fac. Eng., Kanagawa Univ.) KIHARA, Kousuke: KUDO, Hiroto: NISHIKUBO, Tadatomi
- 1E2-18 Bottom-up Fabrication of Organic-Inorganic Nanohybrid Materials Based on Living Coordination Polymerization of Allene Derivatives (Tokyo Institute of Technology Interdisciplinary Graduate School of Science and Engineering Department of Electronic Chemistry) OGAWA, Takahiro; TOMITA, Ikuvoshi
- 1E2-19 Synthesis of superhydrophobic functional particles based on living coordination dispersion polymerization of fluorous-substituted allene derivatives (Tokyo Institute of Technology, Interdisciplinary Graduate School of Science and Engineering, Department of Electronic Chemistry) HISAMRUA, Kenta; TOMITA, Ikuyoshi
- **1E2-20** Synthesis of Poly(methacrylate) with a Cationic End Group using ATRP Initiators End-Modified by Cycloheptatriene Derivatives (Chemical Resources Laboratory, Tokyo Institute of Technology) NANAMIYA, Kenta; IYODA, Tomokazu; HADANO, Shingo

# Saturday, March 26, PM

Chair: MATSUMOTO, Akikazu (13:30∼14:30)

- \* 13:20-13:30: interval for laptop PC connection.(1E2-28, 1E2-30, 1E2-32, 1E2-33)
- **1E2-28\*** Structural Analysis of Poly(p-benzamide)s (Kanagawa Univ.; Department of Material and Life Chemistry) MIKAMI, Koichiro; MURANAKA, Atsuya; UCHIYAMA, Masanobu; YOKOYAMA, Akihiro; YOKOZAWA, Tsutomu
- 1E2-30\*† Synthesis of a rigid helical polymer using C<sub>2</sub> chiral spirobifluorene (Dept. of Organic and Polymeric Materials, Tokyo Tech.) SETO, Ryota; XU, Kun; KOYAMA, Yasuhito; NAKAZONO, Kazuko; TAKATA, Toshikazu
- **1E2-32** Development of a novel compatible phenolic resin with polar functional groups (Kobe City College of Technology; Department of Applied Chemistry) FUKUDA, Hitomi; NEMOTO, Tadamasa
- 1E2-33 Composition of a novel reactive novolac with organic or inorganic commodity polymers and application of its novolac to the initiator for the ring-opening polymerization. (Kobe City College of Technology; Department of Applied Chemistry) MATSUSHITA, Nao; NEMOTO, Tadamasa

Chair: HADANO, Shingo (14:40~15:40)

- \* 14:30-14:40: interval for laptop PC connection.(1E2-35, 1E2-37, 1E2-39)
- **1E2-35\*** Preparation of unique polymer architectures by anionic grafting from approach via lithiation of poly(*p*-methylstyrene)s (Kyoto Inst. Tech.) ADACHI, Kaoru; NISHIMURA, Hideki; HAMAGUCHI, Yusuke; TSUKAHARA, Yasuhisa
- **1E2-37\*** Mesh-Size Control of Chemical Gels with Alkoxyamine Cross-linkers by Precise Monomer Insertion (IMCE Kyushu Univ.; JASRI) OTSUKA, Hideyuki; AMAMOTO, Yoshifumi; KIKUCHI, Moriya; MASUNAGA, Hiroyasu; OGAWA, Hiroki; SASAKI, Sono; TAKAHARA, Atsushi
- 1E2-39\* Design of dismantlable adhesive materials using main-chain degradable block polymers (Graduate School of Engineering, Osaka City Univ.) SATO, Eriko; HAGIHARA, Takashi; MATSUMOTO, Akikazu

Chair: SHIONO, Takeshi (15:50 $\sim$ 16:50)

- \* 15:40-15:50: interval for laptop PC connection.(1E2-42, 1E2-44, 1E2-46)
- **1E2-42\*** Polycondensation via Direct Arylation of Tetrafluorobenzene for syntheses of π-conjugated polymers (Univ. of Tsukuba TIMS) LU, Wei; KUWABARA, Junpei; KANBARA, Takaki
- 1E2-44\*\* Design and Photoconductivity of Metallophthalocyanine Two-Dimensional Polymers (Institute for Molecular Science) DING, Xuesong; GUO, Jia; SEKI, Shu; SAEKI, Akinori; HONSHO, Yoshihito; JIANG, Donglin
- 1E2-46\*\* Photo-induced Shape-memory Polyesters Based on Coumarate Derivatives (Department of Material Science, Japan Advanced Institute of Science and Technology) WANG, Siqian; KANEKO, Daisaku; KANEKO, Tatsuo

Chair: KANBARA, Takaki (17:00 $\sim$ 18:00)

- \* 16:50-17:00: interval for laptop PC connection.(1E2-49, 1E2-50, 1E2-51, 1E2-52, 1E2-53, 1E2-54)
- 1E2-49 Synthesis and properties of novel polyester via polycondensation of itaconic acid and isosorbide (Hiroshima Univ.) SAKAGUCHI, Keisuke; CAI, Zhengguo; NAKAYAMA, Yuushou; SHIONO, Takeshi
- 1E2-50 The effects of polymerization temperature and solvent on the ring-opening polymerization of omega-pentadecalactone with rare earth metal complexes (Hiroshima Univ.) KUSABA, Keisuke; CAI, Zhengguo; NAKAYAMA, Yuushou: SHIONO. Takeshi
- 1E2-51 Synthesis of polymers with hypercoordinated silyl complex in the main chain (Graduate School of Engineering, Kyoto Univ.) YEO, Hyeonuk; TOKORO, Yuichiro; TANAKA, Kazuo; CHUJO, Yoshiki
- 1E2-52 Thermoresponsive tadpole-shaped polymers synthesized by RAFT polymerization of poly(vinyl ether)-based macromonomers and NIPAM (Grad. School of Sci. and Technol., Kyoto Inst. Technol.) MINODA, Masahiko; SHIMIZU, Tatsuya; MOTOYANAGI, Jin
- **1E2-53** Mechanism of radiation-induced graft polymerization into fluorinated polymersubstrates studied by new characterization method of graft polymers (JAEA QuBS) HAMAKAWA, Shotaro; HASEGAWA, Shin;

MAEKAWA, Yasunari

**1E2-54** Synthesis of Poly(TEMPO methacrylate) Brushes and Electrochemical Properties of the Modified ITO Electrode (Dept of Appl. Chem., Waseda Univ.) SASAKI, Yuto; TAKAHASHI, Katsuyuki; NISHIDE, Hiroyuki

#### Sunday, March 27, AM

Chair: MORISAKI, Yasuhiro (9:00 ~10:00)

- \* 8:50-9:00: interval for laptop PC connection.(2E2-01, 2E2-02, 2E2-03, 2E2-04, 2E2-05, 2E2-06)
- 2E2-01 Synthesis of alicyclic polyimides using a novel unsymmetric spiro dianhydride having regioselective reactivity. (IIS, The Univ. of Tokyo) SHIRAI, Kazuaki; AKAGAWA, Kengo; KUDO, Kazuaki
- 2E2-02 Pd(0)-Catalyzed Polyaddition of Propargylic Oxiranes with Nitrogen Nucleophiles (Dept. Appl. Chem., Nat. Def. Acad.) MARUYAMA, Yukari; KOIZUMI, Toshio
- 2E2-03 Preparation of regioregular blockcopolymers consisisting of poly(3-hexylthiophene) and poly(ethylene oxide) by using click chemistry (Yokohama National Univ.) TANI, Takushi; IMAIZUMI, Satoru; KOKUBO, Hisashi; WATANABE, Masayoshi
- 2E2-04 Polymerization study for the synthesis of aromatic ladder polyamide (Kanagawa Univ. Department of Material and Life Chemistry) KIYOTA, Ryohei; YOKOYAMA, Akihiro; YOKOZAWA, Tsutomu
- 2E2-05 Synthesis and Oxidative Degradation of Poly(acylsemicarbazide) (Dep. of Chemistry, Fac. of Science, Kanagawa Univ.) KATAYAMA, Midori: KIHARA. Nobuhiro
- 2E2-06<sup>†</sup> Vinylarene/Polar Vinyl Monomer/CO Terpolymerization Under Palladium Catalysis (Grad. School of Engineering, The Univ. of Tokyo) KAGEYAMA, Takeharu; ITO, Shingo; NOZAKI, Kyoko

Chair: YOKOZAWA, Tsutomu (10:10~11:10)

- \* 10:00-10:10: interval for laptop PC connection.(2E2-08, 2E2-10, 2E2-12)
- **2E2-08\*** Designer Star Polymers via Living Radical Polymerizationtoward Multi-Functional Microgel-Core Vessel (Graduate School of Engineering, Kyoto Univ.) TERASHIMA, Takaya; SAWAMOTO, Mitsuo
- 2E2-10\* Controlled Polymerization of Substituted Acetylenes by Novel Rhodium Catalyst Systems (Kyoto Univ.; Graduate School of Engineering) ONISHI, Naoya; SHIOTSUKI, Masashi; SANDA, Fumio; MASUDA. Toshio
- 2E2-12\*\* Design and functions of porphyrin-based two-dimensional polymers and covalent organic frameworks (PRESTO, JST; Institute for Molecular Science) FENG, Xiao; JIANG, Donglin

Chair: KIHARA, Nobuhiro (11:20~12:10)

- \*11:10-11:20: interval for laptop PC connection.(2E2-15, 2E2-16, 2E2-17, 2E2-18, 2E2-19)
- **2E2-15** Synthesis and emission properties of europium metallic-organic hybrid polymer (NIMS; JST-CREST) SATO, Takashi; HIGUCHI, Masayoshi
- **2E2-16**\* Design And Synthesis of New Azo Bridging Ligand and Properties of Metal Coordination Polymers (NIMS; JST-CREST) BANDYOPADHYAY, Anasuya; HIGUCHI, Masayoshi
- 2E2-17<sup>#</sup> Synthesis and Characterization of Cu & Pt based Organic-Metallic hybrid polymers (NIMS; JST-CREST) HOSSAIN, Md.Delwar; HIGUCHI, Masayoshi
- **2E2-18** Partially Cross-linked Nanoparticles and Their Application to Tumor Imaging (Graduate School of Engineering, Kyoto Univ.) MIKI, Koji; KIMURA, Akinori; MATSUOKA, Hideki; HARADA, Hiroshi; HIRAOKA, Masahiro: OHE, Kouichi
- **2E2-19** Evaluation of the Stability of Amphiphilic Block Copolymers Having Hydrophobic Amino Acids and Application in Tumor Imaging (Graduate School of Engineering, Kyoto Univ.) MIKI, Koji; NAKANO, Katsuya; MATSUOKA, Hideki; HARADA, Hiroshi; HIRAOKA, Masahiro; OHE, Kouichi

# Sunday, March 27, PM

Chair: JIANG, Dong-Lin (14:30~15:30)

- \* 14:20-14:30: interval for laptop PC connection.(2E2-34, 2E2-36, 2E2-37, 2E2-38, 2E2-39)
- 2E2-34\*† Application of pi-Conjugated Polymers Containing Versatile Heteroaoms via Organometallic Polymers Having Titanacyclopentadiene Units to Chemosensors. (Interdisciplinary Graduate School of Science and Engineering, Tokyo Institute of Technology) NISHIYAMA, Hiroki; TOMITA. Ikuvoshi
- 2E2-36 Synthesis and photoresponse of acrylamide copolymer side-chain benzyl viologen (Kanagawa Univ.) UENO, Manami; MIYASAKA, Makoto; KAMEYAMA, Atsushi
- **2E2-37** Synthesis and Reaction of Hyperbranched polymers with Terminal benzoic acid S-(benzoxazole) (Kanagawa Univ.) UCHIDA, Shota; MIYASAKA, Makoto; KAMEYAMA, Atsushi
- 2E2-38 Effects of Addition of Surfactants on Reaction of PET Fibers with Ethylenediamine in the Aqueous Solution (Osaka Municipal Technical Research Institute) OHE, Takeru; YOSHIMURA, Yurika
- 2E2-39 Chemical Modification and Optoelectronic Properties of Phospholecontaining pi-Conjugated Polymers Obtained from Organotitanium Polymers

(Tokyo Institute of Technology Interdisciplinary Graduate School of Science and Engineering Department of Electronic Chemistry) MATSUMURA, Yoshimasa; TOMITA, Ikuyoshi

Chair: MIYASAKA, Makoto (15:40~16:40)

- \* 15:30-15:40: interval for laptop PC connection.(2E2-41, 2E2-42, 2E2-44, 2E2-46)
- 2E2-41 Micro-phase-separated structures and vertical distribution of homo-polymers in PS-b-PB/PS and PS-b-PMMA/PMMA blend films. (Graduate School of Science and Engineering, Chuo Univ.) TAKIGUCHI, Satoshi; NIKI, Kaori; SHIDO, Hitoshi
- **2E2–42\*\*** pH-responsive Carboxylic  $\beta$ -1,3-Glucan for One Dimensional Complex with Guest Macromolecules (Graduate School of Engineering, Kyushu Univ.) LE, T.N. Lien; SHIRAKI, Tomohiro; TSUCHIYA, Youichi; TOKUNAGA, Daisuke; TAMARU, Shuichi; ENOMOTO, Naoya; HOJO, Junichi; SHINKAI, Seiji
- **2E2-44\*** Helical pitch control by using side-chain structures of poly(alkyl propiolate)s (Muroran Institute of Technology, Hokkaido Univ.) YOSHIDA, Yoshiaki; MAWATARI, Yasuteru; SEKI, Chigusa; HIRAOKI, Toshihumi; MATSUYAMA, Haruo; TABATA, Masayoshi
- 2E2-46 The preparation of cross-linked it-PMMA/st-PMAA stereocomplex with amide bond (Osaka Univ.) MAEGAWA, Masumi; AJIRO, Hiroharu; AKASHI, Mitsuru

Chair:,  $(16:50\sim17:30)$ 

- \* 16:40-16:50: interval for laptop PC connection.(2E2-48, 2E2-49, 2E2-51)
- **2E2-48** Estimation of Amorphous Region in Oriented Crystalline Fluorinated Films with Transparency. (Fac. Eng., Yamagata Univ.) NYUI, Tatsuki; FUJIMORI, Atsuhiro
- 2E2-49\* Advanced bioplastic composed of non-food plant resources: cardanol-grafted cellulose diacetate (NEC Co.Ltd) TANAKA, Shukichi; MOON, Sungil; IJI, Masatoshi
- 2E2-51 Solid state NMR study on polyamides controlled the cross-linking (Tokyo Univ. of Agriculture and Technology; Nat. Def. Acad.; Sumitomo Bakelite Co.Ltd) MATSUMOTO, Mitsutaka; ASANO, Atsushi; YAMAUCHI, Kazuo; ASAKURA, Tetsuo

# Monday, March 28, AM

Chair: NARUTAKI, Ayae  $(9:00 \sim 10:10)$ 

- \* 8:50-9:00: interval for laptop PC connection.(3E2-01, 3E2-02, 3E2-04, 3E2-05, 3E2-07)
- **3E2-01** Molecular Shape Discrimination of a Dendrimer with Binary Axial Coordination. (Chemical Resources Laboratory, Tokyo Institute of Technology) YAMASHITA, Tetsuro; IMAOKA, Takane; YAMAMOTO, Kimihisa
- **3E2-02\*** Development of a Phenylazomethine Dendrimer with Inverted Potential Gradient (Tokyo Institute of Technology, Chemical Resouces Laboratory) ALBRECHT, Ken; YAMAMOTO, Kimihisa
- **3E2-04** Mechanism of Thermal Luminescence Caused by Maillard Reaction between Polylysine and Sugar (Tokyo Univ. of Agriculture and Technology; Japan Applied Technology Inc.) YAMADA, Taishi; KARAKISAWA, Takehito; SEKINE, Masahiko; ISHII, Hiroshi; SATOH, Chikahiro; NAKATA, Munetaka
- **3E2-05\***\* Gelation Properties of the polysaccharides extracted from Aphanothece Stagnina (Sch. Mat. Sci., JAIST) NGUYEN, Quyen Thi Le; OKAJIMA, Maiko; KANEKO, Tatsuo
- **3E2-07** Preparation of Amylose-Biodegradable Polymer Inclusion Complexes by Vine-Twining Polymerization and Their Enzymatic Hydrolysis Behavior (Kagoshima Univ.) NOMURA, Shintaro; KYUTOKU, Tsuyoshi; KANEKO, Yoshiro; KADOKAWA, Jun-ichi

Chair: KANEKO, Yoshiro (10:20∼11:10)

- \* 10:10-10:20: interval for laptop PC connection.(3E2-09, 3E2-10, 3E2-11, 3E2-12)
- **3E2-09** Preparation of chitosan/poly(γ-glutamic acid) complex (Tottori Univ.) HIROTANI, Naomichi; TONOI, Takayuki; IFUKU, Shinsuke; MORIMOTO, Minoru; SAIMOTO, Hiroyuki
- **3E2-10** Formation of Amyloid-like Structures from Block Polypeptides having Elastin Domains (Univ. of Tokyo) NARUTAKI, Ayae; LE, Duc; HANAMURA, Ryo; OKUBO, Tatsuya
- **3E2-11** Preparation of cellulose-chitin composite films using ionic liquids. (Kagoshima Univ.) HIROHAMA, Kanako; MINE, Shozaburo; YAMAMOTO, Kazuya; KADOKAWA, Jun-ichi
- **3E2-12\*** Ultra-sensitive detection of cellulose-degrading microorganisms by using nanofibrous cellulose (JAMSTEC) TSUDOME, Mikiko; DEGUCHI, Shigeru; ITO, Susumu; HORIKOSHI, Koki

Chair: KADOKAWA, Junichi (11:20 $\sim$ 12:20)

- \* 11:10-11:20: interval for laptop PC connection.(3E2-15, 3E2-18, 3E2-19, 3E2-20)
- **3E2-15** CSJ Award for Young Chemists Preparation and Application of Polymer Particles with Phase Separation Structures by Self-Organization (IMRAM, Tohoku Univ.; PRESTO, JST) YABU, Hiroshi
- 3E2-18 Depolymerization of Fucoidan and Its Effect on Cartilage Regenera-

tion under Hydrothermal Treatment (Tottori Univ.) NISHIWAKI, Kazuki; MORI, Daiki; KAWAMOTO, Hitoshi; MINAMI, Saburou; TONOI, Takayuki; IFUKU, Shinsuke; MORIMOTO, Minoru; SAIMOTO, Hiroyuki

- 3E2-19 Physicochemical and adsorption properties of hair (Grad. Sch. Eng., Iwate Univ.) TAKAHASHI, Masanobu; ONODERA, Tetsuya; AISAWA, Sumio; HIRAHARA, Hidetoshi; NARITA, Eiichi; YAMAGISHI, Toshihide
- 3E2-20 Analysis for distribution of relaxation times by gamma distribution function (Tokyo Univ. of Marine Sci. and Tech.) MATSUKAWA, Shingo

# Asian International Symposium -Polymer-

Monday, March 28, PM

Chair: IHARA, Eiji (13:00~13:40)

- **3E2-25**<sup>#</sup> Invited Lecture Construction of POSS-based Biomaterials for Monitoring Biological Events (Kyoto Univ.) TANAKA, Kazuo (13:00∼ 13:20)
- **3E2-27<sup>#</sup> Invited Lecture** Stable Nirtile N-Oxide Chemistry: A Powerful Tool for Modification of Polymer with Unsaturated Bonds (Tokyo Tech) KOYAMA, Yasuhito (13:20∼13:40)

Chair: KANEKO, Takashi (13:40~14:30)

- 3E2-29\* Invited Lecture Transition Metal-Catalyzed Step-Growth Radical Polymerization for Sequence-Regulated Vinyl Polymers (Nagoya Univ.) SATOH, Kotaro (13:40~14:00)
- **3E2−31**<sup>#</sup> Keynote Lecture Synthesis of Novel Amylose Derivatives and Chiral Recognition in Enantioseparation by HPLC (Harbin Eng. Univ., China) SHEN, Jun (14:00~14:30)

Chair: TAKATA, Toshikazu (14:40~15:50)

- **3E2-35**\* Invited Lecture Synthesis of One-handed Helical  $\pi$ -Conjugated Polymers (Niigata Univ.) TERAGUCHI, Masahiro (14:40 $\sim$ 15:00)
- 3E2-37<sup>#</sup> Invited Lecture Hierarchically Controlled Helical Polyacetylene Synthesized in Advanced Asymmetric Liquid Crystal Reaction Field (Kyoto Univ.) GOH. Muniu (15:00∼15:20)
- **3E2-39** Keynote Lecture Transparent High-Temperature Polymers and Their Application as a Substrate of Flexible Displays (Pusan National Univ., Korea) CHOI. Myeon-Cheon (15:20∼15:50)

Chair: KAMIGAITO, Masami (16:00∼17:10)

- **3E2-43<sup>#</sup> Invited Lecture** Structure and Dynamics of Polyrotaxane Investigated by Contrast Variation Neutron Scattering (Japan Atomic Energy Agency) ENDO, Hitoshi (16:90∼16:20)
- Agency) ENDO, Hitoshi (16:00~16:20) **3E2-45**\* Invited Lecture Development of Cage Silsesquioxane-Containing Block Copolymer Lithographic Materials (Tokyo Tech) HAYAKAWA, Teruaki (16:20~16:40)
- 3E2-47# Keynote Lecture Low Cost, Ultralarge-Area Nanopatterning via Directed Molecular Assembly (KAIST, Korea) KIM, Sang Ouk (16:40 ~17:10)

# Room E3

Bldg. 11 11-36

# Physical Organic Chemistry -Reaction Mechanism-

# Saturday, March 26, PM

Chair: YAMATAKA, Hiroshi  $(13:00{\sim}13:50)$ 

- \* 12:50-13:00: interval for laptop PC connection.(1E3-25, 1E3-26, 1E3-27, 1E3-28, 1E3-29)
- **1E3-25** Enantioselective Prevost-Woodward Reaction Using Chiral Hypervalent Iodine (Univ. of Hyogo) FUJITA, Morifumi; WAKITA, Mikimasa; SUGIMURA, Takashi
- 1E3-26 Asymmetric Synthesis of 4-Hydroxyisochromanone Using Hypervalent Iodine (Univ. of Hyogo) MORI, Kazuhiro; FUJITA, Morifumi; SUGIMURA. Takashi
- 1E3-27 Substituent Effect on Reactions of Phenylketenes with Primary Amines - Reactivity of Amide-enol Intermediates (Kyushu Univ. IMCE) RAHMAN, Badal Md.M.; KOBAYASHI, Shinjiro; MISHIMA, Masaaki
- **1E3–28** Gas Phase Unimolecular Dissociation for N,(N')-(di)acylimidazoli-dine-2-thione Derivatives. Role of Indan Skeleton and chain length for Multiple Hydrogen Transfer (Osaka Prefecture Univ.; Univ. of Fukui; Jin'ai Univ.) FUJII, Kazuo; ISA, Kimio; NAKATA, Ryuji; OKADA, Kyoko; YAMAOKA, Hiroshi
- **1E3–29** Substituent Effect on the Rates of  $\alpha$  or  $\beta$  CF<sub>3</sub>-Phenylethyl k  $\Delta$  Acetolyses (Fac. Sci., Niigata Univ.; Grad. Schl. of Sci. and Tech., Niigata Univ.) USUI, Satoshi; KOJIMA, Tatsuya; HAZAMA, Ken; OHTA, Mie; KATO, Keiko; OKAMURA, Mutsuo

Chair: FUJITA, Morifumi (14:00∼14:40)

- \* 13:50-14:00: interval for laptop PC connection.(1E3-31, 1E3-33, 1E3-34)
- 1E3-31\* Direct observation of the denitrogenation process of 2,3-diazabicyclo [2.2.1]hept-2-ene derivatives using ultra short laser pulses. (Dept. Chem., Hiroshima Univ. / JST / UEC) IWAKURA, Izumi; YAGI, Singo; ABE, Manabu; KOBAYASHI, Takayoshi
- 1E3-33 An Analysis of the Reaction Pathway of Phenacyl Chloride with Methoxide Ion 3 (Dept. Chem.., Rikkyo Univ.) SASAGAWA, Keita; YAMATAKA, Hiroshi
- 1E3-34 Kinetics Study on Methylation Mechanism of Phenylmethylnitronate Ambident Anions (Dept. Chem.., Rikkyo Univ.) SAKATA, Tomomi; YAMATAKA. Hiroshi

### Sunday, March 27, PM

Chair: MORI, Seiji (13:00∼13:50)

- \* 12:50-13:00: interval for laptop PC connection.(2E3-25, 2E3-26, 2E3-27, 2E3-28)
- 2E3-25 Substituent Effects on the Gas Phase Stabilities of Phenoxide Ions (Hosei Univ.; Kyushu Univ.; Osaka City Univ.) NAKATA, Kazuhide; FUJIO, Mizue; NISHIMOTO, Kichisuke; TSUNO, Yuho
- **2E3-26**<sup>†</sup> A Theoretical Study of Borderline Mechanism of Nucleophilic Addition/substitution Reaction a-bromoacetophenones (Rikkyo Univ.) ITOH, Shuhei; YAMATAKA, Hiroshi
- 2E3-27 Theoretical study on hydrogen transfer of acyloin derivatives (Rikkyo Univ.) JINGUJI, Masaru; YAMATAKA, Hiroshi
- **2E3-28\*** Automated Exploration of Synthetic Reaction Processes for Perfect Atom Economy by GRRM-GDSP Method (Toyota Phys. Chem. Res. Institute;Grad. School of Science, Tohoku Univ.) OHNO, Koichi; OSADA, Yuto; IWAMOTO, Takeaki

Chair: NAKATA, Kazuhide (14:00 $\sim$ 14:50)

- \* 13:50-14:00: interval for laptop PC connection.(2E3-31, 2E3-32, 2E3-33, 2E3-34)
- 2E3-31 Quantum Chemical Studies on Reaction Mechanisms of the Palladium-Catalyzed Exo-selective Cyanoesterification of Norbornadiene (Coll. Sci., Ibaraki Univ.; Grad. Sch. Natural Science and Technology, Okayama Univ.) MORI, Seiji; ISHIGURO, Yuya; NISHIHARA, Yasushi
- 2E3-32 Structure-mutagenic activity correlation of Nitrated aromatic compounds in the environment (Toho-Univ.) YAMAGAMI, Saburo; NAKADA, Yoshimoto; OHSHIMA, Shigeru
- **2E3-33** Theoretical Study on [3+2]Photocycloaddition Reactions of Naphthalene-1,4-Dinitrile Derivatives with Alkenes. (Shimane Univ.) SHIRATORI, Hideo; KUBO, Yasuo
- **2E3-34\*** Mechanistic Study on the Unusual beta-Carbon-Carbon Bond Cleavage Reaction of Azo Compounds (Hiroshima Univ.) ABE, Manabu; TAMURA, Hiroshi

Chair: KUBO, Yasuo (15:00 $\sim$ 15:50)

- \* 14:50-15:00: interval for laptop PC connection.(2E3-37, 2E3-39, 2E3-40, 2E3-41)
- 2E3-37\* Observation of Non-Distonic Radical Cations Possessing One-Electron σ-Bond Generated by Photoinduced Electron-Transfer Reaction (Grad. Sch. of Eng., Osaka Pref. Univ.; Res. Inst. Mol. Elect. Dev., Osaka Pref. Univ.; Grad. Sch. of Sci., Tohoku Univ.) IKEDA, Hiroshi; ASADA, Naoya; OSHIMA, Mitsuhiro; MIZUNO, Kazuhiko
- 2E3-39 Chemical property of biradicals with an unusual electronic configuration (Hiroshima Univ.) MORIKAWA, Yoshiki; HIRAGA, Yosikazu; ABE, Manabu
- 2E3-40 Spin-alignment of Tetraradicals based on the spin-control of cyclopentane-1,3-diyls (Hiroshima Univ.) OKAMOTO, Kazushige; TAKAGI, Ryukichi; ABE, Manabu
- **2E3-41** Photoracemization of 4,4'-dimethoxy-1,1'-biphenanthrene-2,2'-diol and its control (Graduate School of Engineering, Tohoku Univ.) UCHIYAMA, Yuusei; KANAI, Daiki; MOROHASHI, Naoya; HATTORI, Tetsutaro

Chair: ABE, Manabu (16:00 $\sim$ 16:50)

- \* 15:50-16:00: interval for laptop PC connection.(2E3-43, 2E3-45, 2E3-46, 2E3-47)
- **2E3-43\*** Anion-Induced Electron Transfer of Tetrathiafulvalene Calix[4]pyrrole as an Electron Donor and Anion Guest (Osaka Univ.; Univ. Texas Austin; Univ. Houston) OHKUBO, Kei; KARNAS, Elizabeth; PARK, Jung Su; KADISH, Karl M.; SESSLER, Jonathan L.; FUKUZUMI, Shunichi
- 2E3-45 Photooxygenation and Photoalkoxylation of Benzene Derivatives Catalyzed by 1-Methylquinolinium Derivatives (Osaka Univ.) KOBAYASHI, Takaki; OHKUBO, Kei; FUKUZUMI, Shunichi
- 2E3-46 Electron-Transfer Reactivities of DNA containing uracil derivatives (Kyoto Univ.) HAMAGUCHI, Yuta; ITO, Takeo; TANABE, Kazuhito; YAMADA, Hisatugu; NISHIMOTO, Sei-ichi
- 2E3-47 Effects of Metal Ions on Plasmid DNA Cleavage by Reactive Oxygen Species (National Institute of Radiological Sciences; Osaka Univ.) KAWASHIMA, Tomonori; OHKUBO, Kei; FUKUZUMI, Shunichi; NAKANISHI, Ikuo

Chair: USUI, Satoshi (17:00∼18:00)

- \* 16:50-17:00: interval for laptop PC connection.(2E3-49, 2E3-50, 2E3-51, 2E3-52, 2E3-53, 2E3-54)
- **2E3-49** Aryl-group Effect on the Reactivity of Singlet 1,3-Diaryl-2,2-dimethoxy-1,3-biradicals (Hiroshima Univ.) OSHITA, Takahide; FUJIWARA, Yoshihisa; ABE, Manabu
- 2E3-50 Reactivity of Singlet 1,2-diaza-4,4-dialkoxy-3,5-diphenylpyrazolidine-3,5-diyls (Hiroshima Univ.) MISHIMA, Megumi; FUJIWARA, Yoshihisa; ABE, Manabu
- **2E3-51** Disproportionation reaction of quinoxaline substituted by pyrrole groups associated with electron-transfer reduction. (Osaka Univ.; Univ. Texas Austin; Univ. Houston) MASE, Kentaro; OHKUBO, Kei; SESSLER, Jonathan L.; KADISH, Karl M.; FUKUZUMI, Shunichi
- **2E3-52** Substituent Effect at the C(2) position on the lifetime of singlet cyclopentane-1,3-diyls (Hiroshima Univ.) NAKAGAKI, Tomoyuki; FUJIWARA, Yoshihisa; YE, Jianhuai; ABE, Manabu
- **2E3-53** Photocatalytic hydrogen evolution with size-controlled ruthenium nanoparticles (Graduate School of Engineering, Osaka Univ.) MIYAHIGASHI, Takamitsu; YAMADA, Yusuke; KOTANI, Hiroaki; FUKUZUMI, Shunichi
- 2E3-54 Photocatalytic Oxygenation of Alkanes with the Electron-Transfer State of 9-Mesityl-10-methylacridinium Ion (Osaka Univ.) FUJIMOTO, Atsushi; OHKUBO, Kei; FUKUZUMI, Shunichi

# Physical Organic Chemistry -Structures and Properties-

## Monday, March 28, AM

# Molecular Structure Stereochemistry

Chair: SUGIMOTO, Hiroshi  $(9:00\sim10:00)$ 

- \* 8:50-9:00: interval for laptop PC connection.(3E3-01, 3E3-02, 3E3-03, 3E3-04, 3E3-05, 3E3-06)
- 3E3-01 Study on effective capturing and identification of reactive radical species by using radical capturing clay sheets (Yokohama National Univ. Sakakibara Laboratory) ISHIZAWA, Naoya; KOMIYA, Shintarou; KAWASAKI, Kazunori; YUZURI, Tomoaki; SAKAKIBARA, Kazuhisa
- **3E3-02** Theoretical study on how to capture reactive radical species effectively by stable radicals (Yokohama National Univ. Sakakibara laboratory) KASUKABE, Takatoshi; MORI, Kazuki; SAKAKIBARA, Kazuhisa
- **3E3-03** Design of Spur Gear Type Molecules with 9-Triptycyl Groups: Effects of Substituents on Structures and Rotation Mechanisms (Okayama Univ. of Sci.) SHIMIZU, Takamasa; IWANAGA, Tetsuo; WAKAMATSU, Kan; TOYOTA, Shinji
- **3E3-04** Conformation and Orientation Analysis of SinglePerfluoroalkyl Fullerene Molecules by Electron Microscopic Imaging (The Univ. of Tokyo; ERATO, JST; AIST) HARANO, Koji; TAKENAGA, Shinya; NIIMI, Yoshiko; YOSHIKAI, Naohiko; ISOBE, Hiroyuki; SUENAGA, Kazutomo; KATAURA, Hiromichi; KOSHINO, Masanori; NAKAMURA, Eiichi
- **3E3-05** Stereochemistry of substitution Cyanoguanidines (School of Engineering, Tokyo Denki Univ.) TANAKA, Satomi; TKAHASHI, Ryohei; SHIBA, Ryuichi
- **3E3-06** Experimental and Theoretical Investigations of Circular Dichroism of Mono- and Di-aza[6]helicenes (Graduate School of Engineering, Osaka Univ.) NAKAI, Yoshito; MORI, Tadashi; YANG, Cheng; FUKUHARA, Gaku; INOUE, Yoshihisa

Chair: IWANAGA, Tetsuo (10:10 $\sim$ 11:10)

- \* 10:00-10:10: interval for laptop PC connection.(3E3-08, 3E3-09, 3E3-10, 3E3-11, 3E3-12, 3E3-13)
- 3E3-08 Theoretical Investigations of Substituent Effects on Circular Dichroism of 4-Substituted [2.2]Paracyclophanes. (Graduate School of Engineering, Osaka Univ.) TODA, Mitsunobu; MORI, Tadashi; YANG, Cheng; FUKUHARA, Gaku; INOUE, Yoshihisa
- 3E3-09 Chiroptical Properties of Photocyclodimer of 2,6-Anthracenedicar-boxylic Acid. Determination of Absolute Configuration Based on Theoretical Circular Dichroism Calculations. (Graduate School of Engineering, Osaka Univ.) WAKAI, Ayako; MORI, Tadashi; YANG, Cheng; INOUE, Yoshihisa
- 3E3-10 Structural Determination of Bacteriochlorophyll Molecules Possessing a Vinyl Group at the C8-Position (Ritsumeikan Univ.) TAMIAKI, Hitoshi; YAJIMA, Taiki; HARADA, Jiro; YOSHITOMI, Taichi; ISAJI, Megumi; MIZOGUCHI, Tadashi
- 3E3-11 Racemization of Enantiomeric Chlorophyll Pigments (Ritsumeikan Univ.) TAMIAKI, Hitoshi; KIMURA, Yuki; HARADA, Jiro; MIZOGUCHI, Tadashi
- **3E3-12** Helical Chirality of Nickel Linear Tetrapyrrole Synthesized by Modifying Chlorophyll-*a* (Ritsumeikan Univ.) OKAMOTO, Yukihiro; TAMIAKI, Hitoshi

3E3-13 Withdrawn

Chair: MORI, Tadashi (11:20 $\sim$ 12:20)

- \* 11:10-11:20: interval for laptop PC connection.(3E3-15, 3E3-17, 3E3-19)
- **3E3-15\*** Dynamic Conformational Behavior of pi-Conjugated Helices with Electron Donating or Accepting Functionality (RIKEN Advanced Science

- Institute; The Univ. of Tokyo) ANDO, Shinji; OHTA, Eisuke; KOSAKA, Atsuko; FUKUSHIMA, Takanori; HASHIZUME, Daisuke; KOSHINO, Hirovuki: AIDA, Takuzo
- 3E3-17\*# Helical Supramolecular Polymer Based on Benzene-1,3,5-Tricarbox-amides (Eindhoven Univ. of Tech.) NAKANO, Yoko; PALMANS, Anja R. A.; MEIJER, E.W.
- 3E3-19\* Design and Utilization of Planar Chiral, Cyclic Compounds Triggered by Hydrogen Bonding [1] Synthesis of Linear Compound with Selfcomplementary Hydrogen-Bond Units and Behavior in Solution (Faculty of Engineering, Tokyo Univ. of Science) GOTO, Hidetoshi; SUGIMOTO, Hiroshi

#### Monday, March 28, PM

Chair: SUGIMOTO, Hiroshi (13:30∼14:30)

- \* 13:20-13:30: interval for laptop PC connection.(3E3-28, 3E3-29, 3E3-30, 3E3-31, 3E3-32, 3E3-33)
- **3E3-28** Modification at "Backbone" of  $\pi$ -Conjugated Anion Receptors to Form Covalently Linked Oligomers (Institute of Science and Engineering, Ritsumeikan Univ.; PRESTO, JST) MAEDA, Hiromitsu; TAKAYAMA, Mavumi
- **3E3–29** Chiroptical Properties of Anion-Responsive Molecules by Distortion of Constituent π-Conjugate Units (Institute of Science and Engineering, Ritsumeikan Univ.; PRESTO, JST) BANDO, Yuya; SHIMOMURA, Konomi; YAMADA, Ippei; MAEDA, Hiromitsu
- 3E3-30 Crystal Structure of [2+2] Photoreactive Formyl-Substituted Diphenylhexatriene: The Importance of CH/O-type Intermolecular Hydrogen Bonds (National Institute of Advanced Industrial Science and Technology (AIST)) SONODA, Yoriko; IKEDA, Takuji; KANESATO, Masatoshi; GOTO, Midori
- **3E3-31** Systematic syntheses and aggregate properties of planer polycyclic aromatic hydrocarbons based on a coronene framework (Faculty of Science and Technology, Keio Univ.) HIRAYAMA, Sunao; SAKAI, Hayato; MIURA, Tomoaki; HASOBE, Taku
- 3E3-32 Synthesis of cyclic compounds using of stereochemistry of aromatic amide (Tokushima Bunri Univ.) SONOKAWA, Mai; IKEJIMA, Norio; KATAGIRI, Kosuke; TOMINAGA, Masahide; AZUMAYA, Isao
- 3E3-33 Synthesis and structural analysis of spherical molecule based on stereo chemistry of aromatic amide (Tokushima Bunri Univ.) MASU, Hyuma; TAOKA, Takeyuki; KATAGIRI, Kosuke; TOMINAGA, Masahide; AZUMAYA, Isao

Chair: MAEDA, Hiromitsu (14:40~15:40)

- \* 14:30-14:40: interval for laptop PC connection.(3E3-35, 3E3-36, 3E3-37, 3E3-38, 3E3-39, 3E3-40)
- **3E3-35** Synthesis and Molecular Structure of Halogenated Azacalix[5]arene Pentamethyl Ether (Graduate School of Human and Environmental Studies, Kyoto Univ.) TSUE, Hirohito; TAKAHASHI, Daisuke; ONO, Kohei; TAKAHASHI, Hiroki; TAMURA, Rui
- 3E3-36 Synthesis and characterization of calix[3]amide bearing pyridine for building molecular capsules (Nagoya Institute of Technology) YAMAKADO, Ryohei; MATSUOKA, Shin-ichi; SUZUKI, Masato; TAKAGI, Koji
- **3E3-37** Synthesis of Anthracene Oligomers Linked by Bipyridine Spacers (Chemical Resources Laboratory, Tokyo Institute of Technology) GOTO, Tsukasa; IIJZIMA, Takayuki; YOSHIZAWA, Michito; AKITA, Munetaka
- **3E3-38** Trans-cis Interconversion of Anthracene Trimers with Pyridine Spacers (Chemical Resources Laboratory, Tokyo Institute of Technology) IIJIMA, Takayuki; YOSHIZAWA, Michito; AKITA, Munetaka
- 3E3-39 Conformational properties of aromatic amides and ureas bearing bipyridyl groups (Dept. Chem., Fac. Sci., Ochanomizu Univ.) YOSHIDA, Etsuko; MASU, Hyuma; AZUMAYA, Isao; MIYAKE, Ryosuke; KAGECHIKA, Hiroyuki; TANATANI, Aya
- 3E3-40 Synthesis and structural analysis of novel porphyrin amide and urea derivatives. (Ochanomizu Univ.) MATSUMURA, Mio; MURANAKA, Atsuya; UCHIYAMA, Masanobu; HASHIDUME, Daisuke; MASU, Hyuma; AZUMAYA, Isao; KAGECHIKA, Hiroyuki; TANATANI, Aya

Chair: TSUE, Hirohito (15:50 $\sim$ 16:50)

- \* 15:40-15:50: interval for laptop PC connection.(3E3-42, 3E3-43, 3E3-44, 3E3-45, 3E3-46, 3E3-47)
- 3E3-42 Development of fluorescence sensor molecule based on the environment-response amide (Ochanomizu Univ.) KANAI, Misae; HIRANO, Tomoya; MASU, Hyuma; KATAGIRI, Kosuke; AZUMAYA, Isao; KAGECHIKA, Hiroyuki; TANATANI, Aya
- **3E3-43** Synthesis of Covalent Organic Cages Having Anthracene Frameworks (Chemical Resources Laboratory, Tokyo Institute of Technology) OHKAWA, Ryota; YOSHIZAWA, Michito; AKITA, Munetaka
- **3E3-44** Synthesis and properties of anthracene half-tubes with various terminal functional groups (Chemical Resources Laboratory, Tokyo Institute of Technology) HAGIWARA, Keita; YOSHIZAWA, Michito; AKITA, Munetaka
- **3E3-45** Synthesis and Characterization of Triply-branched Anthracene Oligomers with a Heteroatom Core (Chemical Resources Laboratory, Tokyo Institute of Technology) ISHIDUKA, Hiromo; LI, Zhiou;

YOSHIZAWA, Michito; AKITA, Munetaka

- **3E3-46**<sup>†</sup> Construction of Associative Macrocyclic Metal Complexes for Endohedral Metallo-Nanotube Formation (Grad. School of Science, The Univ. of Tokyo) KURITANI, Masumi; TASHIRO, Shohei; SHIONOYA, Mitsuhiko
- 3E3-47 Synthesis and NMR relaxation properties of 2-fluoro-1,3-diphosphapropene derivatives (Tokyo Institute of Technology Greduate School of Science and Technology) NAKAGAWA, Takeshi; MIKAMI, Koich; ITO, Shigekazu

Chair: ISHIDA, Shintaro (17:00~18:10)

- \* 16:50-17:00: interval for laptop PC connection.(3E3-49, 3E3-50, 3E3-51, 3E3-52, 3E3-53, 3E3-54, 3E3-55)
- **3E3-49** Self-assembly of molecular architectures from polycarbene ligands based on adamantane skeltone and Ag(I) (Tokushima Bunri Univ.) TOMINAGA, Masahide; MASU, Hyuma; AZUMAYA, Isao
- **3E3-50** Crystal structure of silver(I) complex with aromatic sulfonamide ligands (Tokushima Bunri Univ.) KATAGIRI, Kosuke; TOMINAGA, Masahide; AZUMAYA, Isao
- 3E3-51 Endohedral Functionalization of Self-Assembled M<sub>24</sub>L<sub>48</sub> Complexes (School of Engineering, The Univ. of Tokyo; CREST) IWASA, Junji; SATO, Sota; FUJITA, Makoto
- 3E3-52 Synthesis of hollow silica on the surface of self-assembled spheres (School of Engineering, The Univ. of Tokyo; CREST) TAKAO, Kiyotaka; SUZUKI, Kosuke; SATO, Sota; FUJITA, Makoto
- **3E3-53** Template Synthesis of TiO2 nanoparticles within hollow spherical complexes (School of Engineering, The Univ. of Tokyo; CREST) ICHIJO, Tatsuya; SUZUKI, Kosuke; TAKAO, Kiyotaka; SATO, Sota; FUJITA, Maketo.
- **3E3-54** Construction of Ferrocene Dimer and TrimerBased on Equilibration Control of Boronic Ester Formation (Tokyo Institute of Technology) TOHYAMA, Yohei; KIKUCHI, Yuji; TAKAHAGI, Hiroki; ONO, Kosuke; IWASAWA. Nobuharu
- 3E3-55 Construction and Modification of Macrocyclic Boronic Esters Derived from 5-Substituted 1,3-Benzenediboronic Acids (Tokyo Institute of Technology) AIZAWA, Ryo; FUJIBE, Satoru; TAKAHAGI, Hiroki; ONO, Kosuke; IWASAWA, Nobuharu

### Tuesday, March 29, AM

### Molecular Structure Stereochemistry

Chair: MURAOKA, Masahiro (9:10  $\sim$ 10:00)

- \* 9:00-9:10: interval for laptop PC connection.(4E3-02, 4E3-03, 4E3-04, 4E3-05, 4E3-06)
- **4E3-02** Synthesis of catenane and polycatenane using ditopic nitrile oxides (Tokyo Tech. Grad. School of Sci) YUKI, Tatsuya; MATSUMURA, Tohru; KOYAMA, Yasuhito; TAKATA, Toshikazu
- **4E3-03** Selective synthesis of crown ether-containing [1]rotaxane (Tokyo Institute of Technology) USUKI, Naoya; KOHSAKA, Yasuhiro; NAKAZONO, Kazuko; KOYAMA, Yasuhito; TAKATA, Toshikazu
- 4E3-04 Synthesis and optical monitoring of rotaxane-type molecular switch (Materials Science and Engineering, Faculty of Engineering, Univ. of Fukui) MATSUBARA, Naoki; TOKUNAGA, Yuji
- 4E3-05 Synthesis and characterization of metal-templated supramolecular polymers using bicyclic molecules (Dept. of Organic and Polymeric Materials, Tokyo Tech.) OGAWA, Masahiro; KAWAKASAKI, Ayumi; KOYAMA, Yasuhito; TAKATA, Toshikazu
- 4E3-06 Successive catalytic reactions via the intermediary formation of rotaxane and its application to asymmetric reaction (Tokyo Tech. Grad. School of Sci) KAWASAKI, Ayumi; KOYAMA, Yasuhito; TAKATA, Toshikazu

Chair: TOKUNAGA, Yuji (10:10 $\sim$ 11:10)

- \* 10:00-10:10: interval for laptop PC connection.(4E3-08, 4E3-09, 4E3-10, 4E3-12)
- **4E3-08** Cryptand-based Rotaxane as an ion sensor (Osaka Institute of Technology) MURAOKA, Masahiro; OHTA, Mamoru; NAKATSUJI, Yohji
- 4E3-09 Synthesis and Characterization of a Rotaxane Threading a Phenanthroline Derivative as an Axle (Osaka Institute of Technology) MURAOKA, Masahiro; AOYAMA, Kakeru; NAKATSUJI, Yoji; HISAKI, Ichiro; MIYATA, Mikiji
- **4E3-10\*** Switchable induction of one-handed helix based on structural control of polyacetylene bearing planar chiral rotaxane moiety on the side chain (Tokyo Institute of Technology) ISHIWARI, Fumitaka; NAKAZONO, Kazuko; KOYAMA, Yasuhito; TAKATA, Toshikazu
- 4E3-12\*# Virus-inspired Self-Assembly of Multicomponent Spherical Complexes (Grad. School of Engineering, The Univ. of Tokyo; CREST) SUN, Qing-fu; MURASE, Takashi; SATO, Sota; FUJITA, Makoto

Chair: SATO, Sota (11:20~11:50)

- \* 11:10-11:20: interval for laptop PC connection.(4E3-15, 4E3-16, 4E3-17)
- **4E3-15** Effect of Rotaxane Structure on The Main Chain Conformation in Side Chain-type Polyrotaxane (Department of Organic and Polymeric

- Materials, Tokyo Institute Of Technology) SUZUKI, Sakiko; NAKAZONO, Kazuko: TAKATA. Toshikazu
- **4E3-16** Synthesis of a polyacetylene bearing planar chiral rotaxane moiety in side chain (Department of Organic and Polymeric Materials, Tokyo Tech.) TAKANO, Akihiko; ISHIWARI, Fumitaka; NAKAZONO, Kazuko; TAKATA, Toshikazu
- 4E3-17 Synthesis of chiral rotaxane having N-Oxide moiety (Department of Organic and polymeric materials, Tokyo Tech.) NAKAZONO, Kazuko; TAKATA, Toshikazu

# Room E4

Bldg. 11 11-37

# Physical Organic Chemistry -Structures and Properties-

### Saturday, March 26, AM

### Porphyrin

Chair: SHIMIZU, Soji (9:00 ~10:00)

- \* 8:50-9:00: interval for laptop PC connection.(1E4-01, 1E4-02, 1E4-03, 1E4-04, 1E4-05, 1E4-06)
- 1E4-01 Synthesis and characterization of meso-substituted oxaporphyrin (Department of Chemistry, Graduate School of Engineering, Doshisha Univ.) KAKEYA, Kazuhisa; NAKAGAWA, Aya; AOZASA, Masakatu; MIZUTANI, Tadashi
- 1E4-02 Synthesis and properties of benzoporphyrins substituted multiple ester groups. (Fac. Eng., Utsunomiya Univ.) GOMIBUCHI, Yuta; ITO, Satoshi; OBA, Toru: HIRATANI, Kazuhisa
- 1E4-03 Synthesis and properties of tetrabenzoporphyrin vanadyl complex (Fac. Eng., Utsunomiya Univ.) ITO, Satoshi; ITO, Takahiro; OBA, Toru; HIRATANI, Kazuhisa
- **1E4-04** novel synthesis and properties *meso*-bromonated benzoporphyrin (Fac. Eng., Utsunomiya Univ.) TEDANI, Yoshihiko; ITOU, Satoshi; OBA, Toru; HIRATANI, Kazuhisa
- 1E4-05 Skeletal rearrangement from a heptaphyrin to the complex with an N-confused porphyrin skeleton triggered by palladium(II)-metallation. (Graduate school of science, Kyoto Univ..) YONEDA, Tomoki; SAITO, Shohei; OSUKA, Atsuhiro
- **1E4-06** Synthesis of Porphyrin Dimers from Acetyl Porphyrin (Graduate School of Science, Kyoto Univ.) TOKUJI, Sumito; YORIMITSU, Hideki; OSUKA, Atsuhiro

Chair: SAITO, Shohei (10:10 $\sim$ 11:10)

- \* 10:00-10:10: interval for laptop PC connection.(1E4-08, 1E4-10, 1E4-11, 1E4-12, 1E4-13)
- **1E4-08\*** Enantiomeric Separations and Asymmetric Induction of Moebius Aromatic [28]Hexaphyrin Metal Complexes (Kyoto Univ.) TANAKA, Takayuki; SUGITA, Tsutomu; TOKUJI, Sumito; OSUKA, Atsuhiro
- 1E4-10 Synthesis and property of 2-aryl-3-trifluoromethyl substituted benzofurans. (Graduate School of Science, Kyoto Univ.) OOKUBO, Yuuya; YORIMITSU, Hideki; OSUKA, Atsuhiro
- **1E4-11** Palladium-Catalyzed Direct Arylation of Porphyrins (Graduate School of Science, Kyoto Univ.) KAWAMATA, Yu; YORIMITSU, Hideki; OSUKA, Atsuhiro
- **1E4-12** Synthesis and properties of Doubly Pyridylene Bridged Multi-Porphyrin Arrays (Graduate School of Science, Kyoto Univ.) ANABUKI, Shoma; SONG, Jianxin; ARATANI, Naoki; SHINOKUBO, Hiroshi; OSUKA, Atsuhiro
- 1E4-13 Phosphorus Complex of Multiply-fused Pentaphyrin(1.1.1.1.1) (Graduate School of Science, Kyoto Univ.) HIGASHINO, Tomohiro; OSUKA, Atsuhiro

Chair: FURUTA, Hiroyuki (11:20 $\sim$ 12:20)

- \* 11:10-11:20: interval for laptop PC connection.(1E4-15, 1E4-18, 1E4-19, 1E4-20)
- **1E4-15** CSJ Award for Young Chemists Exploration of Giant Functional Porphyrin Arrays (Grad. Sch. Sci., Kyoto Univ.; PRESTO, JST) ARATANI, Naoki
- 1E4-18 Efficient Synthesis of Oligopyrroles and Large Expanded Porphyrins (Graduate School of Science, Kyoto Univ.) MORI, Hirotaka; OSUKA, Atsuhiro
- 1E4-19 Synthesis and Properties of subbacteriochlorins (Graduate School of Science, Kyoto Univ.) HAYASHI, Shinya; OSUKA, Atsuhiro
- **1E4–20** Synthesis and oxidative fusion reaction of  $\beta$ -amino porphyrins. (Department of Applied Chemistry, Graduate School of Engineering, Nagoya Univ.) AKITA, Masanari; HIROTO, Satoru; SHINOKUBO, Hiroshi

### Saturday, March 26, PM

Chair: SUGIURA, Ken-Ichi (13:30~14:30)

- \* 13:20-13:30: interval for laptop PC connection.(1E4-28, 1E4-30, 1E4-32, 1E4-33)
- 1E4-28\*† Synthesis and Properties of Novel Expanded Phthalocyanine Analogues (Graduate School of Science, Tohoku Univ.; Riken; Graduate School of Pharmaceutical Sciences, Tokyo Univ.; Organic Intermediates and Dyes Institute) MATSUSHITA, Osamu; DERKACHEVA, Valentina M.; MURANAKA, Atsuya; SHIMIZU, Soji; UCHIYAMA, Masanobu; LUKYANETS, Evgeny A.; KOBAYASHI, Nagao
- 1E4-30\* Synthesis and Properties of Porphyrin Pincer Complexes (Department of Chemistry, Graduate School of Science, Kyoto Univ.; Department of Applied Chemistry, Graduate School of Engineering, Nagoya Univ.) YAMAGUCHI, Shigeru; SHINOKUBO, Hiroshi; OSUKA, Atsuhiro
- **1E4-32** Porphyrin ring interactions of Ethynyl-Linked N-Confused Porphyrin Dimer (Graduate School of Engineering, Kyushu Univ.) TAKAYAMA, Takumi; TOGANOH, Motoki; FURUTA, Hiroyuki
- **1E4-33** Synthesis and properties of N-confused porphyrin rhenium (I)complex bearing multiply fused ring system (Department of Chemistry and Biochemistry Graduate School of Engineering Kyushu Univ.) YAMAMOTO, Takaaki; TOGANOH, Motoki; FURUTA, Hiroyuki

Chair: ARATANI, Naoki (17:00~17:40)

- \* 16:50-17:00: interval for laptop PC connection.(1E4-49, 1E4-50, 1E4-51, 1E4-52)
- 1E4-49 Synthesis and Properties of bisBODIPY condensed in beta-position (Ehime Univ.) NAKAMURA, Mitsunori; TAHARA, Hiroyuki; UOYAMA, Hiroki; YAMADA, Hiroko; MORI, Hideki; OKUJIMA, Tetsuo; UNO, Hidemitsu
- 1E4-50 Synthesis and Photophysical Properties of Porphyrin-substituted m-Phenylene Butadiynylene Oligomers Having Cyclic and Linear Structures (Grad. School of Science and Engineering, Tokyo Metropolitan Univ.) URAJI, Renon; YAMASHITA, Ken-ichi; ASANO, Motoko; SUGIURA, Ken-ichi
- 1E4-51<sup>†</sup> Synthesis and properties of benzene-fused oligoporphyrins (Grad. Sch. Sci., Eng., Ehime Univ.) UOYAMA, Hiroki; OKUJIMA, Tetsuo; YAMADA, Hiroko; UNO, Hidemitsu
- 1E4-52 Synthesis and reaction of the precursors of benzo[1,2-c,4,5-c']dipyrrole (Grad. Sch. Sci., Eng., Ehime Univ.) TAHARA, Hiroyuki; YAMAGAMI, Kaoru; KUWAJIMA, Miki; MORI, Shigeki; OKUJIMA, Tetsuo; YAMADA, Hiroko; UNO, Hidemitsu

Chair: MORI, Shigeki (17:50 $\sim$ 18:30)

- \* 17:40-17:50: interval for laptop PC connection.(1E4-54, 1E4-55, 1E4-56, 1E4-57)
- 1E4-54 Synthesis and Physicochemical Properties of Benzene-fused Porphycene (Graduate School of Engineering, Osaka Univ.) FUKUDA, Tamaki; CHATTOPADHYAY, Prosenjit; ONODA, Akira; HAYASHI, Takashi
- 1E4-55 Palladium Migration with Topological Changes in Hexaphyrin Palladium Complexes (Graduate School of Science, Kyoto Univ.) INOUE, Mitsunori; OSUKA, Atsuhiro
- **1E4–56** Evaluation of the Structure and Anti-aromaticity of  $16\,\pi$  benzofused porphyrin zinc complex (Hiroshima Univ.) SUGAWARA, Shun; HIRATA, Yusuke; KOJIMA, Satoshi; MATSUKAWA, Shirou; HASHIZUME, Daisuke; MAC, Johe; KOBAYASHI, Nagao; YAMAMOTO, Yohsuke
- 1E4-57 Structures of porphyrin assemblies based on coordination in solution and on substrates (CST, Nihon Univ.) MORISAKI, Takuya; OTSUKI, Joe

# Sunday, March 27, PM

### Porphyrin

Chair: IMAOKA, Takane (13:00 $\sim$ 14:00)

- \* 12:50-13:00: interval for laptop PC connection.(2E4-25, 2E4-27, 2E4-29)
- 2E4-25\* Synthesis and electron-transfer reduction of protonated phthalocyanines stabilized by intramolecular hydrogen bonding (Osaka Univ., Univ. of Tsukuba) HONDA, Tatsuhiko; KOJIMA, Takahiko; FUKUZUMI, Shunichi
- 2E4-27\* Synthesis and photophysical properties of a light-harvesting antenna composed of three kinds of porphyrins (Graduate School Of Science, Osaka City Univ.) UETOMO, Atsuhiro; KOZAKI, Masatoshi; SUZUKI, Shuichi; YAMANAKA, Kenichi; ITO, Osamu; OKADA, Keiji
- 2E4-29\*\* Preparation, structures and photodynamics of hydrogen-bonding supramolecular assemblies composed of saddle-distorted porphyrin dications and electron-donor molecules (Univ. of Tsukuba) MUNIAPPAN, Sankar; ISHIZUKA, Tomoya; KAWANO, Masaki; HASOBE, Taku; OHKUBO, Kei; FUKUZUMI, Shunichi; KOJIMA, Takahiko

Chair: OBA, Toru (14:10 $\sim$ 15:10)

- \* 14:00-14:10: interval for laptop PC connection.(2E4-32, 2E4-33, 2E4-34, 2E4-35, 2E4-36, 2E4-37)
- **2E4-32** Catalyst-Free Phenoxylation of *meso*-Bromoporphyrins and Applications (Grad. School of Science and Engineering, Tokyo Metropolitan Univ.)

- YAMASHITA, Ken-ichi; KATAOKA, Kazuyuki; ASANO, Motoko; SUGIURA, Ken-ichi
- 2E4-33 Oxidative meso-acetoxylation of diarylporphyrins (Grad. School of Science and Engineering, Tokyo Metropolitan Univ.) YAMASHITA, Kenichi; ASANO, Motoko; SUGIURA, Ken-ichi
- 2E4-34 meso-Aminoporphyrin oligomers with polyaniline-like structure (Grad. School of Science and Engineering, Tokyo Metropolitan Univ.) YAMASHITA, Ken-ichi; TAKEUCHI, Shouichi; ASANO, Motoko; SUGIURA. Ken-ichi
- 2E4-35 Synthesis and Property of Soluble Asymmetric meso-AlkynylSubstituted Porphyrin Derivatives (The Univ. of Tokyo) HATANO, Junichi; OKAMOTO, Toshihiro: MATSUO, Yutaka
- 2E4-36 Array of double-decker porphyrin complexes of which orientation can be discerned on graphite surface (College of Science snd Technorogy, Nihon Univ.) OHYA, Chiaki; KOMATSU, Yuji; OTUSKI, Joe
- 2E4-37 Synthesis of double-decker phthalocyanine complexes and their orientation on HOPG surface. (College of Science and Technology, Nihon Univ.) TAKA, Megumi; OTSUKI, Joe; OHYA, Chiaki; KOBAYASHI, Daiya
  - Chair: OKUJIMA, Tetsuo (15:20~16:20)
- \* 15:10-15:20: interval for laptop PC connection.(2E4-39, 2E4-41, 2E4-42, 2E4-43, 2E4-44)
- 2E4-39\* Synthesis of Quadruply-benzo-fused Porphyrinoid from Butadiyne-bridged Carbazole Dimer through Annulation Reaction (Faculty of Science and Technology, Keio Univ.) MAEDA, Chihiro; YOSHIOKA, Naoki
- 2E4-41 Synthesis of a cyclic indole tetramer (Department of Applied Chemistry, Graduate School of Engineering, Nagoya Univ.) NAKAMURA, Shoichi; HIROTO, Satoru; SHINOKUBO, Hiroshi
- **2E4-42** Synthesis and property of azacorrole (Department of Applied Chemistry, Graduate School of Engineering, Nagoya Univertisity) HORIE, Miki; YAMAGUCHI, Shigeru; SHINOKUBO, Hiroshi
- 2E4-43 Synthesis and properties of N-linked benzocorrole dimer (Graduate School of Engineering, Kyushu Univ.) KAWABE, Yasunori; TOGANOH, Motoki; FURUTA, Hiroyuki
- 2E4-44 Synthesis and properties of pyrrole-fused largely pi-conjugated molecules (Tokyo Metropolitan Univ.) NARITA, Tomoyuki; TAKASE, Masayoshi; NISHINAGA, Tohru; NOMURA, Kotohiro; MUELLEN, Klaus
  - Chair: ISHIZUKA, Tomoya (16:30~17:30)
- \* 16:20-16:30: interval for laptop PC connection.(2E4-46, 2E4-48, 2E4-50, 2E4-51)
- 2E4-46\* Electron Transfer in Dendritic Macromolecules with an Intramolecular Potential Gradient (Tokyo Tech.) IMAOKA, Takane; KOBAYASHI, Hiroki; YAMAMOTO, Kimihisa
- **2E4-48\*** Dynamics of Conformational Change of a Zinc Porphyrin Dimer by Cu(II) Ion Coordination to the Spacer Unit and Electron Transfer (Osaka Univ.; Universite de Bourgogne) TAKAI, Atsuro; HABERMEYER, Benoit; GROS, Claude P.; BARBE, Jean-michel; FUKUZUMI, Shunichi
- 2E4-50 Synthesis and Properties of Subphthalocyanine Containing a Pyrene Unit (Graduate School of Science, Tohoku Univ.) NAKANO, Shota; SHIMIZU, Soji; KOBAYASHI, Nagao
- 2E4-51 Chiral inductions by porphyrin J-aggregates with the asymmetric field (IIS, The Univ. of Tokyo) NIIMURA, Kazuhiro; ISHII, Kazuyuki

### Monday, March 28, AM

- Chair: HIGASHIBAYASHI, Shuhei (9:00 ∼10:00)
- \* 8:50-9:00: interval for laptop PC connection.(3E4-01, 3E4-02, 3E4-03, 3E4-05)
- **3E4-01** Synthesis of Cycloparaphenylenes through Tetra-nuclear Platinum Complexes and Their Properties (Institute for Chemical Research, Kyoto Univ.; Institute of Molecular Science; CREST) IWAMOTO, Takahiro; WATANABE, Yoshiki; YAMAGO, Shigeru; SAKAMOTO, Youichi; SUZUKI, Toshiyasu
- **3E4-02** Concise Synthesis and Crystal Structure of [12]Cycloparaphenylene (Graduate School of Science, Nagoya Univ.) MATSUURA, Sanae; MIYAMOTO, Shinpei; OMACHI, Haruka; SENEL, Petr; SASAMORI, Takahiro; TOKITOH, Norihiro; SEGAWA, Yasutomo; ITAMI, Kenichiro
- 3E4-03\* Modular Synthesis and Photophysical Properties of Cycloparaphenylenes (Graduate School of Science, Nagoya Univ.) OMACHI, Haruka; MATSUURA, Sanae; IRLE, Stephan; FUKAZAWA, Aiko; YAMAGUCHI, Shigehiro; SEGAWA, Yasutomo; ITAMI, Kenichiro
- **3E4-05\*** o-Phenylene: Redox-responsive molecular helix with highly condensed π-clouds (RIKEN Advanced Science Institute; JST ERATO-SORST Nanospace Pro.; Rigaku) OHTA, Eisuke; SATOH, Hiroyasu; ANDO, Shinji; KOSAKA, Atsuko; FUKUSHIMA, Takanori; HASHIZUME, Daisuke; YAMASAKI, Mikio; HASEGAWA, Kimiko; AIDA, Takuzo
  - Chair: ITAMI, Kenichiro (10:10 $\sim$ 11:10)
- \* 10:00-10:10: interval for laptop PC connection.(3E4-08, 3E4-11, 3E4-13)
- **3E4-08** Young Scholar Lectures of CSJ Bowl-shaped .pi.-Conjugated Molecule Sumanene: Its Dynamics, Functionalization, and Complexation (Grad. Sch. Eng., Osaka Univ.) AMAYA, Toru
- 3E4-11\* Synthesis, Structures and Properties of Heterasumanenes with no

- Substituents on the exo Carbon Atoms (Department of Chemistry, Graduate School of Science and Engineering, Saitama Univ.) TANIKAWA, Tomoharu; SAITO, Masaichi; GUO, Jing-dong; NAGASE, Shigeru
- **3E4-13** Synthesis of Metallocene Complex Utilizing Benzyl Anion of Sumanene (Osaka Univ.) AMAYA, Toru; TAKAHASHI, Yuki; HIFUMI, Maiko; HIRAO, Toshikazu
  - Chair: SAITO, Masaichi (11:20~12:20)
- \* 11:10-11:20: interval for laptop PC connection.(3E4-15, 3E4-16, 3E4-17, 3E4-19, 3E4-20)
- 3E4-15 Nanostructures of Sumanene Thin Films Formed by Laser Irradiation (Osaka Univ.) AMAYA, Toru; INADA, Yuhi; SAEKI, Akinori; SEKI, Shuhei; HIRAO, Toshikazu
- **3E4-16** Properties of Sumanene Monolayer on Metal Surface (Osaka Univ.) AMAYA, Toru; JAAFAR, Rached; RUFFIEUX, Pascal; PIGENDOLI, Carlo; AIT-MANSOUR, Kamel; GROENING, Oliver; FASEL, Roman; HIRAO, Toshikazu
- 3E4-17\* Synthesis of C<sub>3</sub> Symmmetric Trisubstituted Sumanenes (Institute for Molecular Science) HIGASHIBAYASHI, Shuhei; SAKURAI, Hidehiro
- 3E4-19 A Chiral Carbon Nanoring: Synthesis of Cyclophenylenenaphthylene (Graduate School of Science, Nagoya Univ.) SEGAWA, Yasutomo; OMACHI, Haruka; ITAMI, Kenichiro
- 3E4-20 Synthesis and Properties of Cyclonaphthylene (Graduate School of Science, Nagoya Univ.) YAGI, Akiko; SEGAWA, Yasutomo; ITAMI, Kenichiro

## Monday, March 28, PM

Chair: KOBAYASHI, Kenji (13:30∼14:30)

- \* 13:20-13:30: interval for laptop PC connection.(3E4-28, 3E4-29, 3E4-30, 3E4-31, 3E4-32, 3E4-33)
- **3E4-28** Synthesis of Extended π-Conjugated Molecules via Successive Ring Expansion of Tricyclobutabenzene. (Department of Chemistry, School of Science and Technology, Kwansei Gakuin Univ.; PRESTO) SHINOZAKI, Shinya; SAKAMOTO, Yuhi; HAMURA, Toshiyuki; SUZUKI, Keisuke
- 3E4-29 Syntheses and Properties of Novel Hetero[7]helicene Derivatives (The Univ. of Tokyo) OYAMA, Hiromi: NAKANO, Koii: NOZAKI, Kyoko
- 3E4-30 Synthesis and Properties of New Tetracene Derivatives with Extended π System (School of Science, The Univ. of Tokyo) KOJIMA, Shungo; OKAMOTO, Toshihiro; MATSUO, Yutaka
- **3E4-31** Synthesis of π-extended quinone based on hexabenzocoronene (Department of Applied Chemistry, Graduate School of Engineering, Nagoya Univ.) YAMAGUCHI, Ryuichi; HIROTO, Satoru; SHINOKUBO, Hiroshi
- **3E4-32** Synthesis of Substituted Pentacene Derivatives via Successive Cycloaddition of Isobenzofurans (Department of Chemistry, School of Science and Technology, Kwansei Gakuin Univ., PRESTO) NAKATSUJI, Yuya; HANEDA, Hiroshi; HAMURA, Toshiyuki
- 3E4-33 Synthesis of Azulene Derivatives Exhibiting Liquid Crystalline Behavior (Hirosaki Univ.) UEDA, Mao; KUROTAKI, Takafumi; ITO, Shunji; KAWAKAMI, Jun
  - Chair: SHINMYOZU, Teruo (14:40∼15:40)
- \* 14:30-14:40: interval for laptop PC connection.(3E4-35, 3E4-36, 3E4-37, 3E4-38, 3E4-39, 3E4-40)
- 3E4-35 Synthesis and Properties of Steric-Protected Anthracenes (Shizuoka Univ.; Hamamatsu Photonics; Bruker axs) FUJIWARA, Yutaka; OZAWA, Ryota; SUZUKI, Kengo; YOZA, Kenji; KOBAYASHI, Kenji
- 3E4-36 Synthesis and Properties of π-Conjugated Macrocycle Based on 2,7-Diborylanthracene as a Building Block (Shizuoka Univ.;Hamamatsu Photonics;Bruker axs) OZAWA, Ryota; SUZUKI, Kengo; YOZA, Kenji; KOBAYASHI, Kenji
- **3E4–37** Properties of *o-* and *p-*Chloranil Dimers and Their Efficiency as an Oxidizing Agent (Univ. of Toyama) YOSHINO, Junro; NAKAGAWA, Hiroyuki; HAYASHI, Naoto; HIGUCHI, Hiroyuki
- 3E4-38 Synthesis and properties of aromatic vinylogous amide (Faculty of Science, Tokyo Univ. of Science) IKEDA, Hirokazu; YAMASAKI, Ryu; MASU, Hyuma; AZUMAYA, Isao; SAITO, Shinichi
- 3E4-39 Chemical oxidation of a triphenylmethane dye bearing zinc complex moieties (IIS, The Univ. of Tokyo) YAMADA, Hiroka; TAKEZAWA, Svunpei: MATSUMURA, Kazunari; HOUJOU, Hirohiko
- 3E4-40 Synthesis and Characterization of a Novel Cyclophane Consisting of 6,13-Dihydropentacene (Graduate School of Enviomental Science, Okayama Univ.) MATSUDA, Akikazu; TAJIMA, Tomoyuki; TAKAGUCHI, Yutaka
  - Chair: TAHARA, Kazukuni (15:50 $\sim$ 16:40)
- \* 15:40-15:50: interval for laptop PC connection.(3E4-42, 3E4-43, 3E4-44, 3E4-45, 3E4-46)
- 3E4-45, 3E4-46) **3E4-42**<sup> $\dagger$ </sup> Synthesis and photophysical properties of  $\pi$ -conjugate expandedparacyclophanes (Grad. Sch. Sci. Eng., Saga Univ.) MIYAMOTO, Shinpei; DO, Junghee; HORIGUCHI, Yosuke; YAMATO, Takehiko
- 3E4-43 Synthesis and Photophysical Properties of Pendant-Type Donor-Acceptor Molecules with a [2.2]Paracyclophane Spacer (IMCE, Kyushu Univ.; Faculty of Sciences, Kyushu Univ.) FUJISHIGE, Jyun-ichi; WATANABE, Motonori; SHINMYOZU, Teruo

- **3E4-44** Syntheses of the cyclophanes consisting of the acetylene moiety and their structural properties (Department of Applied Chemistry, Kyushu Institute of Technology) MATSUSHITA, Ryuichiro; MORIGUCHI, Tetsuji; ARAKI, Koji; TSUGE, Akihiko
- **3E4-45**<sup>†</sup> The synthesis of the enone-briged cyclophanes and their properties (Grad. Sch. Sci., Eng., Yamagata Univ.) ISHIKAWA, Ken; KATAGURI, Hiroshi: OHBA, Yoshihiro: TSUJIMOTO, Kazuo
- 3E4-46<sup>#</sup> Synthesis and nanostructure formation of Cyclic Triphenylene Trimer with Long alkoxy Chains (Tokyo Metropolitan Univ.) RAHMAN, Mohammad Jalilur; HANAI, Yoshimi; YAMAKAWA, Jun; TAKASE, Masayoshi; NISHINAGA, Tohru; IYODA, Masahiko

Chair: KAWASE, Takeshi (16:50~17:30)

- \* 16:40-16:50: interval for laptop PC connection.(3E4-48, 3E4-49, 3E4-50, 3E4-51)
- 3E4-48 Synthetic Studies on Pyrene-Based Shape-Persistent Macromolecules (Grad. School of Science and Engineering, Tokyo Metropolitan Univ.) TAZAWA, Shin; YAMASHITA, Ken-ichi; ASANO, Motoko; SUGIURA, Ken-ichi
- **3E4-49** Construction of vertically π-conjugated Hydrindacene-Macrocycles and Their Spectroscopic Properties (Department of Chemistry, Faculty of Science, Hokkaido Univ.; PRESTO, Japan Science and Technology Agency) KAWAI, Hidetoshi; UTAMURA, Tatsuya; MOTOI, Erina; FUJIWARA, Kenshu; SUZUKI, Takanori
- 3E4-50 Transannular Cyclization of Dehydrobenzo[12]annulene Induced by Nucleophilic Attack (Graduate School of Engineering Science, Osaka Univ.) YOSHIZAKI, Ayumi; NOBUSUE, Shunpei; INUKAI, Koji; TAKEDA, Takashi; TAHARA, Kazukuni; SHIMIZU, Akihiro; TOBE, Yoshito
- **3E4-51** Synthesis of Phenanthrene-Fused Dehydro[12]- and [18]annulenes and Their Antiaromaticity/Aromaticity (Gunma Univ.) TAKAHASHI, Nobutaka; KATO, Shin-ichiro; NAKAMURA, Yosuke

Chair: KATO, Shin-ichiro (17:40~18:20)

- \* 17:30-17:40: interval for laptop PC connection.(3E4-53, 3E4-54, 3E4-55, 3E4-56)
- 3E4-53 Synthesis and dynamic behavior of propeller-shaped tris(dehydroben-zo[14]annulene)s (Graduate School of Engineering Science, Osaka Univ.) NOBUSUE, Shumpei; MUKAI, Yuichi; TAHARA, Kazukuni; TOBE, Yoshito
- **3E4-54** Synthesis of Cyclic Acetylene Compounds that are Aimed at the Construction of Carbon Nanotube Segment (Hirosaki Univ.) KUDO, Shun; ASAI, Shintaro; KAMEYAMA, Yui; ITO, Shunji; KAWAKAMI, Jun
- **3E4-55** Synthesis and Reactivity of Tetrabenzofluorenone (Grad. School of Eng., Univ. of Hyogo) SHIBAMOTO, Hiroshi; TANIGAWA, Yusuke; KITAMURA, Chitoshi; KAWASE, Takeshi
- **3E4-56**\* The Synthesis and Physical Properties of Octasubstituted 1,7-Dihydro-s-indacene (The Univ. of Tokyo) KOJIMA, Tatsuo; ZHU, Xiaozhang; TSUJI, Hayato; NAKAMURA, Eiichi

### Tuesday, March 29, AM

Chair: MAEDA, Hiromitsu (9:00  $\sim$ 10:00)

- \* 8:50-9:00: interval for laptop PC connection.(4E4-01, 4E4-02, 4E4-03, 4E4-05)
- **4E4-01** Syntheses and properties of novel planar π-extended BODIPYs with *meso*-alkynyl substituents (The Univ. of Tokyo) KUSAKA, Shinpei; SAKAMOTO, Ryota; NISHIHARA, Hiroshi
- 4E4-02 Development and application of selective bromination of BODIPY (Department of Applied Chemistry, Graduate School of Engineering, Nagoya Univertsity) HAYASHI, Yosuke; YAMAGUCHI, Shigeru; SHINOKUBO, Hiroshi
- **4E4-03\*** Magneto-chiral dichroism and circular dichroism studies of chiral Jaggregates based on porphyrins (IIS, The Univ. of Tokyo) KITAGAWA, Yuichi; SEGAWA, Hiroshi; ISHII, Kazuyuki
- **4E4-05\***<sup>†</sup> Evaluation of Single Molecular Conductance by Means of Two-Dimensional Phase Separation of Tetraphenylporphyrin Templates at a Liquid-Solid Interface (Graduate School of Engineering, Kyoto Univ.) SAKANO, Takeshi; HIGASHIGUCHI, Kenji; MATSUDA, Kenji

Chair: MATSUDA, Kenji (10:10 $\sim$ 11:10)

- \* 10:00-10:10: interval for laptop PC connection.(4E4-08, 4E4-09, 4E4-10, 4E4-11)
- **4E4-08** Synthesis and Spectroscopic Properties of 9,10-Diethynylanthracenebisimide Derivatives. (Okayama Univ. of Sci.) IWANAGA, Tetsuo; YAMASHITA. Natsuki: TOYOTA. Shinii
- 4E4-09 Synthesis and Electronic Properties of Perylene Bisimide Derivatives with Two Anthracene Donors (Okayama Univ. of Sci.) IDA, Hiroko; IWANAGA, Tetsuo; TOYOTA, Shinji
- **4E4-10** Supramolecular perylene bisimides assemblies showing thermal conversion from columnar to lamellar architectures (Grad. Sch. of Eng., Chiba. Univ., AIST) YAGAI, Shiki; USUI, Mari; SEKI, Tomohiro; KARATSU, Takashi; KITAMURA, Akihide; KIKKAWA, Yoshihiro
- **4E4-11** CSJ Award for Young Chemists Construction of Functional Dye Assemblies by Hydrogen-Bond-Directed Supramolecular Modulation (Grad. Sch. Eng., Chiba Univ.) YAGAI, Shiki

- Chair: IWANAGA, Tetsuo (11:20~12:20)
- \* 11:10-11:20: interval for laptop PC connection.(4E4-15, 4E4-16, 4E4-17, 4E4-18, 4E4-19, 4E4-20)
- **4E4-15** Formation and Control of Metal-Driven Helical π-Conjugated Systems (Institute of Science and Engineering, Ritsumeikan Univ.; PRESTO, JST) MAEDA, Hiromitsu; NISHIMURA, Takuma
- **4E4-16** New Dipyrrolyl Ligands: Formation of Fused Dipyrrolyl Dimers and Metal Coordination Polymers (Institute of Science and Engineering, Ritsumeikan Univ.; PRESTO, JST) MAEDA, Hiromitsu; KOBAYASHI, Hiroaki
- **4E4-17** Synthesis of π-Conjugated Anion Receptors Composing Charge-by-Charge Assemblies (Institute of Science and Engineering, Ritsumeikan Univ.; PRESTO, JST) TERASHIMA, Yoshitaka; HAKETA, Yohei; FUKUNAGA, Shinya; HANE, Wataru; MAEDA, Hiromitsu
- **4E4-18** Synthsis and Properties of multiple N-Confused Calix[n]Phyrins (Graduate School of Engineering, Kyushu Univ.) OMAGARI, Toshihiro; TOGANOH, Motoki; FURUTA, Hiroyuki
- **4E4-19** Synthesis of Carbazole Derivatives with Aromatic Groups at 1,8-Positions and Their Complexation Behavior with π-Acceptors (Gunma Univ.) YASUDA, Kenji; KATO, Shin-ichiro; NAKAMURA, Yosuke
- 4E4-20 Preparation and redox behavior of dicationic species possessing two units of 10-methyl-9-phenyl acridinium (Hokkaido Univ.) SUZUKI, Takanori; HOSHIYAMA, Yuuki; MIURA, Youhei; KAWAI, Hidetoshi; FUJIWARA, Kenshu

### Tuesday, March 29, PM

Chair: NISHIDA, Jun-Ichi (13:30~14:20)

- \* 13:20-13:30: interval for laptop PC connection.(4E4-28, 4E4-29, 4E4-30, 4E4-31, 4E4-32)
- **4E4-28** Synthesis and Properties of Novel Dipyrrin Silicon Complexes (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) SAKAMOTO, Naoya; YAMAMURA, Masaki; NABESHIMA, Tatsuya
- 4E4-29 Synthesis and Properties of Triphenylamine Derivatives with Quasi-Planar Structure (Institute for Chemical Research, Kyoto Univ.; JST-PRESTO) NISHIMURA, Hidetaka; WAKAMIYA, Atsushi; MURATA, Yasujiro
- 4E4-30 Studies on the new synthetic method of porphyrin arrays for automated synthesis (Osaka Univ.) YAMANA, Ayuko; OGAWA, Takuji
- **4E4-31** Template-Directed Preparation and Photoelectric Properties of Hybrid Organic/Inorganic Nanorods (Kyoto Univ., iCeMS) KITAURA, Shinji; ZHANG, Zhe; MATSUSIGE, Kazumi; UMEYAMA, Tomokazu; MATANO, Yoshihiro; IMAHORI, Hiroshi
- 4E4-32 Preparation and properties of phenazasiline with various degree of polymerizations (Nagoya Municipal Ind. Res. Inst.; National Institute for Materials Scienc; Chem. Res. Lab., Tokyo Institute of Technology) HAYASHI, Hideki; NAKAO, Hidenobu; KOIZUMI, Take-aki

Chair: YAMAMURA, Masaki (14:30 $\sim$ 15:30)

- \* 14:20-14:30: interval for laptop PC connection.(4E4-34, 4E4-35, 4E4-36, 4E4-37, 4E4-38, 4E4-39)
- **4E4-34** Synthesis and Properties of *p*-Terphenyl-Based Molecular Glass Containing Group 14 Substituents (Grad. Sch. Eng., Gunma Univ.) NEGISHI, Yuma; KYUSHIN, Soichiro
- **4E4-35** Synthesis and metal complexation of nitrogen-heterocycles with vinyl groups (Tokyo Institute of Technology, Interdisciplinary Graduate School of Science and Engineering) NISHIDA, Jun-ichi; TAKAHASHI, Takumi; YAMASHITA, Yoshiro
- 4E4-36 Synthesis and Properties of Thienylcarbazoles (Gunma Univ.) SHIMIZU, Satoru; TAGUCHI, Hiroaki; KATO, Shin-ichiro; NAKAMURA, Yosuke
- **4E4-37** Synthesis and Properties of Bicarbazoles and Formal [2 + 2] Cycloadditions of Ethynylcarbazoles with TCNE (Grad. Sch. Eng., Gunma Univ.) NOGUCHI, Hiroto; KATO, Shin-ichiro; NAKAMURA, Yosuke
- **4E4-38** Synthesis of Near-Infrared Absorbing Dibenzopyrromethene Dyes with Thiophene Moieties for the Application in Organic Thin-Film Solar Cells. (Tokyo Metropolitan Univ., Mitsubishi Chemical Group Science and Technology Research Center) KUBO, Yuji; WATANABE, Kazuki; NISHIYABU, Ryuhei; HATA, Rieko; OTA, Hitoshi
- 4E4-39 Fluorescent Coordination Capsules Bearing Anthracene Rings (Chemical Resources Laboratory, Tokyo Institute of Technology; Rigaku Corporation) LI, Zhiou; HASEGAWA, Kimiko; YOSHIZAWA, Michito; AKITA, Munetaka

# Room E5

# Blda. 11 11-413

# Physical Organic Chemistry -Structures and Properties-

## Saturday, March 26, AM

Chair: HAN-NA, Jun-Ichi (9:10  $\sim$ 10:00)

- \* 9:00-9:10: interval for laptop PC connection.(1E5-02, 1E5-03, 1E5-04, 1E5-05, 1E5-06)
- **1E5-02** Synthesis of porphyrin-imide molecular transistor (Grad. Sch. Sci., Osaka Univ.) GOTO, Akifumi; GOHDA, Syun; TANAKA, Daisuke; TANAKA, Hirofumi; OGAWA, Takuji
- **1E5-03** Carrier Transfer Properties and Electronic Structure of Stable Allyl Radicals (Grad. Sch. of Eng., Osaka Pref. Univ.; Res. Inst. Mol. Elect. Dev., Osaka Pref. Univ.) IKEDA, Hiroshi; SHIGEMORI, Minoru; ENDO, Toshiyuki; NAITO, Hiroyoshi; MIZUNO, Kazuhiko
- **1E5-04** Delopment of intramolecular B-N coordinated organic semiconductors (Kyushu Univ., NIPPON SYOKUBAI Co., Ltd) TANAKA, Satotaro; GOYA, Tsuyoshi; MORII, Katsuyuki; ADACHI, Chihaya
- **1E5-05** Synthesis and OFET Properties of Soluble Extended π-Conjugated Tetracenes (Shizuoka Univ.; NIMS) TANAKA, Kenro; HAYAKAWA, Ryoma; WAKAYAMA, Yutaka; KOBAYASHI, Kenji
- **1E5-06** Synthesis and Properties of Steric-Protected Pentacenes (Shizuoka Univ.; Hamamatsu Photonics; Bruker axs) SERIZAWA, Koretaka; SUZUKI, Kengo; YOZA, Kenji; KOBAYASHI, Kenji

Chair: KOBAYASHI, Kenji (10:10∼11:10)

- \* 10:00-10:10: interval for laptop PC connection.(1E5-08, 1E5-09, 1E5-10, 1E5-12)
- **1E5-08** Synthesis and Semiconductor Characteristics of dibenzo[*d,d'*]benzo [1,2-*b*:4,5-*b'*]difuran derivatives with two alkyl substituents (Univ. of Tokyo) NAKANO, Koji; TRUONG, Minhanh; NOZAKI, Kyoko
- **1E5-09** Synthesis and Characterization of Pentacene Derivative with Pendant Cyanobiphenyl Groups at 2,3-Positions (Graduate School of Enviomental Science, Okayama Univ.) KAMISAKO, Koetsu; TAJIMA, Tomoyuki; TAKAGUCHI, Yutaka
- 1E5-10\* Molecular design for liquid crystals exhibiting high charge carrier mobility (I) (Tokyo Inst. of Tech. & JST-CREST) HANNA, Jun-ichi
- 1E5-12\* Molecular design for liquid crystals exhibiting high charge carrier mobility (II) -anthracene derivative- (Tokyo Inst. of Tech. & JST-CREST) TAKAYASHIKI, Yukiko; HANNA, Jun-ichi

Chair: TAKIMIYA, Kazuo (11:20 $\sim$ 12:20)

- \* 11:10-11:20: interval for laptop PC connection.(1E5-15, 1E5-17, 1E5-19)
- **1E5-15\*** Molecular design for liquid crystals exhibiting high charge carrier mobility (III) -BTBT derivative- (Tokyo Inst. of Tech. & JST-CREST) IINO, Hiroaki; KOBORI, Takeo; HANNA, Jun-ichi
- **1E5-17\*** Hydrogen-Bonded Perylene Bisimide Assemblies for Solution-Processable Organic Thin Film Transistors (Graduate school of Engineering, Chiba Univ.) SEKI, Tomohiro; YAGAI, Shiki; KARATSU, Takashi; KITAMURA, Akihide; MARUYA, Yukihiro; NAKAYAMA, Ken-ichi
- **1E5–19\*** Self-Organization and Charge-Transport Properties of π-Conjugated Columnar Liquid-Crystalline Molecules (The Univ. of Tokyo; Kyushu Univ.; Univ. of Sheffield) YASUDA, Takuma; SHIMIZU, Tomohiro; UNGAR, Goran; KATO, Takashi

## Saturday, March 26, PM

Chair: ASO, Yoshio (13:30~14:30)

- \* 13:20-13:30: interval for laptop PC connection.(1E5-28, 1E5-30, 1E5-32)
- **1E5-28\*** Disilanyl Double-Pillared Bisanthracene: A Bipolar Carrier Transport Material for Organic Light Emitting Diode Devices (Tohoku Univ.) HITOSUGI, Shunpei; NAKANISHI, Waka; PISKAREVA, Anna; SHIMADA, Yusuke; TAKA, Hideo; KITA, Hiroshi; ISOBE, Hiroyuki
- **1E5-30\***<sup>†</sup> Selective synthesis and structure-property relationship offour isomeric Naphthodithiophenes. (Graduate School of Engineering, Hiroshima Univ.) SHINAMURA, Shoji; MIYAZAKI, Eigo; OSAKA, Itaru; TAKIMIYA, Kazuo
- **1E5-32\*** Structure-Property Relationships in Organic Photovoltaics Based on Dinaphthothienothiophene (DNTT) Derivatives (Hiroshima Univ.) MORI, Hiroki; KANG, Myeong jin; SHINAMURA, Shoji; OSAKA, Itaru; MIYAZAKI, Eigo; TAKIMIYA, Kazuo

Chair: YAMASHITA, Yoshiro (17:00 $\sim$ 18:00)

- \* 16:50-17:00: interval for laptop PC connection.(1E5-49, 1E5-50, 1E5-52, 1E5-54)
- **1E5-49** New Method for the Synthesis of DNTT using Regioselective Functionalizations of Naphthalene Derivatives (Hiroshima Univ.) NIIMI, Kazuki; KANG, Myeong jin; OSAKA, Itaru; MIYAZAKI, Eigo;

TAKIMIYA, Kazuo

- **1E5-50\*** Synthesis and FET chracteristices of two kinds of isomeric Dinaphto [2,3-b:2',3'-f]thieno[3,2-b]thiophenes derivatives (Hiroshima Univ.) KANG, Myeong jin; NIIMI, Kazuki; MIYAZAKI, Eigo; OSAKA, Itaru; TAKIMIYA, Kazuo
- 1E5-52\* Synthesis and Properties of Acenes Having Electron Withdrawing Groups (Ehime Univ.; Yamagata Univ.) KATSUTA, Shuhei; MIYAGI, Daichi; YAMADA, Hiroko; TANAKA, Kazuki; OKUJIMA, Tetsuo; MORI, Shigeki; NAKAYAMA, Ken-ichi; UNO, Hidemitsu
- 1E5-54 Synthesis and Structure of Pentacene bisimide (Fac. Sci. Ehime Univ.) TANAKA, Kazuki; KATUTA, Shuhei; YAMADA, Hiroko; OKUJIMA, Tetusuo; MORI, Shigeki; UNO, Hidemitsu

### Sunday, March 27, AM

Chair: OKUJIMA, Tetsuo (9:00 ~10:00)

- \* 8:50-9:00: interval for laptop PC connection.(2E5-01, 2E5-02, 2E5-03, 2E5-04, 2E5-05, 2E5-06)
- **2E5-01** Synthesis and Properties of Thiophene Derivatives with Difluoroboron Diketonates (Nagoya Institute of Technology, Tokyo Institute of Technology) NAKASHIMA, Akihiro; ONO, Katsuhiko; NISHIDA, Junichi; YAMASHITA, Yoshiro
- 2E5-02 Synthesis and Properties of Triphenylamine Dyes Containing Difluoroboron Diketonates (Nagoya Institute of Technology) KOBAYASHI, Yusuke; YAMAGUCHI, Tomoya; YAMAOKA, Yasuaki; ONO, Katsuhiko
- 2E5-03 Synthesis and Properties of Quinacridonequinone Derivatives Modified by BF<sub>2</sub> Chelation (Nagoya Institute of Technology) HASHIZUME, Junko; TAKI, Masato; ONO, Katsuhiko
- 2E5-04 Quinacridone-Based Semiconducting Copolymers; Synthesis, Structures and Transistor Properties (Hiroshima Univ.) AKITA, Masahiro; OSAKA, Itaru; MIYAZAKI, Eigo; TAKIMIYA, Kazuo
- 2E5-05<sup>†</sup> Synthesis and FET Characteristics of Diketopyrrolopyrrole Derivatives (Tokyo Institute of TechnologyInterdisciplinary Grad. School of Sci. and Eng.) SUNA, Yuki; NISHIDA, Jun-ichi; YAMASHITA, Yoshiro
- 2E5-06 n-Type organic semiconductors composed of thiadiazole and pyrazine rings (Kurume National College of Technology) TESHIMA, Yuuki; NAKANISHI, Taro; YASUDA, Takeshi; ISHI-I, Tsutomu

### Sunday, March 27, PM

Chair: NISHIDA, Jun-Ichi (13:10~14:00)

- \* 13:00-13:10: interval for laptop PC connection.(2E5-26, 2E5-27, 2E5-28, 2E5-29, 2E5-30)
- 2E5-26 Palladium-Catalyzed (Acyl)cyanomethylation of Thiophene Derivatives (Hiroshima Univ.) TANABE, Hiroyuki; OSAKA, Itaru; MIYAZAKI, Eigo; TAKIMIYA, Kazuo
- 2E5-27 Synthesis, Properties, and n-Type FET Characteristics of Electron-accepting pai-Conjugated Systems Containing Carbonyl-bridged Thiazoles (ISIR, Osaka Univ.) UETA, Masashi; IE, Yutaka; ASO, Yoshio
- **2E5-28**<sup>†</sup> Synthesis and Properties of Encapsulated Electronegative Oligothiophene Molecular Wires Containing Dioxocyclopenta[c]thiophene. (The Institute of Scientific and Industrial Research, Osaka Univ.; JST-PRESTO) ENDOU, Masaru; IE, Yutaka; ASO, Yoshio
- 2E5-29<sup>†</sup> Synthesis and characteristics of organic FET materials based on azulene (Grad. Sch. Sci., Eng., Yamagata Univ.) YAMAGUCHI, Yuji; MARUYA, Yukihiro; KATAGIRI, Hiroshi; NAKAYAMA, Ken-ichi; OHBA, Yoshihiro
- **2E5-30** Propeties of Cyclic Tetrathiophene Deriverives Bearing Planar COT Structure (Tokyo Metroporitan Univ.) AITA, Kazunari; OHMAE, Takeshi; TAKASE, Masayoshi; IYODA, Masahiko; NISHINAGA, Tohru

Chair: MIYAZAKI, Eigo (14:10∼15:10)

- \* 14:00-14:10: interval for laptop PC connection.(2E5-32, 2E5-33, 2E5-34, 2E5-35, 2E5-36, 2E5-37)
- 2E5-32 Development of electronegative oligomers having dicyanomethylene cyclopentene-annelated thiophenes as solution-processable n-type OFET materials. (The Institute of Scientific and Industrial Research, Osaka Univ.; JST-PRESTO) NISHIDA, Kazufumi; IE, Yutaka; ASO, Yoshio
- 2E5-33 Synthesis and Characteristics of Copolymer Containing Difluorodiox-ocyclopentene- Annelated Thiophene Unit as Material for Organic Solar Cells (The Institute of Scientific and Industrial Research, Osaka Univ.; JST-PRESTO) HUANG, Jianming; KARAKAWA, Makoto; IE, Yutaka; ASO, Yoshio
- 2E5-34 Synthesis and Properties of Three-Dimensional n-Type Materials Containing Peripheral Perylene Bis(dicarboximide) Groups. (The Institute of Scientific and Industrial Research, Osaka Univ.; JST-PRESTO) SAKURAI, Takahiro; IE, Yutaka; ASO, Yoshio
- 2E5-35<sup>†#</sup>Property of Bis-cinnolines as n-Type Semiconducting Materials and Their Application to Organic Solar Cells (Department of Chemistry, School of Science, The Univ. of Tokyo; ERATO, JST) YOKOI, Yuki; FURUKAWA, Shunsuke; SATO, Yoshiharu; TSUJI, Hayato; NAKAMURA, Eiichi
- 2E5-36\* Application of Truxene Derivatives as Buffer Layer Materials for Organic Solar Cells (The Univ. of Tokyo) OTA, Yoshinori; FURUKAWA, Shunsuke; BABU, B. P.; MITSUI, Chikahiko; SATO, Yoshiharu; TSUJI,

- Hayato; NAKAMURA, Eiichi
- 2E5-37 Assembled Structure and Photovoltaic Application of Ambipolar Tetraceneimide Disulfides Having Intramolecular Dipole Moment (School of Science, The Univ. of Tokyo) SUZUKI, Tsuyoshi; OKAMOTO, Toshihiro; TANAKA, Hidevuki: MATSUO, Yutaka
  - Chair: TAKAHASHI, Kazuvuki (15:20~16:20)
- \* 15:10-15:20: interval for laptop PC connection.(2E5-39, 2E5-41, 2E5-42, 2E5-43, 2E5-44)
- 2E5-39\*† Synthesis and properties of TTF oligomer with alkylenedithio linker (Grad. Sch. Sci., Eng., Ehime Univ.) NAKAMURA, Ken-ichi; HASHIMOTO, Tomomi; SHIBA, Ryou; BABA, Yumi; SHIRAHATA, Takashi; HASEGAWA, Masashi; MAZAKI, Yasuhiro; MISAKI, Yohji
- 2E5-41 Synthesis of multiarylated tetrathiafulvalenes by palladium-catalyzed direct arylation and their properties. (Graduate School of Engineering, and Graduate School of Science, Kyoto Univ..) MITAMURA, Yukihiro; YORIMITSU, Hideki; OSHIMA, Koichiro
- **2E5-42** Synthesis and properties of 1,3-dithiole[n]dendralenes with three thiophene spacers (Grad. Sch. Sci., Eng., Ehime Univ.) HORIUCHI, Hiroaki; SHIRAHATA, Takashi; MISAKI, Yohji
- **2E5-43** Redox behavior of 1,3-dithiole[4]dendralenes with furan ring inserted (Grad. Sch. Sci., Eng., Ehime Univ.) WATANABE, Miho; HORIUCHI, Hiroaki; SHIRAHATA, Takashi; MISAKI, Yohji
- 2E5-44 Synthesis, structures and properties of new extended TTF dimers. (Grad. Sch. Sci., Eng., Ehime Univ.) KAWASAKI, Yuji; SHIRAHATA, Takashi; MISAKI, Yohji
  - Chair: MISAKI, Yohji (16:30 $\sim$ 17:30)
- \* 16:20-16:30: interval for laptop PC connection.(2E5-46, 2E5-47, 2E5-48, 2E5-49, 2E5-50, 2E5-51)
- 2E5-46 Synthesis and properties of Catechol fused novel electron-donating ligand CatTTF (Inst. for Solid State Phys., Univ. of Tokyo) KAMO, Hiromichi; TAKAHASHI, Kazuyuki; MORI, Hatsumi
- **2E5-47** Controlling of polymorphic crystallization using gel-crystal transition of pyridazine annulated TTF (Sch. Sci., Kitasato Univ.) INOUE, Ryota; HASEGAWA, Masashi; MAZAKI, Yasuhiro
- 2E5-48 Synthesis and Properties of Chiral Tetrathiafulvalenyl Allenes (Sch. Sci., Kitasato Univ.) IWATA, Seiya; SONE, Yasuhito; HASEGAWA, Masashi; MATSUZAWA, Hideyo; MAZAKI, Yasuhiro
- **2E5-49** Synthesis and Properties of Radially-arranged Pyrrole-fused Tetrathiafulvalenes (Tokyo Metropolitan Univ.) YOSHIDA, Naofumi; TAKASE, Masayoshi; NISHINAGA, Tohru; IYODA, Masahiko
- 2E5-50 Synthesis and Properties of Pi-extended Bianthrone Thiophene Analogues (Sch. Sci., Kitasato Univ.) TAKEHANA, Natsuki; HASEGAWA, Masashi; MAZAKI, Yasuhiro
- 2E5-51 Synthesis and Properties of Oligothiophenes Integrated with Multiple Quinone-Methides (Grad. Sch. Sci., Osaka Univ.) INOUE, Taihei; KURATA, Hiroyuki; HIRAO, Yasukazu; MATSUMOTO, Kouzou; KUBO, Takashi

# Monday, March 28, AM

- Chair: HASEGAWA, Masashi (9:00  $\sim$ 10:00)
- \* 8:50-9:00: interval for laptop PC connection.(3E5-01, 3E5-02, 3E5-03, 3E5-04, 3E5-05)
- **3E5-01** Synthesis of Cage Shaped Oligothiophene Constructed by Three Chains of Oligothiophene (Grad. Sch. Sci., Osaka Univ.) ADACHI, Kazuhiko; KURATA, Hiroyuki; HIRAO, Yasukazu; MATSUMOTO, Kouzou; KUBO, Takashi
- **3E5-02** Properties of radical cations of dithienylpyrrole derivatives end-capped with methylthio group (Graduate School of Science and Engineering, Tokyo Metropolitan Univ.) KOIZUMI, Masahide; TAKASE, Masayoshi; IYODA, Masahiko; NISHINAGA, Tohru
- **3E5-03** Synthesis and Properties of Segregated Donor-Acceptor Discotic molecules (Graduate School of Science and Engineering, Tokyo Metropolitan Univ.) FUJIO, Takashi; TAKASE, Masayoshi; NISHINAGA, Tohru; IYODA, Masahiko
- 3E5-04 Synthesis and Properties of Tetrathienylborole (Department of Chemistry, Graduate School of Science, Nagoya Univ.; CREST, Japan Science and Technology Agency) ARAKI, Takafumi; YAMAGUCHI, Shigehiro
- 3E5-05\*† Synthesis and Properties of Heteroarene-Fused Ladder Boroles (Department of Chemistry, Graduate School of Science, Nagoya Univ.; CREST, Japan Science and Technology Agency) IIDA, Azusa; SEKIOKA, Anna; YAMAGUCHI, Shigehiro
  - Chair: NISHINAGA, Tohru (10:10~11:10)
- \* 10:00-10:10: interval for laptop PC connection.(3E5-08, 3E5-10, 3E5-12, 3E5-13)
- 3E5-08\* Photophysical Properties of Tetraarylthiophenes with Thiazolyl Groups (Department of Chemistry, Graduate School of Science, Nagoya Univ.; CREST, Japan Science and Technology Agency; Institute for Advanced Research, Nagoya Univ.) NAGURA, Kazuhiko; SAITO, Shohei; IRLE, Stephan; YAMAGUCHI, Shigehiro
- **3E5-10\***<sup>†</sup> Synthesis and Properties of Cyclic Thiazole Tetramer (Department of

- Chemistry, Graduate School of Science, Nagoya Univ.; CREST, JST)
  MOURI, Kazuhiro; SAITO, Shohei: YAMAGUCHI, Shigehiro
- **3E5-12** Synthesis and Properties of pi-Conjugated Molecules based on Thioalkyl-Substituted Benzodithiophene Skeleton (Faculty of Engineering, Osaka Univ.) OTA, Shinya; HIRANO, Koji; SATOH, Tetsuya; SEKI, Shuuhei: MIURA, Masahiro
- **3E5-13** Syntheses and Properties of Perfluoroalkyl-substituted Poly(thienopyrazine)s: Toward Creation of Electron-accepting Fluorous Conjugated Polymers (Department of Chemistry, Massachusetts Institute of Technology) TAKEDA, Youhei; SWAGER, Timothy M.
  - Chair: MATSUMOTO, Kouzou (11:20~12:20)
- \* 11:10-11:20: interval for laptop PC connection.(3E5-15, 3E5-16, 3E5-17, 3E5-18, 3E5-19, 3E5-20)
- **3E5-15** Control of Pi-dimerization of Oligothiophene Radical Cations End-Capped by thio groups (Graduate School of Science and Engineering, Tokyo Metropolitan Univ.) TATENO, Masaki; TAKASE, Masayoshi; KOMATSU, Koichi; IYODA, Masahiko; NISHINAGA, Tohru
- 3E5-16 Synthesis and properties of pi-expanded oligothiophene 7-mer and 14-mer (Tokyo Metropolitan Univ.) POCHI, Huang, RAHMAN, Mohammad Jalilur; TAKASE, Masayoshi; NISHINAGA, Tohru; IYODA, Masahiko
- **3E5-17** Preparation of the cyclophanes consisting of the oligothiophene units and control of their dynamic structure by formation of rotaxane (Department of Applied Chemistry, Kyushu Institute of Technology) NAKAMURA, Katsuji; MORIGUCHI, Tetsuji; ARAKI, Koji; TSUGE, Akihiko
- 3E5-18 Synthesis and photophysical properties of novel extended π-conjugated dithienothiophene-based fluorescent materials (Grad. Sch. Sci. Eng., Saga Univ.) DO, Junghee; MIYAMOTO, Shinpei; YAMATO, Takehiko
- **3E5-19** Solid-state Photophysical Properties of Bi(thieno[2,3-c]thiophene) Derivatives (Graduate School of Science, Nagoya Univ.; JST-CREST) KISHI, Daisuke; FUKAZAWA, Aiko; YAMAGUCHI, Shigehiro
- **3E5-20** Synthesis and Properties of Bi(thiazole-fused heteroaryl)s (Graduate School of Science, Nagoya Univ.; JST-CREST) TANGE, Satoshi; FUKAZAWA, Aiko; YAMAGUCHI, Shigehiro

### Monday, March 28, PM

#### **Fullerene**

Chair: TSUCHIYA, Takahiro (13:30~14:30)

- \* 13:20-13:30: interval for laptop PC connection.(3E5-28, 3E5-30, 3E5-32)
- **3E5-28\*** Aziridinofullerene: A Versatile Platform for Functionalized Fullerenes (Graduate School of Science, Nagoya Univ.) NAMBO, Masakazu; SEGAWA, Yasutomo; ITAMI, Kenichiro
- 3E5-30\*\*A New Synthetic Method for Methano[60]- and Methano[70]-fullerenes (The Univ. of Tokyo) ZHANG, Ying; MATSUO, Yutaka; NAKAMURA, Eiichi
- 3E5-32\* Selective Synthesis of [5,6]-Open Azafulleroids from C<sub>60</sub> and Amides Using Iodonium Sources (Osaka Univ.) NAGAMACHI, Toshiki; MINAKATA, Satoshi
  - Chair: KOKUBO, Ken (14:40~15:40)
- \* 14:30-14:40: interval for laptop PC connection.(3E5-35, 3E5-36, 3E5-37, 3E5-38, 3E5-39, 3E5-40)
- 3E5-35 Selective Synthesis of [6,6]-Closed Aziridinofullerenes from C<sub>60</sub> and N, N-Dibromosulfonamides (Osaka Univ.) MINAKATA, Satoshi; NAKAYAMA, Kazuhisa; NAGAMACHI, Toshiki; NISHIKORI, Katsuaki
- **3E5-36** Synthesis of Alkynyl [60]Fullerene Derivatives and Their Application for Organic Solar Cells (Institute for Chemical Research, Kyoto Univ.) NOBORI, Masahiro; MURATA, Michihisa; MORINAKA, Yuta; WAKAMIYA, Atsushi; SAGAWA, Takashi; YOSHIKAWA, Susumu; MURATA, Yasujiro
- **3E5-37** Synthesis and Properties of BODIPY-Azafullerene Dyads (Institute for Chemical Research, Kyoto Univ.) KATSUYA, Satoshi; MURATA, Michihisa; MURATA, Yasujiro
- 3E5-38<sup>†#</sup>Penta(organo)[60]fullerene self-assembled monolayers for work function and surface energy tuning of metals and metal oxides (The Univ. of Tokyo) LACHER, Sebastian; MATSUO, Yutaka; NAKAMURA, Eiichi
- 3E5-39 Synthesis, Structures, and Properties of an Oxidation Product of the [60]Fullerene 1,4-bis-adduct, SIMEF (Dept. of Chem., Univ. of Tokyo) OZU, Ayako; XIAO, Zuo; NAKAMURA, Eiichi; MATSUO, Yutaka
- 3E5-40 Introduction of azetidinimine skelton on C<sub>60</sub> (Univ. of Tsukuba, TARA) UEDA, Nobuaki; TAKANO, Yuta; NIKAWA, Hidefumi; ISHITSUKA, Midori; TSUCHIYA, Takahiro; AKASAKA, Takeshi
  - Chair: MURATA, Michihisa (15:50 $\sim$ 17:00)
- \* 15:40-15:50: interval for laptop PC connection.(3E5-42, 3E5-43, 3E5-44, 3E5-45, 3E5-46, 3E5-47)
- **3E5-42** The acid catalyzed denitrogenation reaction oftriazolinofullerene. (Graduate School of Engineering, Osaka Univ.) MIKIE, Tsubasa; TANAKA, Nobuhide; IKUMA, Naohiko; KOKUBO, Ken; OSHIMA, Takumi
- 3E5-43 Regiochemistry and electronic properties of [60]fullerenyl 2-methyl-malonate bisadducts (Graduate School of Engineering, Osaka Univ.)

- KOKUBO, Ken; ARASTOO, Riyah S.; OSHIMA, Takumi
- **3E5-44**\* Copper-Catalyzed Formal [4 + 2] Annulation between Alkyne and Fullerene Bromide (The Univ. of Tokyo) XIAO, Zuo; MATSUO, Yutaka; NAKAMURA, Eiichi
- **3E5-45** Polar and Halogenated Solvent Effects on Diels-Alder Reaction of Fullerene and its Derivatives. (Graduate School of Engineering, Osaka Univ.) IKUMA, Naohiko; MIKIE, Tsubasa; ARASTOO SAYED, Riyah; KOKUBO, Ken; OSHIMA, Takumi
- 3E5-46 Synthesis of Carbazole Oligomers Connected with Various Linkages and Their Complexation with Fullerenes (Gunma Univ.) KOBAYASHI, Kounosuke; KATO, Shin-ichiro; NAKAMURA, Yosuke
- 3E5-47\* Synthesis of fluorescent-tagged fullerenols and their photophysical properties (Graduate School of Engineering, Osaka Univ.) KOKUBO, Ken; SHIRAKAWA, Shogo; IKUMA, Naohiko; OSHIMA, Takumi

### Molecular Magnetism

Chair: SUZUKI, Shuichi (17:10~18:10)

- \* 17:00-17:10: interval for laptop PC connection.(3E5-50, 3E5-51, 3E5-52, 3E5-53, 3E5-54, 3E5-55)
- 3E5-50 Synthesis of benzene-urea derivatives having organic radicals and their thermosensitive self-assembling behavior (Graduate school of Pharmaceutical Science, Kyushu Univ.) OHASHI, Eriko; KARASAWA, Satoru; KOGA, Noboru
- 3E5-51 Preparation of 1,3,5-Triureabenzene Derivatives and pH-sensitive and Thermoresponsive Self-Assemblies in Aqueous Solution (Kyushu Univ.) OHKUBO, Kengo; HAYASHI, Hiroyuki; KARASAWA, Satoru; KOGA, Noboru
- 3E5-52 Effects of Chemical Modification of Indole Nitronyl Nitroxide on Solid State Magnetic Properties (Faculity of science and technology, Keio Univ.) XU, Shiyu; MURAOKA, Takashi; MAEDA, Chihiro; YOSHIOKA, Naoki
- 3E5-53 Substitution Effect of 1,5-positions on Solid-state Magnetic Properties of 6-Oxoverdazyl Derivatives (Faculty of Science and Technology, Keio Univ.) TAKATA, Mina; HIGUCHI, Hironori; MAEDA, Chihiro; YOSHIOKA, Naoki
- 3E5-54 Self-assembly and Spin Alignment of Nitridochromium(V) Complex (Faculty of Science and Technology, Keio Univ.) WATANABE, Yuki; ISHIDA, Kirie: MAEDA, Chihiro: YOSHIOKA, Naoki
- **3E5-55** Evaluation of β Value of Phenylene Unit by Probing Exchange Interaction between Two Nitroxides (Grad. School of Eng., Kyoto Univ.) HIGASHIGUCHI, Kenji; YUMOTO, Koji; MATSUDA, Kenji

### Tuesday, March 29, AM

Chair: KARASAWA, Satoru (9:00  $\sim$ 10:00)

- \* 8:50-9:00: interval for laptop PC connection.(4E5-01, 4E5-03, 4E5-05, 4E5-06)
- **4E5-01\*** Magnetic Properties and metal Complexes of meso-Diketo Hexaphyrin (Graduate School of Science, Kyoto Univ., Institute for Molecular Science, Graduate School of Science, Osaka City Univ.) KOIDE, Taro; FURUKAWA, Ko; TAKUI, Takeji; OSUKA, Atsuhiro
- 4E5-03\*<sup>†</sup> Synthesis and electronic properties of aromatic amines stacked through m-phenylene pillars (Kyoto Univ.; Institute for Molecular Science; Kyoto Univ.) SAKAMAKI, Daisuke; ITO, Akihiro; TANAKA, Kazuyoshi; FURUKAWA, Ko; KATO, Tatsuhisa
- **4E5-05** Construction of proton-coupled electron transfer systems using an organic stable radical and elucidation of the mechanisms (Grad. Sch. Sci., Osaka Univ.) SAITO, Toru; HIRAO, Yasukazu; KONISHI, Akihito; MATSUMOTO, Kouzou; KURATA, Hiroyuki; KUBO, Takashi
- 4E5-06 Substituent Effect on Redox Behavior of Delocalized Stable Organic Radicalds (Faculty of Science and Technology, Keio Univ.) ISHIDA, Mikiyasu; MAEDA, Chihiro; YOSHIOKA, Naoki

Chair: HIGASHIGUCHI, Kenji (10:10∼11:00)

- \* 10:00-10:10: interval for laptop PC connection.(4E5-08, 4E5-09, 4E5-10, 4E5-11, 4E5-12)
- **4E5-08** Structure and Magnetic Properties of Bisnitroxide as a Paramagnetic Host (The Univ. of Electro-Communications;Department of Engineering Science) KOIDE, Kazuya; ISHIDA, Takayuki
- **4E5-09** Preparation and Magnetic Properties of Heterospin 3d metal Complexes Using *N*,*N*-di(4-pyridyl) aminoxyl (Graduate School of Pharmaceutical Sciences, Kyushu Univ.) MURASHIMA, Kensuke; KARASAWA, Satoru; KOGA, Noboru
- 4E5-10 Magnetic Properties of Heterospin Cobalt 1D Complexes Bridging with High-spin Magnetic Coupler (Graduate School of Pharmaceutical Sciences, Kyushu Univ.) YOSHIHARA, Daisuke; KARASAWA, Satoru; KOGA, Noboru
- 4E5-11 Synthesis and Magnetic Properties of a New Diradical Cation Based on Trioxytriphenylamine (Departments of Chemistry, Graduate School of Science, Osaka City Univ.) NAGATA, Atsuki; SUZUKI, Shuichi; KURATSU, Masato; KOZAKI, Masatoshi; SHIOMI, Daisuke; SATO, Kazunobu; TAKUI, Takeji; OKADA, Keiji
- **4E5-12** Synthesis and Properties of Optically-active Spin-delocalized Neutral Radical with Helicenic Non-planar  $\pi$ -Electronic Structure (Osaka Univ.;

Osaka City Univ.) UEDA, Akira; SUZUKI, Shuichi; OKADA, Keiji; SATO, Kazunobu; TAKUI, Takeij; MORITA, Yasushi

Chair: MAEDA, Chihiro (11:10~11:50)

- \* 11:00-11:10: interval for laptop PC connection.(4E5-14, 4E5-15, 4E5-16, 4E5-17)
- 4E5-14 Electric field dependence of paramagnetic susceptibility in all-organic ferroelectric radical liquid crystals (Kyoto Univ.) SUZUKI, Katsuaki; UCHIDA, Yoshiaki; SHIMONO, Satoshi; TAMURA, Rui; NODA, Yohei; YAMAUCHI, Jun
- 4E5-15 Synthesis and Properties of Bistrioxotriangulene Derivative (Osaka Univ.) ASAKURA, Noriaki; UEDA, Akira; MURATA, Tsuyoshi; SATO, Kazunobu; TAKUI, Takeii; MORITA, Yasushi
- **4E5-16** Studies of a Singlet Biradical with Small Biradical Character: Synthesis and Properties of an Indeno[2,1-a]fluorene Derivative (Graduate School of Engineering Science, Osaka Univ.) SHIMIZU, Akihiro; TOBE, Yoshito
- 4E5-17 Syntheses and Properties of Triphenothiazinylborane Neutral and Radical Cation, and Related Compounds (Osaka City Univ.) YOSHIDA, Kohei; SUZUKI, Shuichi; KOZAKI, Masatoshi; OKADA, Keiji

# Tuesday, March 29, PM

### **Another Properties**

Chair: MORITA, Yasushi (13:00~13:50)

- \* 12:50-13:00: interval for laptop PC connection.(4E5-25, 4E5-26, 4E5-27, 4E5-28, 4E5-29)
- **4E5-25** Host-guest electron transfer induced by encapsulation of TTF molecules into electron-deficient networked M<sub>6</sub>L<sub>4</sub> cages (School of Engineering, The Univ. of Tokyo; CREST) ARAI, Tatsuhiko; INOKUMA, Yasuhide; KATO, Tatsuhisa; FUJITA, Makoto
- 4E5-26 Oxidation of guest molecules included in a networked M<sub>6</sub>L<sub>4</sub> cages (School of Engineering, The Univ. of Tokyo; CREST) SHIMIZU, Mahito; INOKUMA, Yasuhide: FUJITA, Makoto
- 4E5-27<sup>#</sup> Control of the reactivity of the active reagents in the networked M<sub>6</sub>L<sub>4</sub> capsules (School of Engineering, The Univ. of Tokyo; CREST) NING, Guohong; INOKUMA, Yasuhide; FUJITA, Makoto
- 4E5-28 Control of optical properties of π-conjugated chiral supramolecular organic fluorophores by positional effect of substituent. (Kinki Univ.; NAIST; Univ. of Tokyo) NISHIGUCHI, Noriaki; KINUTA, Takafumi; SATO, Tomohiro; NAKANO, Yoko; TOKUTOME, Hayato; FUJIKI, Michiya; KURODA, Reiko; MATSUBARA, Yoshio; IMAI, Yoshitane
- 4E5-29 Preparation of supramolecular fluorescent host complex composed ofthiophenedicarboxylic acid derivatives (Kinki Univ.; Univ. of Tokyo) SHIOTA, Naoki; KIMOTO, Takaya; KINUTA, Takafumi; SATO, Tomohiro; KURODA, Reiko; MATSUBARA, Yoshio; IMAI, Yoshitane

Chair: INOKUMA, Yasuhide (14:00∼14:30)

- \* 13:50-14:00: interval for laptop PC connection.(4E5-31, 4E5-32, 4E5-33)
- 4E5-31 Molecular recognition behavior of Bisphenol A derivatives using cogniding complexation (Kinki Univ.; Univ. of Tsukuba; The Univ. of Tokyo) IWASE, Noriaki; SATO, Tomohiro; TAJIMA, Nobuo; KURODA, Reiko; MATSUBARA, Yoshio; IMAI, Yoshitane
- 4E5-32<sup>†</sup> Polymorphism property of naphthoquinone derivatives with thioether bond (Kinki Univ.) KINUTA, Takafumi; SATO, Tomohiro; MATSUBARA, Yoshio; IMAI, Yoshitane
- **4E5-33** Preparation of supramolecular organic fluorophore with porymorphism property by using aromatic amine and fluorescent naphthalenecarboxylic acid molecules. (Kinki Univ.; Univ. of Tokyo) KOBAYASHI, Yuhei; KINUTA, Takafumi; SATO, Tomohiro; HARADA, Takunori; KURODA, Reiko; MATSUBARA, Yoshio; IMAI, Yoshitane

# Room F1

Bldg. 20 20-201

# Colloid and Interface Chemistry Saturday, March 26, AM

### Nanoparticles and Dispersion

Chair: YAMADA, Sunao  $(9:00 \sim 10:00)$ 

- \* 8:50-9:00: interval for laptop PC connection.(1F1-01, 1F1-03, 1F1-04, 1F1-05, 1F1-06)
- 1F1-01\* Preparation of silver coated gold nanorods and their optical properties (Dept. Appl. Chem., Kyushu Univ.) NIIDOME, Yasuro; KIYA, Ayaka; NAKASHIMA, Naotoshi
- 1F1-03 Spectroscopic properties of Au-Ag core-shell Nanorods in a Solution and on a Substrate (Dept. of Appl. Chem., Kyushu Univ.) TSURU, Yukiko; NIIDOME, Yasuro; NAKASHIMA, Naotoshi
- 1F1-04 Electrochemical Deposition of Metal Silver on Gold surfaces in the

- Presence of Cationic Surfactants (Dept. of Appl. Chem., Kyushu Univ.) HAMASAKI, Yuki; NAKASHIMA, Naotoshi; NIIDOME, Yasuro
- 1F1-05 Reactivity and stability of Ag triangular nanoplates produced by substitution of surface protectants (Institute of Science and Engineering, Chuo Univ.) SAWADA, Tomoaki; KOJIMA, Yasuhiro; NISHIDA, Naoki; TANAKA, Hideki
- 1F1-06 Synthesis of Ag triangular nanoplates protected by chiral molcules and their chiroptical properties (Faculty of Science and Engineering, Chuo Univ.) KOJIMA, Yasuhiro; NISHIDA, Naoki; TANAKA, Hideki

Chair: NIIDOME, Yosuro (10:10~11:10)

- \* 10:00-10:10: interval for laptop PC connection.(1F1-08, 1F1-09, 1F1-10, 1F1-11, 1F1-12)
- 1F1-08 Preparation of oil-dispersible gold nanorod-clay compositesand their properties (Graduate School of Engineering, Kyushu Univ.) UGAMURA, Tomotaka; MATSUMOTO, Ryuji; ITO, Kengo; TAKAHASHI, Yukina; YAMADA. Sunao
- 1F1-09 Preparation of oil-dispersible gold nanoparticle-clay composites and their optical characteristics (Graduate School of Engineering, Kyushu Univ.) MATSUMOTO, Ryuji; UGAMURA, Tomotaka; ITO, Kengo; TAKAHASHI, Yukina; YAMADA, Sunao
- 1F1-10 Synthesis and size-control of dendric Au nanowires by using a long-chain amidoamine derivative (Tokyo Univ. of Science) MAEZAWA, Ayumi; IMURA, Yoshiro; MORITA, Clara; ENDO, Hiroshi; KAWAI, Takeshi
- 1F1-11 Selective growth of noble metal from both ends of a straight Au nanowire (Tokyo Univ. of Science) IMURA, Yoshiro; ITO, Yuki; MORITA, Clara; ENDO, Hiroshi; KAWAI, Takeshi
- 1F1-12\* Closely adjacent gold and silver nanoparticles formed by electrostatic and chemical interaction towards enormous SERS activation (Graduate School of Science and Engineering, Saitama Univ.) FUTAMATA, Masayuki; YU, Yeiyei; YAJIMA, Toru

Chair: KAWAI, Takeshi (11:20~12:20)

- \* 11:10-11:20: interval for laptop PC connection.(1F1-15, 1F1-17, 1F1-18, 1F1-20)
- 1F1-15\* Investigation and photoelectrochemical control of polarization properties of upright Ag nanoplates deposited on a nanoparticulate TiO<sub>2</sub> film (IIS, The Univ. of Tokyo) TANABE, Ichiro; MATSUBARA, Kazuki; SAKAI, Nobuyuki; TATSUMA, Tetsu
- 1F1-17 Size- and orientation-selective removal of upright Ag nanoplates on a nanoparticulate TiO<sub>2</sub> film (IIS, The Univ. of Tokyo) SAKAI, Yoko; TANABE, Ichiro; TATSUMA, Tetsu
- 1F1-18\* Fabrication of hybrid material based on growth of metal-organic frameworks on a surface of metal nanoparticle (FIRST, Konan Univ.) TSURUOKA, Takaaki; KAWASAKI, Hiroko; NAWAFUNE, Hidemi; AKAMATSU, Kensuke
- 1F1-20<sup>†</sup> Surface Plasmon Enhanced Fluorescence of Chlorophyll Derivatives by Flower-like Au-Ag Binary alloy Nanoparticles (Kyoto Prefectural Univ. Division of Applied Life Sciences) KUMAGAI, Keisuke; ISHIDA, Akito

# Saturday, March 26, PM

Chair: TERANISHI, Toshiharu (13:30~14:30)

- \* 13:20-13:30: interval for laptop PC connection.(1F1-28)
- 1F1-28 CSJ Award for Creative Works Functional Materials Based on Photoinduced Redox Reactions of Metal Nanoparticles (IIS, The Univ. of Tokyo) TATSUMA, Tetsu

Chair: KOBAYASHI, Hirokazu (14:40 $\sim$ 15:40)

- \* 14:30-14:40: interval for laptop PC connection.(1F1-35, 1F1-37, 1F1-39)
- 1F1-35\* Role of Base During the Ag NPs Formation Using Sodium Acrylate as a Dual Capping and Reducing Agent (Sch. Mat. Sci., JAIST) NISHIMURA, Shun; MOTT, Derrick; TAKAGAKI, Atsushi; MAENOSONO, Shinya; EBITANI, Kohki
- **1F1-37\*** Multipole Plasmon-Induced Charge Separation at the Ag Nanorod-TiO<sub>2</sub> Interface (IIS, The Univ. of Tokyo) KAZUMA, Emiko; SAKAI, Nobuyuki; TATSUMA, Tetsu
- 1F1-39\* Syntheses of Glutathione-Protected Metal Clusters and Their Application to Photoelectrochemistry (IIS, The Univ. of Tokyo) SAKAI, Nobuyuki; TATSUMA, Tetsu

Chair: TATSUMA, Tetsu (15:50∼16:50)

- \* 15:40-15:50: interval for laptop PC connection.(1F1-42, 1F1-44, 1F1-46, 1F1-47)
- 1F1-42\* PAMAM Dendrimer-Stabilized Pd Nanoparticles Supported on Microporous Polymers: Efficient Suppression against Pd Leaching Behavior. (Kawamura Institute of Chemical Research) OGASAWARA, Shin; KATO, Shinji
- **1F1-44\*** Photoinduced Electron Transfer of Gold Cluster Palnarly Coodinated by Porphyrine (Univ. of Tsukuba) SAKAMOTO, Masanori; TANAKA, Daisuke; TERANISHI, Toshiharu
- 1F1-46 Synthesis and Hydrogen-Storage Properties of Pt-Pd bimetallic nanoparticles (Kyoto Univ.) KOBAYASHI, Hirokazu; KITAGAWA,
- 1F1-47 Synthesis and Physical Properties of Shape-Controlled Bimetallic Pd/

Pt Nanocrystals (Faculty of Science, Kyoto Univ.) HEMMI, Kojiro; KOBAYASHI, Hirokazu; KITAGAWA, Hiroshi

Chair: KANEHARA, Masayuki (17:00~18:00)

- \* 16:50-17:00: interval for laptop PC connection.(1F1-49, 1F1-50, 1F1-51, 1F1-52, 1F1-53, 1F1-54)
- **1F1-49** Synthesis of a New Chiral Polypyrrolidone and Its Polypyrrolidone-Protected Metal Nanoclusters (Kinki Univ. Faculty of Science and Engineering) HARAGUCHI, Yu; NAKAHODO, Tsukasa; FUJIHARA, Hisashi
- 1F1-50 Synthesis and Catalysis of Calixarene-linked Bisphosphine-Functionalized Metal Nanoclusters (Kinki Univ. Faculty of Science and Engineering) YASUTAKE, Ryo; NISHIMURA, Ryo; YAMADA, Shota; NAKAHODO, Tsukasa; FUJIHARA, Hisashi
- 1F1-51 Synthesis and Property of Optically Active Phosphine Cavitand-functionalized Metal Nanoclusters (Kinki Univ. Faculty of Science and Engineering) NISHIMURA, Ryo; NAKAHODO, Tsukasa; FUJIHARA, Hisashi
- 1F1-52 Synthesis and Catalysis of Chiral Metal Nanoclusters Protected by Fluorocarbon-substituted BINAP (Kinki Univ. Faculty of Science and Engineering) FUKUSHIMA, Kei; NAKAHODO, Tsukasa; FUJIHARA, Hisashi
- 1F1-53 One-step Synthesis of Sugar-Gold Nanoparticle Hybrid Materials Using Sugar containing Reductive Stabilizer (Graduate School of Engineering and Science, Kagoshima Univ..) OKIAYU, Yuta; OKAMURA, Hiroaki; KURAWAKI, Jyunichi; HAMADA, Toshiyuki; IWAGAWA, Tetsuo
- **1F1-54** Preparation of Polythiophene-hybrid Gold Nanocrystals with Several Shapes (Tokyo Metropolitan Univ.) MINAMI, Tsuyoshi; NISHIYABU, Ryuhei; IYODA, Masahiko; KUBO, Yuji

### Sunday, March 27, AM

### Nanoparticles and Dispersion

Chair: NEGISHI, Yuichi  $(9:00\sim10:00)$ 

- \* 8:50-9:00: interval for laptop PC connection.(2F1-01, 2F1-02, 2F1-03, 2F1-04, 2F1-05, 2F1-06)
- **2F1-01** Photoluminescence Enhancement of Terbium(III) Dipicolinic Acid Complex in Near-field Formed among Silver Nanoparticles (Kobe Univ.) MIZUHATA, Minoru: YOSHIMOTO, Daisuke
- 2F1-02 Effect of metal nanoparticles embedded in organic thin films on photoelectric conversion (Kyushu Univ.) MUNAOKA, Takatoshi; UMINO, Hidehisa; MITARAI, Hiroko; TAKAHASHI, Yukina; YAMADA, Sunao
- 2F1-03<sup>†#</sup>Effects of the Film thickness and morphology on Silver nanoparticles-Assisted Photocurrent Generation in Polythiophene-Fullerene Thin Films (Faculty of Engineering, Kyushu Univ.; Graduate School of Engineering, Kyushu Univ.) YOU, Jing; TAKAHASHI, Yukina; AKIYAMA, Tsuyoshi; YAMADA, Sunao
- **2F1-04** Improvement of photoelectric conversion efficiency of electrochemically-polymerized polythiophene with gold nanoparticles (Faculty of Engineering, Kyushu Univ.) Graduate school of Engineering, Kyushu Univ.) TAURA, Sakiko; YONEDA, Hiroyuki; TAKAHASHI, Yukina; AKIYAMA, Tsuyoshi; YAMADA, Sunao
- **2F1-05** Size Control of Gold Nanocubes for Direct Observation of Plasmon Hybridization Mode (Univ. of Tsukuba) MITSUI, Daisuke; EGUCHI, Miharu; TERANISHI, Toshiharu
- 2F1-06 Structural Analysis of Porphyrin-Protected Gold Clustersand Their Optical and Electrical Properties (Univ. of Tsukuba; JST-CREST) TANAKA, Daisuke; SAKAMOTO, Masanori; TERANISHI, Toshiharu

Chair: TAKAHASHI, Yukina (10:10 $\sim$ 11:10)

- \* 10:00-10:10: interval for laptop PC connection.(2F1-08, 2F1-09, 2F1-10, 2F1-11, 2F1-12, 2F1-13)
- 2F1-08 Stability and photoluminescence properties of Pd<sub>1</sub>Au<sub>10</sub>(PPh<sub>3</sub>)<sub>8</sub>Cl<sub>2</sub> cluster (Tokyo Univ. of Science) KURASHIGE, Wataru; NEGISHI, Yuichi
- 2F1-09 Protectant-free gold nanoparticles formed on carbon nanotubes (Institute of Science and Engineering, Chuo Univ.) TAKAHASHI, Tomoko; OSADA, Syohei; ENDO, Takahiro; NISHIDA, Naoki; TANAKA, Hideki
- 2F1-10 Regenerative synthesis of copper nanoparticles by photoirradiation (Institute of Science and Engineering, Chuo Univ.) MIYASHITA, Akira; NISHIDA, Naoki: TANAKA, Hideki
- 2F1-11<sup>†</sup> Development of Py-g-PEG stabilized Silver on Gold core-shell nanorods and application for cancer thermal therapy (Tokyo Univ. of Science, Center for Colloid and Interface Science Research Institute for Science and Technology) KUTSUZAWA, Koichi; KUROSAWA, Toshihiko; OTSUKA, Hidenori
- 2F1-12 Critical role played by photothermal effect on photo-induced growth of single gold nanoparticle (Institute of Science and Technology, The Univ. of Tokushima) SHIRAISHI, Ryowya; HASHIMOTO, Shuichi; UWADA, Takayuki
- 2F1-13 Properties of the exposed inorganic surface formed in thiolate-modified gold nanoclusters. (Faculty of Environmental Earth Science, Hokkaido Univ.; JST CREST) SUZUKI, Kai; SHICHIBU, Yukatsu;

Chair: KONISHI, Katsuaki (11: $20\sim12:20$ )

- \* 11:10-11:20: interval for laptop PC connection.(2F1-15, 2F1-16, 2F1-17, 2F1-18, 2F1-19, 2F1-20, 2F1-27, 2F1-29, 2F1-31, 2F1-33)
- 2F1-15<sup>#</sup> Selective aerobic oxidation catalysis of PVP-stabilized Pt clusters prepared by microfluidic method (Hokkaido Univ., Catalysis Research Center) Jakir Hossain, Mohammad; TSUNOYAMA, Hironori; YAMAUCHI, Miho: TSUKUDA, Tatsuva
- 2F1-16 Reversible control of gold nanoparticle assembly in non-linear chemical reaction system (Hokkaido Univ.) IWASAKI, Keisuke; NABIKA, Hideki; MURAKOSHI, Kei
- 2F1-17 Synthesis and characterization of small Pt cube based on growth mechanism (JAIST) NAKAMURA, Shingo; ISHINO, Yousuke; MIYABAYASHI, Keiko; MIYAKE, Mikio
- 2F1-18 Facile Synthesis and Electrocatalytic Activities of Monodisperse PtSn Nanoparticles (Department of Crystalline Materials Science, Nagoya Univ.) FURUKAWA, Koji; OKAZAKI, Ken-ichi; TORIMOTO, Tsukasa
- 2F1-19 Fabrication of janus gold nanoparticles by plasma treatment (Tokyo Univ. of Science) ITO, Naoyuki; ENDO, Hiroshi; KAWAI, Takeshi
- 2F1-20 Fabrication of network structure of Pd and Pt nanowires by using long-chain amido amine derivative (Tokyo Univ. of Science) TSUJIMOTO, Katsura; IMURA, Yoshiro; MORITA, Clara; ENDO, Hiroshi; KAWAI, Takeshi

### Sunday, March 27, PM

Chair: TORIMOTO, Tsukasa (13:20~14:30)

- 2F1-27\*\* Biomolecules-Assisted Isolation and Functionalization of Boron Nitride Nanotubes in Aqueous Solution (Graduate School of Engineering, The Univ. of Tokyo) GAO, Zhenghong; ZHI, Chunyi; BANDO, Yoshio; GOLBERG, Dmitri; SERIZAWA, Takeshi
- 2F1-29\*\* Formation of Hollow Semiconductor Nanostructures via DNA Assisted Double Templating (Graduate School of Environmental Studies, Nagoya Univ.) ZINCHENKO, Anatoly; PU, Shengyan; MURATA, Shizuaki
- 2F1-31\*#Structure and Optical Properties of Hydrophilic CdSe Colloidal Nanoparticles (Nagoya Univ.) PARK, Yeon-su; OKAMOTO, Yukihiro; KAJI, Noritada; TOKESHI, Manabu; BABA, Yoshinobu
- 2F1-33\* Electron Transfer and Multiexciton Dynamics of Au-CdSe nanorods (Kwansei Gakuin Univ.; School of Science and Technology.) SAGARZAZU, Gabriel; SARUYAMA, Masaki; TERANISHI, Toshiharu; TAMAI, Naoto

### Monday, March 28, AM

# Nanoparticles and Dispersion

Chair: TAMAI, Naoto (10:10~11:10)

- \* 10:00-10:10: interval for laptop PC connection.(3F1-08, 3F1-09, 3F1-10, 3F1-11, 3F1-12, 3F1-13)
- **3F1-08** Intensity enhancement of RGB-light-emitting Si nanoparticles by gold nanostructure (Grad. Sc. Sci., Hiroshima Univ. Faculty of Sci., Hiroshima Univ. N-BARD, Hiroshima Univ.) SAITOW, Ken-ichi; TAMAMITSU, Hironori; NISHIO, Kazuyuki
- **3F1-09** Synthesis of TypeII CuInS<sub>2</sub>/CdS Semiconductor Heterostructured Nanoparticles (Univ. of Tsukuba) INOUE, Kouki; SARUYAMA, Masaki; TERANISHI, Toshiharu
- **3F1-10** The effect of composition ratio and size of (CdMn)S nanoparticles on their magnetic and optical properties (Tohoku Univ.) NAKAYA, Masafumi; TANAKA, Itaru; MURAMATSU, Atsushi
- 3F1-11 Synthesis of PbS/EuS core/shell nanoparticles (Graduate School of Matrials Science, Nara Institute of Science and Technology) NAKAO, Hiroki; NAKASHIMA, Takuya; HASEGAWA, Yasuchika; KAWAI, Tsuyosi
- 3F1-12 Synthesis and Characterization of EuS/Au Nanoaggregates (Hokkaido Univ.) KAWASHIMA, Akira; MIYATA, Kohei; FUSHIMI, Koii: HASEGAWA, Yasuchika
- 3F1-13 Syntheses and characterization of EuS nanocrystals with Mn ions (Hokkaido Univ.) MAEDA, Masashi; MIYATA, Kohei; FUSHIMI, Koji; HASEGAWA, Yasuchika

Chair: NAKAYA, Masafumi (11:20~12:20)

- \* 11:10-11:20: interval for laptop PC connection.(3F1-15, 3F1-16, 3F1-17, 3F1-19)
- 3F1-15 Auger recombination and single particle spectroscopy of core-shell InP/ZnS quantum dots shell thickness dependence (School of Science and Technology, Kwansei Gakuin Univ.) TAKEUCHI, Akira; CHUNLIANG, Li; MURASE, Norio; TAMAI, Naoto
- **3F1-16** Time-resolved spectroscopic study on carrier multiplication of PbS nanocrystals and its surface effects (Kwansei Gakuin Univ.; School of Science and technology) KANTO, Shiori; LI, Wan; KOBAYASHI, Yoichi; TAMAI, Noote
- 3F1-17\*† Exciton generation processes and multiexciton interactions in semi-conductor CdTe quantum dots (School of Science and Technology, Kwansei Gakuin Univ.) KOBAYASHI, Yoichi; TAMAI, Naoto
- **3F1-19\***<sup>†</sup> Synthesis of CdS/CdTe Heterostructured Nanoparticles through

Anion Exchange Reaction of CdS Nanoparticles (Univ. of Tsukuba) SARUYAMA, Masaki; SO, Yeong-gi; KIMOTO, Koji; KANEHARA, Masayuki; TERANISHI, Toshiharu

### Monday, March 28, PM

Chair: KANDORI, Kazuhiko (13:30~14:30)

- \* 13:20-13:30: interval for laptop PC connection.(3F1-28, 3F1-29, 3F1-30, 3F1-32, 3F1-33)
- 3F1-28 Preparation and Photochemical Properties of AgInS<sub>2</sub> Nanoparticles with Anisotropic Shapes (Department of Crystalline Materials Science, Nagoya Univ.) TAKAMI, Shohei; OKAZAKI, Ken-ichi; KUDO, Akihiko; KUWABATA, Susumu; TORIMOTO, Tsukasa
- 3F1-29 Water Effect on Size-controlled Synthesis of CdS Nanoparticles in Hydrophilic Ionic Liquids (Wakayama National College of Technology) MORI, Midori; TRAN, Duy Thach; HAYASHI, Junjiro
- 3F1-30\* Gel-Assisted Solvothermal Synthesis of Monodispersed ITO Nanoparticles with Cubic Shape (IMRAM Tohoku Univ.) SASAKI, Takafumi; AKAMA, Yuki; KANIE, Kiyoshi; MURAMATSU, Atsushi
- 3F1-32 Preparation of Surface-Modified Iron Oxide Fine Particles Controlled in Size and Shape and their Magnetorheological Properties (IMRAM, Tohoku Univ.) ODA, Yasufumi; KANIE, Kiyoshi; YAMANAKA, Shinya; NAKAYA, Masafumi; ABE, Hiroya; MURAMATSU, Atsushi
- 3F1-33 Hydrothermal Synthesis of Shape-Controlled Barium Zirconate Fine Particles: Precise Size Control by Two-step Hydrothermal Treatment (IMRAM, Tohoku Univ.) SEINO, Yuki; KANIE, Kiyoshi; MURAMATSU, Atsushi

Chair: MAENOSONO, Shinya (14:40 $\sim$ 15:40)

- \* 14:30-14:40: interval for laptop PC connection.(3F1-35, 3F1-37, 3F1-39, 3F1-40)
- **3F1-35\*** Synthesis of Positively Charged Calcium Hydroxyapatite Nano-Crystals and Their Adsorption Behavior of Proteins (Osaka Kyoiku Univ.) KANDORI, Kazuhiko; ODA, Shohei
- 3F1-37\* Influence of Fe(III) on the formation and structure of layered zinc hydroxysulfate (Shimane Univ.; Faculty of Sci. and Eng.) TANAKA, Hidekazu: HIROIWA, Sei
- 3F1-39 Effects of pH on One-Dimensional Self-Assembly of Silica Nanospheres with the Aid of Surfactant Polymers (Univ. of Tokyo) OKADA, Mizuki; FUKAO, Masashi; NARUTAKI, Ayae; SHIMOJIMA, Atsushi; OKUBO, Tatsuya
- **3F1-40** Electric Field Enhancement Induced by Near IR Surface Plasmon Resonance of ITO Nanoparticles (Univ. of Tsukuba) YOSHINAGA, Taizo; FURUBE, Akihiro; KANEHARA, Masayuki; TERANISHI, Toshiharu

Chair: TORIGOE, Kanjiro (15:50 $\sim$ 17:00)

- \* 15:40-15:50: interval for laptop PC connection.(3F1-42, 3F1-43, 3F1-44, 3F1-45, 3F1-46, 3F1-47, 3F1-48)
- 3F1-42 Synthesis and huge coercive field of rhodium substituted epsilon-Fe<sub>2</sub>O<sub>3</sub> (School of Science, The Univ. of Tokyo) NAMAI, Asuka; UMEDA, Sayaka; SAKURAI, Shunsuke; NAKAJIMA, Makoto; SUEMOTO, Tohru; GOTO, Takashi; YOSHIDA, Takayuki; MIYAZAKI, Tatsuro; OHKOSHI, Shin-ichi
- **3F1-43**<sup>†</sup> Synthesis and Characterization of Highly water dispersible γ-AlOOH Nanorods (Jpn. Adv. Inst. Sci. Tec.) MATSUSHIMA, Satoshi; TRAN, Thu, Viet; MAENOSONO, Shinya
- **3F1-44** Assembly of iron oxide nanoparticles in lysozyme crystal (Genesis Res. Inst., Inc.; The Univ. of Tokyo) TAKEDA, Yoshihiro; MAFUNE, Fumitaka
- **3F1-45** Water dispersion of carbon nanotubes using peptides selected via a phage display method (The Univ. of Tokyo) MATSUMIYA, Kisei; EJIMA, Hirotaka; SAWADA, Toshiki; YUI, Hiroharu; SERIZAWA, Takeshi
- 3F1-46 Dispersion of Boron Nitride Nanotubes in Water Using Synthetic Polymers (The Univ. of Tokyo, Meiji Univ., National Institute for Materials Science) FUJIOKA, Kei; GAO, Zhenghong; SAWADA, Toshiki; ZHI, Chunyi; BANDO, Yoshio; GOLBERG, Dmitri; AIZAWA, Mamoru; SERIZAWA, Takeshi
- **3F1-47** Living radical polymerization of bpy(bipyridine)-g-PEG and the application to metal-coodinated polymer (Tokyo.Univ. of Sci; Ootsuka. Lab) TAKAHASHI, Riichi; UENO, Koji; OTSUKA, Hidenori
- **3F1-48** Study on nanoparticles of Py-b-PEG block copolymers (Tokyo Univ. of Sic; Otsuka.Lab.) IKENAGA, Yusuke; UENO, Koji; OTUKA, Hidenori

Chair: MAFUNE, Fumitaka (17:10∼18:20)

- \* 17:00-17:10: interval for laptop PC connection.(3F1-50, 3F1-51, 3F1-52, 3F1-53, 3F1-54, 3F1-55, 3F1-56)
- 3F1-50 Soft Materials Based on [2 + 2]-Type Planar Assemblies Consisting of Dipyrrolylpyrazoles and Anions (Institute of Science and Engineering, Ritsumeikan Univ.; PRESTO, JST) MAEDA, Hiromitsu; CHIGUSA, Kengo
- 3F1-51 Spontaneous emulsification under the electrochemically unstable condition in the presence of supporting electrolytes (Graduate School of Engineering, Kyoto Univ.) KITAZUMI, Yuki; NISHI, Naoya; KAKIUCHI, Takashi
- 3F1-52 Observation of Local Flow in Rotating Non-linear Pattern by Electroconvecting Colloidal Fluid (Yamagata univ.) SHINDO, Takahiro;

- SANO, Masahito
- 3F1-53 Preparation of nanoparticle colloid of flavonoids by laser ablation in water (Ehime Univ.) FUJIMURA, Tatsuya; ASAHI, Tsuyoshi
- 3F1-54 Fabrication of Porous Diamond Spherical Particles (Tokyo Univ. of Science) KOBAYASHI, Mari; KONDO, Takeshi; KAMESHIMA, Takashi; KADOTA, Yasuhiko: KAWAI, Takeshi; YUASA, Makoto
- 3F1-55 Near-infrared Photoluminescence of Diamond Nanoparticle (Tokyo Univ. of Science) URAI, Junichi; KONDO, Takeshi; YUASA, Makoto
- 3F1-56 Oscillation of micronano bubble generated by laser local heating at gas/liquid interface (Chuo Univ.) FUKANO, Ryuta; FUJII, Sho; KANAIZUKA. Katsuhiko: HAGA. Masa-aki

# Tuesday, March 29, AM

### Organized Films

Chair: KATAYAMA, Kenji (9:00 ∼10:00)

- \* 8:50-9:00: interval for laptop PC connection.(4F1-01, 4F1-02, 4F1-03, 4F1-04, 4F1-05, 4F1-06)
- **4F1-01** Temperature dependence on the formation process of vesicles in a nonionic surfactant solution (Tokyo Metropolitan Univ.) KAWABATA, Youhei; ICHIGUCHI, Kunihiro; KATO, Tadashi
- 4F1-02 Early process of vesicle formation below the Krafft temperature in a nonionic surfactant (Tokyo Metropolitan Univ.) YAMAUCHI, Yosuke; KAWABATA, Youhei; KATO, Tadashi
- 4F1-03 Development of a new pulsed magnet system and response to pulsed magnetic fields of vesicle (Shinshu Univ.) HAMASAKI, Atom; OZEKI, Sumio
- 4F1-04 Magnetic field control of electrical properties of a 1,10-N,N'-didecyl-diaza-18-crown-6 ether bimolecularmembrane (Physical Chemistry Laboratory, Shinshu Univ.) YAMAGUCHI, Suguru; KOBAYASHI, Yuuta; HAMASAKI, Atom; OZEKI, Sumio
- **4F1-05** Control on Molecular Filtering via Curvature-Induced Phase Transition in Lipid Bilayer (Hokkaido Univ.) OGAWA, Takafumi; NABIKA, Hideki; MURAKOSHI, Kei
- 4F1-06 Investigation of structural change of lipid bilayer in nano-space using fluorescence depolarization (Hokkaido Univ.) FUKAGAWA, Kazuya; SUMIDA, Tomoki; NABIKA, Hideki; MURAKOSHI, Kei

Chair: KAWABATA, Youhei (10:10~11:20)

- \* 10:00-10:10: interval for laptop PC connection.(4F1-08, 4F1-09, 4F1-10, 4F1-11, 4F1-12, 4F1-13, 4F1-14)
- **4F1-08** Mechanism of liposome solubilization induced by surfactant molecules observed in a microchip(1) (Chuo Univ.) SHOJI, Yuri; IGARASHI, Takashi; NOMURA, Hiroko; EITOKU, Takeshi; KATAYAMA, Kenji
- **4F1-09** Mechanism of liposome solubilization induced by surfactant molecules observed in a microchip (2) (Chuo Univ.) IGARASHI, Takashi; SHOJI, Yuri; NOMURA, Hiroko; KATAYAMA, Kenji
- 4F1-10 Length-effect of amplified DNA inside vesicle acted as an accelerator for vesicular division (Ochanomizu Univ., The Univ. of Tokyo) KAN, Yumi; KURIHARA, Kensuke; TOYOTA, Taro; IMAI, Masayuki; SUGAWARA, Tadashi
- 4F1-11 Spontaneous motion of o-toluidine droplet in STAC aqueous solution (Kanagawa Univ.) NANZAI, Ben; ISHIKAWA, Ryotaro; IGAWA, Manabu.
- 4F1-12 Threshold for spontaneous oscillation in a three-phase liquid membrane system involving nonionic surfactant (Kanagawa Univ.) FUNAZAKI. Tomohisa: NANZAI. Ben: IGAWA, Manabu
- 4F1-13 Study on structural changes in stratum corneum by applying liposomes. (Nippon Menard Cosmetic Co.,Ltd) OGURA, Ayako; NAKAMA, Mitsuo; BAN, Sadanori; NAKATA, Satoru
- **4F1-14** Dependence of Surface Properties on Graft Density of Polystyrene Thin Films (Shimane Univ.) SAKANE, Tomoya; FUJII, Masatoshi

Chair: HAMASAKI, Atom (11:30~12:20)

- \* 11:20-11:30: interval for laptop PC connection.(4F1-16, 4F1-17, 4F1-19)
- 4F1-16 Influence of gold nanoparticles to surface properties of alcohol aqueous solutions. (Utsunomiya Univ.) HIGASHI, Syuhei; IIMURA, Kenichi; SATO, Masahide; ABE, Yoshiyuki; OUCHI, Mayumi; FUKAGAYA, Masato; OHTA, Haruhiko; SHINMOTO, Yasuhisa
- **4F1-17\*** Phase transition of surfactant adsorbed films and line tension of alkane lens on water (Department of Chemistry, Faculty of Sciences, Kyushu Univ.) MATSUBARA, Hiroki; TAKATA, Youichi; TAKIUE, Takanori; ARATONO, Makoto
- 4F1-19\* Analysis of the ionic multilayers formed at the ionic liquid surface studied by x-ray reflectivity: ionic-species dependence (Kyoto Univ.; JASRI) NISHI, Naoya; KASUYA, Koji; URUGA, Tomoya; TANIDA, Hajime; KAKIUCHI, Takashi

# Room F2

Bldg. 20 20-203

# Colloid and Interface Chemistry Saturday, March 26, AM

### Solid surface interface

Chair: KURODA, Yasushige  $(9:00\sim10:00)$ 

- \* 8:50-9:00: interval for laptop PC connection.(1F2-01, 1F2-03, 1F2-05)
- 1F2-01\*\*\*Selective adsorption of atomic deuterium on boron nitride thin film (Japan Atomic Energy Agency) KOSWATTAGE, Kaveenga Rasika; SHIMOYAMA, Iwao; SEKIGUCHI, Tetsuhiro; BABA, Yuji; NAKAGAWA, Kazumichi
- **1F2-03\*** Low temperatrure PROX reaction of CO in H<sub>2</sub> by dual functional catalysis (Saitama Institute of Technology, Research center of Advanced Sciences) TANAKA, Ken-ichi
- 1F2-05\* Designed Synthesis of Monodisperse Metal/Pt Core/Shell Nanoparticlesand Their CO Adsorption Properties (Univ. of Tsukuba) SATO, Ryota; ITO, Shin-ichi; KANEHARA, Masayuki; TOMISHIGE, Keiichi; TERANISHI, Toshiharu

Chair: TSURUOKA, Takaaki (10:10~11:10)

- \* 10:00-10:10: interval for laptop PC connection.(1F2-08, 1F2-10, 1F2-12)
- 1F2-08\*† High Catalysis of Two-Dimensionally Arrayed Au Nanoparticles.
  (NIMS) TAGUCHI, Tomoya; ISOZAKI, Katsuhiro; OCHIAI, Takao;
  NITTOH, Koh-ichi; MIKI, Kazushi
- 1F2-10\*† Characterization of active species for Xe adsorption formed in silver ion-exchanged zeolites (Okayama Univ.; Kyoto Institute of Technology) TORIGOE, Hiroe; YAP, Mee-lin; ITADANI, Atsushi; OHKUBO, Takahiro; YUMURA, Takashi; KOBAYASHI, Hisayoshi; KURODA, Yasushige
- 1F2-12\* Graphene Oxide Periodic Mesoporous Silica Sandwich Nanocomposites with Vertically Oriented Channels (AIST; Univ. of Toronto) WANG, Zheng-ming; WANG, Wendong; COOMBS, Neil; SOHEILNIA, Navid; OZIN, Geoffrey A

Chair: MATSUO, Yoshiaki (11:20∼12:20)

- \* 11:10-11:20: interval for laptop PC connection.(1F2-15, 1F2-16, 1F2-17, 1F2-18, 1F2-19)
- 1F2-15 Uniform Molecular Gate Separation on Single Wall Nanocarbon (Chiba Univ.) OHBA, Tomonori; KANOH, Hirofumi; KANEKO, Katsumi
- 1F2-16 Preparation of Piller-Structured Single Wall Carbon Nanotube Bundles by Polycyclic Aromatic Molecular Adsorption (Shinshu Univ.) ITOH, Tsutomu; GOTOVAC-ATLAGIC, Suzana; FUJIMORI, Toshihiko; FUJISAWA, Kazunori; SAKAMOTO, Hirotoshi; NIIMURA, Subaru; TAKEUCHI, Kenji; ENDO, Morinobu; KANEKO, Katsumi
- 1F2-17 Kinetic quantum molecular sieving of carbon nanotubes (Research Center for Exotic Nano Carbons, Shinshu Univ.) NIIMURA, Subaru; FUJIMORI, Toshihiko; ITOH, Tsutomu; SAKAMOTO, Hirotoshi; ASAI, Michihiro; KANEKO, Katsumi
- 1F2-18 STM observation of single-walled carbon nanotubes under electrochemical potential control. (Hokkaido Univ.) IKEDA, Kota; TAKASE, Mai; YASUDA, Satoshi; MURAKOSHI, Kei
- 1F2-19\* Observation of the Optical Property of an Isolated Single-Walled Carbon Nanotube using Electrochemical Surface-Enhanced Raman Scattering Spectroscopy (Hokkaido Univ.) TAKASE, Mai; YASUDA, Satoshi; NABIKA, Hdeki; MURAKOSHI, Kei

#### Saturday, March 26, PM

Chair: UEDA, Takahiro (13:30 $\sim$ 14:30)

- \* 13:20-13:30: interval for laptop PC connection.(1F2-28, 1F2-29, 1F2-30, 1F2-31, 1F2-32, 1F2-33)
- 1F2-28 Redox Reactivity of an Isolated Single-Walled Carbon Nanotube monitored by in-situ Surface-Enhanced Raman Scattering (Hokkaido Univ.) HOSHINA, Shinji; TAKASE, Mai; NARA, Masanobu; YASUDA, Satoshi; MURAKOSHI, Kei
- 1F2-29 Size-selective inclusion of organinc molecules into pillared carbons (Univ. of Hyogo) KONISHI, Kentaro; MATSUO, Yoshiaki
- 1F2-30 Quantum molecular sieving effect of CH<sub>4</sub> and CD<sub>4</sub> in nanocarbon (Chiba Univ.; Shinshu Univ.) TAMURA, Tomoki; KAGITA, Hirotoshi; TANAKA, Hideki; OHBA, Tomonori; KANEKO, Katsumi; KANOH, Hirofumi
- **1F2-31** High Pressure Organic Synthesis in Nanopore-field under Standard Atmosphere (Chiba Univ.; Shinshu Univ.) ABE, Kozue; KANOH, Hirofumi; OHBA, Tomonori; NEYA, Saburo; KANEKO, Katsumi
- 1F2-32 Selective CO<sub>2</sub> separation of MOF having a flexible structure by column sorption (Chiba Univ.; Shinshu Univ.; Tokyo Univ. Agri. Technol.; Nippon Steel Corp.) SONG, Chi; ITOH, Tsutomu; KONDO, Atsushi; KAJIRO, Hiroshi; OHBA, Tomonori; KANEKO, Katsumi; KANOH,

Hirofumi

1F2-33 Investigation of Molecular Adsorption Behavior on PCPs constituted by Photo-responsive Ligands (Faculty of Science, Shinshu Univ.) HIRAOKA, Naoto; IIYAMA, Taku; HAMASAKI, Atom; OZEKI, Sumio

Chair: KASUYA, Motohiro (14:40~15:40)

- \* 14:30-14:40: interval for laptop PC connection.(1F2-35, 1F2-36, 1F2-37, 1F2-39, 1F2-40)
- 1F2-35 Molecular Dynamics simulations on the phase transitions and molecular motions of benzene molecules confined in IRMOF-1 (Graduate School of Science, Osaka Univ.; The Museum of Osaka Univ.; Toyo Univ.; Univ. of Heidelberg) TAKAKURA, Kohei; UEDA, Takahiro; MIYAKUBO, Keisuke: EGUCHI, Taro; MARTIN, Bodo; COMBA, Peter
- **1F2-36** Hysteresis between Freezing and Melting of Kr in Hexagonally-Shaped Pore with Crystalline Carbon Walls (Okayama Univ. of Sci.) MORISHIGE, Kunimitsu
- 1F2-37\*† Orientation of cyclohexene molecules in Slit-shaped carbon nanopore (Chiba Univ.; TOKYO GAS Co., Ltd.; Shinshu Univ.) KOJIMA, Natsuko; OHBA, Tomonori; URABE, Yasuhiko; KANOH, Hirofumi; KANEKO, Katsumi
- **1F2-39** Hydrogen-bonding Structure of Water Assemblies in Hydrophobic Space: Neutron and X-ray Diffraction Study (Fac. Sci., Shinshu Univ.) FUJISAKI, Fumika; IIYAMA, Taku; HAMASAKI, Atom; OZEKI, Sumio; HOSHIKAWA, Akinori; ISHIGAKI, Toru
- 1F2-40 Hydration structure of copper ion adsorbed in nanospaces of activated carbons and SWNT (Okayama Univ.) OHKUBO, Takahiro; USHIO, Mitsuhiro; TAKEHARA, Yutaro; ITADANI, Atsushi; KURODA, Yasushige

Chair: OHKUBO, Takahiro (15:50 $\sim$ 16:50)

- \* 15:40-15:50: interval for laptop PC connection.(1F2-42, 1F2-43, 1F2-44, 1F2-45, 1F2-46, 1F2-47)
- 1F2-42 Design of ionic liquids for lubricants (Tottori Univ.; Iwate Univ.) MACHIDA, Ko-hei; OHIRA, Kazutaka; WATANABE, Naoko; INADA, Kento: MINAMI, Ichiro: MORI, Shigevuki; ITOH, Toshiyuki
- 1F2-43 Structural analysis of confined liquid by synchrotron x-ray diffraction (Tohoku Univ.; Institute of Multidisciplinary Research for Advanced Materials, Japan Synchrotron Radiation Research Institute, JST-CREST) NAKANO, Shinya; MIZUKAMI, Masashi; OHTA, Noboru; YAGI, Naoto; HATTA, Ichiro: KURIHARA, Kazue
- 1F2-44 Evaluation of pH of Confined Liquid by Surface Force and Fluorescence Spectrum Measurements (Tohoku Univ.; Institute of Multidisciplinary Research for Advanced Materials) SAITO, Yuko; KASUYA, Motohiro; KURIHARA, Kazue
- 1F2-45 Observation of reaction dynamics of pyrene excimer in confined liquid using resonance shear and fluorescence lifetime measurements (IMRAM, Tohoku Univ., WPI-AIMR, Tohoku Univ.) KASUYA, Motohiro; KURIHARA, Kazue
- 1F2-46 Structuring and Properties of Confined Traction Oil Nano-Films Studied by Resonance Shear Measurement (IMRAM, WPI-AIMR, Tohoku Univ.) HINO, Masaya; MIZUKAMI, Masashi; KURIHARA, Kazue
- 1F2-47 Characterization of Ionic Liquid Confined in Nano Space by Resonance Shear Measurement (IMRAM, Tohoku Univ., WPI-AIMR, Tohoku Univ., JST-CREST) MINAMINO, Yutaka; KASUYA, Motohiro; MIZUKAMI, Masashi; KURIHARA, Kazue

Chair: HASHIZUME, Mineo (17:00 $\sim$ 18:00)

- \* 16:50-17:00: interval for laptop PC connection.(1F2-49, 1F2-50, 1F2-51, 1F2-53, 1F2-54)
- **1F2-49** The Attachment of Perylene Derivatives to Glass Substrate and Their Fluorescent Characteristics (CST, Nihon Univ.) BABA, Yusuke; OTSUKI, Joe; CHAEN, Shigeru; TOJO, Tadashi
- 1F2-50 Water Structure Analysis at Crystal Surface in TiO2 Photocatalysis by ATR-FTIR Spectroscopy (National Institute of Advanced Industrial Sceince and Technology) HIRAKAWA, Tsutomu; MURAKAMI, Yoshinori; NOSAKA, Yoshio
- 1F2-51\* Ionic conductivity of electrolyte penetrated into mesoporous silica(II) (Kobe Univ.) MIZUHATA, Minoru; USUI, Masafumi
- 1F2-53 Biomolecular recongnition on the glycopolymer modified surface (Tokyo Univ. of sience) MIDORIKAWA, Aya; OTSUKA, Hidenori
- 1F2-54 Low-Temeprature Gas-Phase Preparation of CuO Nanocoral Reefs and their Application for Nonenzymatic Glucose Sensing (Kinki Univ.; Kyushu Univ.; JST CREST) SOEJIMA, Tetsuro; YAGYU, Hitomi; KIMIZUKA, Nobuo; ITO, Seishiro

# Sunday, March 27, AM

### Solid surface interface

Chair: OTSUKA, Hidenori  $(9:00\sim9:40)$ 

- \* 8:50-9:00: interval for laptop PC connection.(2F2-01, 2F2-02, 2F2-03, 2F2-04)
- 2F2-01 Study of Gel-Polymer Interface by Confocul Raman Microscopy (yamagata Univ.) HIRAYAMA, Shinya; SANO, Masahito
- 2F2-02 In situ characterization of the isocyanide monolayers studied by sum frequency generation spectroscopy (National Institute for Materials Science)

NOGUCHI, Hidenori; ITO, Mikio; IKEDA, Katsuyoshi; UOSAKI, Kohei

- **2F2-03** Titania Coating on Polyimide Surfaces with the Aid ofUltrathin Layers of Linker Polymers (Tokyo Univ. of Sci.) HIRASHIMA, Michihisa; HASHIZUME, Mineo
- 2F2-04 Surface Modification of Poly(tetrafluoroethylene) using Supercritical Fluids (Tokyo Univ. of Sci.) MURAYAMA, Satoru; OTAKE, Katsuto; HASHIZUME. Mineo

Chair: SERIZAWA, Takeshi  $(9:50 \sim 10:50)$ 

- \* 9:40-9:50: interval for laptop PC connection.(2F2-06, 2F2-07, 2F2-08, 2F2-09, 2F2-10)
- 2F2-06 in situ XAFS Study of Pt-ceria Catalyst during Oxygen Reduction Reaction (National Institute for Materials Science) MASUDA, Takuya; FUKUMITSU, Hitoshi; FUGANE, Keisuke; TOGASAKI, Hirotaka; MATSUMURA, Daiju; TAMURA, Kazuhisa; NISHIHATA, Yasuo; YOSHIKAWA, Hideki; KOBAYASHI, Keisuke; MORI, Toshiyuki; UOSAKI, Kohei
- 2F2-07 Enhancement of the conductivity of boron-doped diamond-like carbon films and the evaluation of the electrochemical response as polarized electrode (Yamaguchi Univ. Faculty of Science) NARAGINO, Hiroshi; KURIYAMA, Kouichi; KUWABARA, Ryousuke; YOSHINAGA, Kohsuke; TATSUTA, Seiji; HONDA, Kensuke
- 2F2-08 Fabrication of nitrogen-doped amorphous silicon carbide thin film by plasma CVD method and its physico-chemical properties (Yamaguchi Univ. Faculty of Science) YOSHINAGA, Kohsuke; KURIYAMA, Kouichi; KUWABARA, Ryousuke; NARAGINO, Hiroshi; HONDA, Kensuke
- 2F2-09 Catalytic activity of electrochemically-deposited carbon on Au electrode (Hokkaido Univ.) TANABE, Masahiro; AHMED, Ghareeb; YASUDA, Satoshi; MURAKOSHI, Kei
- 2F2-10\*# An Approach for Selective Diameter Growth of Single-walled Carbon Nanotubes via Electrochemical Process (Hokkaido Univ.) GHAREEB, Ahmed; YASUDA, Satoshi; MURAKOSHI, Kei

Chair: HONDA, Kensuke (11:00∼11:50)

- \* 10:50-11:00: interval for laptop PC connection.(2F2-13, 2F2-14, 2F2-15, 2F2-16)
- 2F2-13 Synthesis of novel liquid crystalline phthalocyanine-fullerene dyad that exhibits ambipolar property (Kyoto Univ., Grad School of Eng.; iCeMS) NIHASHI, Wataru; HAYASHI, Hironobu; UMEYAMA, Tomokazu; MATANO, Yoshihiro; IMAHORI, Hiroshi
- 2F2-14 Bottom-up organization of organic/inorganic composites that exhibits efficient photocurrent generation (Kyoto Univ., iCeMS) HAYASHI, Hironobu; UMEYAMA, Tomokazu; IMAHORI, Hiroshi
- 2F2-15 Synthesis and Function of Polyelectrolyte Polymer Nanotubes with Fluorescence (Kinki Univ. Faculty of Science and Engineering) IMANISHI, Katsuya; NAKAHODO, Tsukasa; FUJIHARA, Hisashi
- 2F2-16\* Control of surface wettability using photodimerization of side-chain reactive polymers (Graduate School of Engineering, Osaka City Univ.) SATO, Eriko; NAGAI, Sayoko; MATSUMOTO, Akikazu

# Sunday, March 27, PM

Chair: MIZUHATA, Minoru (13:00 $\sim$ 14:00)

- \* 12:50-13:00: interval for laptop PC connection.(2F2-25, 2F2-27, 2F2-29, 2F2-30)
- **2F2-25\***<sup>†</sup> Modification of Engineering Plastic Surfaces with Specific Binding Peptides (Univ. of Tokyo) DATE, Takaaki; SERIZAWA, Takeshi
- 2F2-27\* Catalytic Activity of the Surface of Cellulose Nanocrystals (Univ. of Tokyo) SERIZAWA, Takeshi; SAWADA, Toshiki; WADA, Masahisa
- 2F2-29 Construction of binary self-assembled monolayers with nano-domain structures by electrochemical partial desorption (Hokkaido Univ.) KANAMARU, Kohei; IKEDA, Katsuyoshi; MURAKOSHI, Kei
- 2F2-30 Suface modification of phenylboronic acid polymer for enhanced selectivity of sialic acid (Tokyo Univ. of Sience Otsuka Lab.) TAKAHASHI, Yosuke; MATSUMOTO, Akira; KATAOKA, Kazunori; MATSUMOTO, Yuji; OTSUKA, Hidenori

### Monday, March 28, AM

## Solid surface interface

Chair: SHINDO, Hitoshi  $(9:20\sim9:50)$ 

- \* 9:10-9:20: interval for laptop PC connection.(3F2-03, 3F2-04, 3F2-05)
- **3F2-03** Inference of radius of critical nucleus used a natural Apophyllite. (Fac. Eng., Shinshu Univ.) KOYASU, Jun; SUZUKI, Takaomi
- 3F2-04 Thermodynamic approach for growth mechanism of natural fluor-apatite (Fac. Eng., Shinshu Univ.) TAKEMAE, Haruka; MIYASHITA, Masao; SUZUKI, Takaomi
- **3F2-05** Evaluation of Negative Step Free Energy of Synthesized Ruby Crystal (Fac. Eng., Shinshu Univ.) ODA, Masayuki; SUZUKI, Takaomi

Chair: NAKAHODO, Tsukasa (10:00∼10:40)

- \* 9:50-10:00: interval for laptop PC connection.(3F2-07, 3F2-08, 3F2-09, 3F2-10)
- 3F2-07 Relative stabilities of crystal faces of calcite (CaCO<sub>3</sub>) studied by AFM

- observation of dissolution processes in acidic aqueous ethanol (Graduate School of Science and Engineering, Chuo Univ.) YAMAMURA, Ryouhei; NIKI, Kaori; SHINDO, Hitoshi
- 3F2-08 AFM observation of chiral NaClO<sub>3</sub> and NaBrO<sub>3</sub> {100} surfaces and enantio-selective adsorption of chiral pyrimidyl alkanol participating in asymmetric autocatalysis. (Graduate School of Science and Engineering, Chuo Univ.) TAKESHITA, Tsuyoshi; NIKI, Kaori; SHINDO, Hitoshi
- 3F2-09 Ionic configuration of sodium chloride crystal surfacestimated from dispersion and polar components of surface free energy (Fac. Eng., Shinshu Univ.) NAKAYAMA, Masaki; SUZUKI, Takaomi
- 3F2-10 Microscopic study on macroscopic morphology of synthesized chlorapatite crystal (Fac. Eng., Shinshu Univ.) YOSHIDA, Mika; KIBE, Taichi; SUZUKI, Takaomi
  - Chair: SUZUKI, Takaomi (10:50∼11:50)
- \* 10:40-10:50: interval for laptop PC connection.(3F2-12, 3F2-13, 3F2-15, 3F2-16, 3F2-17)
- 3F2-12 Optical properties and photocurrent generation of dyes/nanoparticles films using gold nanorods (Kumamoto Univ.; Kyushu Univ.) MURATA, Yumi; KUWAHARA, Yutaka; OGATA, Tomonari; YAMADA, Sunao; KURIHARA, Seiji
- 3F2-13\* Patterning of Metal Oxide Film by Photolithography with Surface-modified Nanoparticles (Tech. R&D Dept. Central Japan Railway Co. Ltd.)
  NAKAMURA, Akimasa; JIMBO, Masako; SHIMO, Masayoshi; CORDONIER, Christopher E. J.; FUJISHIMA, Akira
- 3F2-15 Synthesis and Property of Semiconductor and Metal Nanoparticle-Polythiophene Hybrid Nanotubes (Kinki Univ. Faculty of Science and Engineering) KOTANI, Michihiko; NAKAHODO, Tsukasa; FUJIHARA, Hisashi
- 3F2-16 Synthesis and Property of Photoresponsive Polythiophene Nanotubes (Kinki Univ. Faculty of Science and Engineering) UEHIGASHI, Atsushi; NAKAHODO, Tsukasa; FUJIHARA, Hisashi
- 3F2-17 Encapsulation of Metal Nanoparticles in Chiral Polymer Nanotubes and Its Function (Kinki Univ. Faculty of Science and Engineering) TATSUMI, Satoshi; KITANO, Daiki; NAKAHODO, Tsukasa; FUJIHARA, Hisashi

### Monday, March 28, PM

### Organized Films

Chair: IIMURA, Ken-Ichi (13:00~14:00)

- \* 12:50-13:00: interval for laptop PC connection.(3F2-25, 3F2-26, 3F2-27, 3F2-28, 3F2-29)
- **3F2-25** Structure of Fatty-Acid Langmuir Monolayers on Water studied by Polarized-Modulation Infrared Absorption Spectroscopy (Graduate School of Science and Engineering, Tokyo Institute of Technology) MURO, Maiko; ITOH, Yuki; HASEGAWA, Takeshi
- **3F2-26** Characteristic change of surface pressure by mixing sex hormone with DMPC molecular layer (Department of Chemistry, Faculty of Science, Hiroshima Univ.) SHIOTA, Takaya; NAKATA, Satoshi; KUMAZAWA, Noriyuki; DENDA, Mitsuhiro
- 3F2-27 Molecular Arrangement and Surface Morphology of Organized Molecular Films for Comb Polymer with Metal Capturing Ability (Fac. Eng., Yamagata Univ.) HAKOZAKI, Syou; OCHIAI, Bungo; FUJIMORI, Atsuhiro
- 3F2-28 Two-dimensional transition of molecular arrangement in organized molecular films for charge-transfer complexes containing metal(dimt)<sub>2</sub> unit (Grad. Sch. Sci., Eng., Yamagata Univ.) ITAGAKI, Ryosuke; FUJIMORI, Atsuhiro
- **3F2-29\*** Preparation and Nanoscale Characterization of Polycyclic Aromatic Hydrocarbon Adlayers (Kumamoto Univ.) YOSHIMOTO, Soichiro; OGATA, Hiroto; NISHIYAMA, Katsuhiko
  - Chair: FUJIMORI, Atsuhiro (14:10 $\sim$ 15:10)
- \* 14:00-14:10: interval for laptop PC connection.(3F2-32, 3F2-33, 3F2-35, 3F2-36)
- 3F2-32 Molecular arrangement and photocurrent generation of chlorophyll derivative monolayers (Utsunomiya Univ.) WACHI, Yuriko; KURAYAMA. Fumio: OBA. Toru: KATO. Norihiro: IIMURA. Ken-ichi
- 3F2-33\* Structures and photoconductive property of monolayers of amphiphilic HBC derivatives (Utsunomiya Univ.) AKABANE, Chika; KATO, Norihiro; IIMURA, Ken-ichi; FUKUSHIMA, Takanori; YAMAMOTO, Yohei: AIDA, Takuzo
- **3F2-35**<sup>#</sup> Design of Novel Command Surfaces Responsive to Electric Field (The Univ. of Tokyo) CHEN, Shuo: ITOH, Yoshimitsu: AIDA, Takuzo
- **3F2-36**\*† Formation of Supramolecular Nanodots Pattern through Interfacial Organization (NIMS) SAKAKIBARA, Keita; MORI, Taizo; OKAMOTO, Ken; SHUNDO, Atsuomi; LEE, Michael; ENDO, Hiroshi; JI, Qingmin; HILL, Jonathan; ARIGA, Katsuhiko
  - Chair: HASEGAWA, Takeshi (15:20~15:50)
- \* 15:10-15:20: interval for laptop PC connection.(3F2-39, 3F2-40)
- 3F2-39 Dynamic Helicity Control of Binaphthyl Derivatives at the Air-water Interface (TUS; NIMS) FUJISAWA, Takuya; MORI, Taizo; SAKAI,

- Hideki; ABE, Masahiko; HILL, Jonathan; ARIGA, Katsuhiko
- 3F2-40\* MMechanical Tuning of Molecular Machines for Nucleoside Recognition at the Air-Water Interface (NIMS) MORI, Taizo; OKAMOTO, Ken; ENDO, Hiroshi; HILL, Jonathan; SHINODA, Satoshi; MATSUKURA, Miki; TSUKUBE, Hiroshi; SUZUKI, Yasumasa; KANEKIYO, Yasumasa; ARIGA. Katsuhiko
  - Chair: ARIGA, Katsuhiko (16:00∼17:00)
- \* 15:50-16:00: interval for laptop PC connection.(3F2-43, 3F2-44, 3F2-45, 3F2-46, 3F2-47, 3F2-48)
- 3F2-43 Observation of alkanethiol self-assembled monolayers by atomic force microscopy (Graduate school of science, Kobe Univ.; Shimadzu Co.; JST; Graduate school of engineering, Kyoto Univ.; ICC, Kyoto Univ.) SUZUKI, Tomoko; HIASA, Takumi; KIMURA, Kenjiro; ONISHI, Hiroshi; OHTA, Masahiro; WATANABE, Kazuyuki; YAMAZAKI, Masashi; KOKAWA, Ryohei; OHYABU, Noriaki; KOBAYASHI, Kei; YAMADA, Hirofumi
- 3F2-44 Electrochemical STM investigation of cyclic anion receptors at the aqueous solution Au(111) interface (Grad. Sch. Sci. Tech., Kumamoto Univ.; Institute of Science and Engineering, Ritsumeikan Univ.; PRESTO, JST) SAKATA, Kenki; HAKETA, Yohei; KUNITAKE, Masashi; MAEDA, Hiromitsu; UEMURA, Shinobu
- **3F2–45** 2D nano patterning of  $\pi$ -conjugated anion receptors at the organic solution-HOPG interface (Grad. Sch. Sci. Tech., Kumamoto Univ.; Institute of Science and Engineering, Ritsumeikan Univ.; PRESTO, JST) UEMURA, Shinobu; HAKETA, Yohei; MAEDA, Hiromitsu
- **3F2-46** 2D self-asembled structures consisted of Melamine and Melem at the solution-Au(111) interface. (Kumamoto Univ., Graduate School of Science and Technology) AONO, Masashi; UEMURA, Shinobu; KOMATSU, Tamikuni; KUNITAKE, Masashi
- 3F2-47 Effect of related molecules for the preparation of self-assembled monolayer film of trithiocyanuric acid in coadsorption system (College of Industrial Technology, Nihon Univ.) ISHITSUKA, Megumi; SATO, Toshiyuki; OKADA, Masaki; HIAKI, Toshihiko; KOMORIYA, Tomoe; KOHNO, Hideki; OSAKA, Naoki
- 3F2-48 Lipid bilayer nanodisc having organic-inorganic hybrid structure (Grad. Sch. Mater. Sci., Nara Inst. Sci. and Technol.) NAKAZONO, Hajime; MIKI, Syo-hei; YASUHARA, Kazuma; KIKUCHI, Jun-ichi

Chair: UEMURA, Shinobu (17:10~18:10)

- \* 17:00-17:10: interval for laptop PC connection.(3F2-50, 3F2-52, 3F2-53, 3F2-54, 3F2-55)
- **3F2-50\*** Self-Assembled Monolayer of the PAMAM Dendrimer (Kyushu Univ.; JAIST) FUKUDA, Tomohiro; MATSUMOTO, Erino; SUGIMOTO, Masashi: HOSHINO, Yu: MIURA, Yoshiko
- **3F2-52** Metal Oxide Layer Formation on Porphyrin Derivative Assembly Films using Solution Processes (Tokyo Univ. of Sci.) UEDA, Daichi; HASHIZUME, Mineo
- **3F2-53** Extremely high hole-mobility of polythiophen wires by electrochemical epitaxial polymerization (Inst. Adv. Energy, Kyoto Univ.) KURIHARA, Naoki; UKAI, Takuya; SAKAGUCHI, Hiroshi
- 3F2-54 Preparation of hydrophobic silica particles and alcohol absorption property. (Univ. of Hyogo) FUNAOKA, Tatsuya; DAIKO, Yusuke; MINESHIGE, Atsushi; KOBUNE, Masafumi; YAZAWA, Tetsuo
- 3F2-55 Durability of hydrophobic nano coatings prepared via layer-by-layer method (Univ. of Hyogo) HIRAGUCHI, Daiki; DAIKO, Yusuke; MINESHIGE, Atsushi; KOBUNE, Masafumi; YAZAWA, Tetsuo

# Room F3

Bldg. 20 20-208

# Theoretical Chemistry, Informatics Chemistry and Computational Chemistry

### Saturday, March 26, AM

Chair: IMAMURA, Yutaka (9:10  $\sim$ 9:50)

- \* 9:00-9:10: interval for laptop PC connection.(1F3-02, 1F3-04, 1F3-05)
- 1F3-02\* Optimal control simulation of rovibrational wave packets of nitrogen molecules (Tohoku Univ.) ABE, Hiroya; OHTSUKI, Yukiyoshi
- 1F3-04 Laser-induced molecular orientation control via an aligned state (Tohoku Univ.) NAKAJIMA, Katsuhiro; ABE, Hiroya; OHTSUKI, Yukiyoshi; KONO, Hirohiko
- 1F3-05 Computational study on attosecond quantum interferograms from electronic-vibrational wave packets (Tohoku Univ., IMS, JST-CREST) FUSE, Taito; ABE, Hiroya; OHTSUKI, Yukiyoshi; KONO, Hirohiko; OHMORI, Kenji

Chair: USHIYAMA, Hiroshi  $(10:00{\sim}11:00)$ 

- \* 9:50-10:00: interval for laptop PC connection.(1F3-07, 1F3-09, 1F3-11, 1F3-12)
- 1F3-07\* Semiclassical Frozen Gaussian Propagation Theory for Excited State

- Dynamics of Multidimensional Systems (Sophia Univ.; Lebedev Physics Inst.) SAITA, Kenichiro; KONDORSKIY, Alexey D.; NANBU, Shinkoh
- 1F3-09\* Photon-polarization dependence of nonadiabatic vibrational dynamics of laser-excited molecules (Tohoku Univ.) ONO, Yukari; KANNO, Manabu; KONO, Hirohiko; FUJIMURA, Yuichi
- 1F3-11 Theoretical study of photo-physical properties of indolylmaleimides (Sophia Univ.; Faculty of Science and Technology) MURAKAMI, Tatsuhiro; SAITA, Kenichiro; NAKAZONO, Manabu; ISHIDA, Toshimasa: NANBU. Sinkoh
- 1F3-12 Dynamic reaction path of Stone-Wales rearrangement in pyrene: Time-resolved power spectra analysis of the trajectories (Tohoku Univ.; Nara Women's Univ.) YAMAZAKI, Kaoru; NIITSU, Naoyuki; TODA, Mikito; KONO, Hirohiko
  - Chair: OHTSUKI, Yukiyoshi (11:10∼12:10)
- \* 11:00-11:10: interval for laptop PC connection.(1F3-14, 1F3-16, 1F3-18)
- 1F3-14\* Theoretical study on the mechanism of the C-F bond activation by fluoroacetate dehalogenase (IMCE) KAMACHI, Takashi; NAKAYAMA, Tomonori; JITSUMORI, Keiji; KURIHARA, Tatsuo; ESAKI, Nobuyoshi; YOSHIZAWA, Kazunari
- 1F3-16\*† Electronic structure computational study of H and Mu addition to C=S double bonds (Saitama Univ. and Yokohama National Univ.) KOBAYASHI, Takanori; SEKI, Kanekazu; TANAKA, Tomokazu; TAKAYANAGI, Toshiyuki
- 1F3-18\* Theoretical studies on the chemical reactions of diradical species by using an approximate spin-projection method. (Osaka Universiy) SAITO, Toru; YASUDA, Natsumi; KATAOKA, Yusuke; KITAGAWA, Yasutaka; KAWAKAMI, Takashi; YAMANAKA, Shusuke; OKUMURA, Mitsutaka; YAMAGUCHI, Kizashi

### Saturday, March 26, PM

- Chair: KAMACHI, Takashi (13:30~14:30)
- \* 13:20-13:30: interval for laptop PC connection.(1F3-28, 1F3-30, 1F3-32, 1F3-33)
- 1F3-28\*† Morphology Design of Porous Coordination Polymer Crystals under Thermodynamic Control (JST ERATO Kitagawa Integrated Pores Project) UMEMURA, Ayako; FURUKAWA, Shuhei; KITAGAWA, Susumu
- 1F3-30\* Quantitative prediction of basicity using multiple regression of parameters obtained by NBO and its application (Nagoya Univ.) SHIMURA, Naotaka; SAWABE, Kyoichi
- 1F3-32 Theoretical Study on the catalytic process of a model complex of carbonic anhydrase II. (graduate school of engineering, univ. of kyoto) OKAYAMA, Svota: SATO, Hirofumi
- **1F3-33** A RISM-SCF study of solvation effect on the bromination reaction of ethylene (Univ. of Kyoto; Dep.) YOKOI, Hayato; SATO, Hirohumi
  - Chair: SATO, Hirofumi  $(14:40\sim15:40)$
- \* 14:30-14:40: interval for laptop PC connection.(1F3-35, 1F3-36, 1F3-38, 1F3-39, 1F3-40)
- **1F3-35** Theoretical studies on the reaction mechanism of surface oxidation and its catalytic activity of Tantalum Nitride (The Univ. of Tokyo, Department of Chemical System Engineering) WATANABE, Eriko; USHIYAMA, Hiroshi; YAMASHITA, Koichi
- 1F3-36\* DFT study on Graphene-based Materials for Hydrogen Storage (Kyoto Pref. Univ.) LINTULUOTO, Masami; SETO, Hiroki; ENDO, Takamasa
- 1F3-38 Theoretical study of transport properties of tripod-shaped molecules on Au surface (Department of Chemical System Engineering, Graduate School of Engineering, The Univ. of Tokyo) SUDO, Shotaro; NAKAMURA, Hisao; YAMASHITA, Koichi
- **1F3-39** First-principle Calculations of F- doped or Li- inserted anatase TiO2 (School of Eng. , Univ. of Tokyo) MIZUGUCHI, Nanako; KAMISAKA, Hideyuki; YAMASHITA, Koichi
- 1F3-40 Orientation dependence of charge-transfer rate and stability for organic solar cells (Tokyo univ.; YAMASHITA & USHIYAMA lab) NAGANO, Tomoya; FUJII, Mikiya; YAMASHITA, Koichi
  - Chair: LINTULUTO, Masami (15:50~16:50)
- \* 15:40-15:50: interval for laptop PC connection.(1F3-42, 1F3-44, 1F3-45, 1F3-46, 1F3-47)
- 1F3-42\* Conformational analysis of chignolin and C-peptide using the SAAP force field (Tokai Univ.) DEDACHI, Kenichi; SHIMOSATO, Taku; MINEZAKI, Toshiya; IWAOKA, Michio
- **1F3-44**\* Novel neon hydrate of cubic ice structure (Okayama Univ.) HAKIM, Lukman; KOGA, Kenichiro; TANAKA, Hideki
- 1F3-45<sup>†</sup> Theoretical study on electromagnetically induced transparency for molecular aggregate model (Osaka Univ.) MINAMI, Takuya; INUI, Tomoya; INOUE, Yuudai; KISHI, Ryohei; SIGETA, Yasuteru; NAKANO, Masavoshi
- 1F3-46 The analysis of silver ion water cluster by using ab initio path integral molecular dynamics (Yokohama City Univ., Graduate school of Nanobioscience) KOIZUMI, Akihito; SHIGA, Motoyuki; TACHIKAWA, Masanori
- 1F3-47<sup>†</sup> Reduction of calculation time for searching of isomers by using the

SHS method with DFTB+ (Wakayama Univ.; Kyoto Univ.; Toyota Phys. & Chem. Research Institute) TOKOYAMA, Hiroaki; YAMAKADO, Hideo; MAEDA. Satoshi: OHNO. Koichi

#### Sunday, March 27, AM

Chair: SHIGETA, Yasuteru (9:10 $\sim$ 9:50)

- \* 9:00-9:10: interval for laptop PC connection.(2F3-02, 2F3-03, 2F3-04)
- 2F3-02 Vibronic coupling in cyclopentadienyl radical: Evaluation of vibronic coupling constants as integrals with wave functions using floating basis (Engineering, Kyoto Univ.; Fukui Institute, Kyoto Univ.) HARUTA, Naoki; SATO, Tohru; TANAKA, Kazuyoshi
- 2F3-03 Constrained DFT calculations on the triplet energy transfer processes (Univ. of Tsukuba) AIKAWA, Koharu; MORIHASHI, Kenji
- 2F3-04\* Theoretical Study of the Mechanism of Valence Tautomerism in Cobalt Complexes (kyushu Univ.) SHIOTA, Yoshihito; SATO, Daisuke; GERGELY, Juhasz; YOSHIZAWA, Kazunari
  - Chair: SHIOTA, Yoshihito  $(10:00{\sim}11:00)$
- \* 9:50-10:00: interval for laptop PC connection.(2F3-07, 2F3-09, 2F3-10, 2F3-11, 2F3-12)
- **2F3-07\***<sup>†</sup>A theoretical study on the substituent dependence of the change of molecular charge distributions induced by OH stretching vibrations and overtone intensity. (Keio Univ. Faculty of Science and Technology) TAKAHASHI, Hirokazu; YABUSHITA, Satoshi
- 2F3-09 Solvent effects on hyperpolarizability of openshell systems :PCM study (Sch. Eng. Sci., Osaka Univ.) INUI, Tomoya; MINAMI, Takuya; INOUE, Yudai; MATSUI, Toru; KISHI, Ryohei; SHIGETA, Yasuteru; KUBO, Takashi; NAKANO, Masayoshi
- 2F3-10 Solvent effects on hyperpolarizability of open shell systems: QM/MM study (Osaka Univ.) SHIGETA, Yasuteru; INUI, Tomoya; MINAMI, Takuya; INOUE, Yuudai; MATSUI, Toru; KISHI, Ryohei; KUBO, Takashi; NAKANO, Masayoshi
- 2F3-11 Theoretical study on the zero-field splitting tensors of arylnitrenes (Graduate School of Science, Osaka City Univ.) SUGISAKI, Kenji; TOYOTA, Kazuo; SATO, Kazunobu; SHIOMI, Daisuke; TAKUI, Takeji
- **2F3-12** Implementation of open-shell scheme based on FMO method (Rikkyo Univ.; NIHS; NEC Soft, Ltd.) KATO, Yuji; NAKANO, Tatsuya; YAMASHITA, Katsumi; MOCHIZUKI, Yuji
  - Chair: MOCHIZUKI, Yuji (11:10∼12:10)
- \* 11:00-11:10: interval for laptop PC connection.(2F3-14, 2F3-15, 2F3-16, 2F3-17, 2F3-18)
- 2F3-14 Theoretical study of intermolecular interaction effects on aromaticity, open-shell character and nonlinear optical properties of dicyclopenta-fused acene dimers (Osaka Univ.) MOTOMURA, Shuto; YONEDA, Kyohei; FUKUI, Hitoshi; INOUE, Yudai; MINAMIDE, Shu; KISHI, Ryohei; SHIGETA, Yasuteru; NAKANO, Masayoshi
- 2F3-15 Theoretical study on the open-shell characters and third-order nonlinear optical properties of graphene nanoflakes with antidot structures (Osaka Univ.) YONEDA, Kyohei; FUKUI, Hitoshi; MOTOMURA, Shuto; INOUE, Yudai; INUI, Tomoya; KISHI, Ryohei; SHIGETA, Yasuteru; KUBO, Takashi; NAKANO, Masayoshi
- **2F3-16** Excited State Calculation using Reference of GUHF-CC Wave Function including Spin Dependence High Order Relativity (Tokyo Metropolitan Univ.) SOMENO, Shusuke; MATSUOKA, Takayuki; HADA, Masahiko
- 2F3-17 Difference Density Matrix Analysis: Application to Substituent Effects (Graduate School of Science, Tokyo Metropolitan Univ.) YAMAKI, Daisuke: HADA, Masahiko
- 2F3-18\* Recent advances in the analytical energy gradient for the divide-and-conquer method (Waseda Univ.; Inst. Mol. Sci.; JST-CREST) KOBAYASHI, Masato; NAKAI, Hiromi

# Sunday, March 27, PM

Chair: HONDA, Yasushi (13:30∼14:20)

- \* 13:20-13:30: interval for laptop PC connection.(2F3-28, 2F3-30, 2F3-31)
- **2F3-28**\*† Theoretical Study of Cis and Trans Isomers of Ferrocenyl-Diphosphenes (Kyoto Univ.) ISHIKAWA, Atsushi; KONISHI, Satoshi; NAKAO, Yoshihide; SATO, Hirofumi; SAKAKI, Shigeyoshi
- **2F3-30** Analytical gradient method for the frequency-dependent polarizability with complex orbital exponents and its applications to theoretical calculations of photoionization cross-sections. (Keio Univ. Faculty of Science and Technology) TAMEMUEA, Atsushi; YABUSHITA, Satoshi
- 2F3-31\*† Prediction of selectivity based on dipole-dipole interaction between DNA base-pair sequence and amino-acid residue (QuLiS and Graduate School of Science, Hiroshima Univ.) MIEDA, Shunsuke; AIDA, Misako

# Monday, March 28, AM

Chair: ISHIDA, Toyokazu (9:20 ∼10:00)

- \* 9:10-9:20: interval for laptop PC connection.(3F3-03, 3F3-04, 3F3-05)
- **3F3-03** Interacion energy analysis of DNA-base molecules based on FMO calculations (Rikkyo Univ.) MOCHIZUKI, Yuji; FUKUZAWA, Kaori;

- YAMADA, Haruka; OKIYAMA, Yoshio; NAKANO, Tatsuya; KURISAKI, Ikuo: TANAKA, Shigenori
- **3F3-04** Theoretial Study of Substituent Effects on Purple Photosynthetic Bacteria (Nagoya Univ.) HIYAMA, Miyabi; KOGA, Nobuaki
- 3F3-05\* Effect of High Hydrostatic Pressure on the Dynamics and the Spatial Distributions of the Protein Partial Molar Volume: Time-Resolved Kirkwood-Buff Approach (Aoyama Gakuin Univ.; Nagoya Univ.) YU, Isseki; NAKADA, Kyoko; NAGAOKA, Masataka

Chair: YOSHIZAWA, Kazunari (10:10∼11:10)

- \* 10:00-10:10: interval for laptop PC connection.(3F3-08, 3F3-11, 3F3-12)
- **3F3-08** Young Scholar Lectures of CSJ Computer Simulation of Protein Functions: Ligand Recognition and Catalysis (NRI, AIST) ISHIDA, Toyokazu
- 3F3-11 Transition state structures on the DNA-chain-elongation process (Univ. of Tsukuba) HIROTA, Kei; MORIHASHI, Kenji
- **3F3-12\***<sup>†</sup> Theoretical study of the reversible photoconversionmechanism in Dronpa (Graduate School of Yokohama City Univ.) KOSEKI, Jun; KITA, Yukiumi; NAGASHIMA, Umpei; TACHIKAWA, Masanori

Chair: HADA, Masahiko (11:20 $\sim$ 12:20)

- \* 11:10-11:20: interval for laptop PC connection.(3F3-15)
- **3F3-15** CSJ Award for Creative Works Studies on the Structures and Reactions of Metalloenzymes by Large-Scale Quantum Chemical Calculations (IMCE, Kyushu Univ.) YOSHIZAWA, Kazunari

# Asian International Symposium -Theoretical Chemistry, Chemoinformatics, Computational Chemistry-Monday, March 28, PM

Chair: MATSUBARA, Toshiaki (13:30 $\sim$ 14:50)

- **3F3-28** Opening Remarks (13:30~13:40)
- 3F3-29\* Invited Lecture Development of orbital-specific hybrid functional: Linearity condition for orbital energies in density functional theory (Waseda Univ.) IMAMURA, Yutaka (13:40~14:00)
- 3F3-31\* Invited Lecture Ab initio calculations of nuclear volume effects in isotope fractionations (Tokyo Metropolitan Univ.) ABE, Minori (14:00 ~14:20)
- 3F3-33\* Keynote Lecture Computational Chemistry applications in Materials Designs and Developments (Institute of High Performance Computing, Singapore) Zhigen YU (14:20~14:50)

Chair: HADA, Masahiko (15:00 $\sim$ 16:10)

- **3F3-37**<sup>#</sup> Invited Lecture Development of multi-Component Quantum Monte Carlo Method: Application to Positronic Compounds (Yokohama City Univ.) KITA, Yukiumi (15:00∼15:20)
- **3F3-39** Invited Lecture H/D isotope effect in hydrogen bonds by direct treatment of nuclear quantum effect (Kyushu Univ.) ISHIMOTO, Takayoshi (15:20∼15:40)
- **3F3-41**\* Keynote Lecture Electronic coherence assisted energy transfer in photosynthetic light-harvesting networks (National Taiwan Univ., Taiwan) Yuan-Chung Cheng (15:40~16:10)

Chair: TACHIKAWA, Masanori (16:20 $\sim$ 17:30)

- **3F3-45**\* Invited Lecture Extracting low-dimensional dynamics to describe the essence of huge molecular systems (Hokkaido Univ.) KAWAI, Shinnosuke (16:20~16:40)
- **3F3-47** Invited Lecture Precursor optical excitations of photocatalysis at TiO2 anatase surfaces (The Univ. of Tokyo) Giacomo, Giorgi  $(16:40 \sim 17:00)$
- **3F3-49**<sup>#</sup> Keynote Lecture Molecular Simulation Studies and Dynamic Network Analysis on the Electrical Conductivity of Carbon Nanotube/Polymer Composites (Sogang Univ., Korea) Bong June Sung (17:00∼17:30)

# Room F4

Bldg. 20 20-210

# Analytical Chemistry Saturday, March 26, AM

### Micro and nano analysis

Chair: SASAKI, Naoki (9:10  $\sim$ 10:10)

- \* 9:00-9:10: interval for laptop PC connection.(1F4-02, 1F4-03, 1F4-05, 1F4-06)
- 1F4-02 Creating Mimicked Intercellular Structure and Analyzing Water Molecule Behavior in the Extended-nano Space (School of Engineering, The Univ. of Tokyo) EMON, Hisaki; MAWATARI, Kazuma; TSUKAHARA,

Takehiko; KITAMORI, Takehiko

- 1F4-03\* Development of a microchip liquid chromatography system using electroosmotic flow pumps (Hokkaido Univ.; Nano Fusion Technologies, inc) ISHIDA, Akihiko; YANAGISAWA, Ichiro
- 1F4-05 Flow distribution and mixing inside droplets at curved structure of microchannel (RNBS, Hiroshima Univ.) MURAKAMI, Yuji; TAKAHATA, Yuto; ARITOME, Katsuhiro; KASAMA, Toshihiro; MIYAKE Ryo
- 1F4-06\* Development of Thermally-Actuated Valve for Highly Integrated Microdevices (Nagoya Univ.) NAITO, Toyohiro; KAJI, Noritada; OKAMOTO, Yukihiro: TOKESHI, Manabu; BABA, Yoshinobu

Chair: NIWA, Osamu (10:20~11:20)

- \* 10:10-10:20: interval for laptop PC connection.(1F4-09, 1F4-10, 1F4-11, 1F4-12)
- 1F4-09 Analysis of a single enzyme reaction by micro- and nanofabricated structures (Grad. Sch. Eng., Nagoya Univ.) IIJIMA, Kazuki; KAJI, Noritada; OKAMOTO, Yukihiro; TOKESHI, Manabu; BABA, Yoshinobu
- 1F4-10 Therapeutic drug monitoring chip: one-step assay of serum sample (Graduate School of Engineering, Nagoya Univ.; FIRST Research Center for Innovative Nanobiodevice, Nagoya Univ.) SUGIURA, Kanako; OKAMOTO, Yukihiro; KAJI, Noritada; TOKESHI, Manabu; BABA, Yoshinobu
- 1F4-11 Characterization of non-crosslinking aggregation of gold nanoparticles with DNA and its application (Bioengineering Laboratory, RIKEN; Grad. Sch. Sci., Japan Woman's Univ.) KOBAYASHI, Nao; SATO, Kae; FUJITA, Masahiro; MAEDA, Mizuo
- 1F4-12# Young Scholar Lectures of CSJ Semiconductor quantum dots for single-molecule imaging (AIST) BIJU, VASUDEVAN PILLAI

Chair: KAJI, Noritada (11:30~12:30)

- \* 11:20-11:30: interval for laptop PC connection.(1F4-16, 1F4-18, 1F4-19, 1F4-20, 1F4-21)
- 1F4-16\* Alternating Current Cloud Point Extraction of Membrane-associated Biomolecules on a Microchip (Japan Women's Univ.) SASAKI, Naoki; TAKEMURA, Azusa; SATO, Kae
- 1F4-18 Develpment of single cell and single gene detection system on a microchip (Univ. of Tokyo) WAKABAYASHI, Jun; TANAKA, Yo; SATO, Kae; MAWATARI, Kazuma; NILSSON, Mats; KITAMORI, Takehiko

### Micro and nano analysis

- 1F4-19 Development of the analytical technique of proteins inside single cells by the interface between micro and extended-nano space (The Univ. of Tokyo) SHIRAI, Kentaro; SUGII, Yasuhiko; TANAKA, You; MAWATARI, Kazuma; KITAMORI, Takehiko
- 1F4-20 Capillary flow reactor using a water-hydrophilic/hydrophobic organic solvent mixture as a carrier solution (1); introduction of double tubes having different inner diameters mixer (Faculty of Science and Engineering, Doshisha Univ.) MASUHARA, Yuji; JINNO, Naoya; HASHIMOTO, Masahiko; TUKAGOSHI, Kazuhiko
- 1F4-21 Capillary flow reactor using a water-hydrophilic/hydrophobic organic solvent mixture as a carrier solution; introduction of T type joint-filter (Faculty of Science and Engineering, Doshisha Univ.) TAINAKA, Naoya; JINNO, Naoya; HASHIMOTO, Masahiko; TSUKAGOSHI, Kazuhiko

### Saturday, March 26, PM

Chair: KATO, Ryo (13:40 $\sim$ 14:30)

- \* 13:30-13:40: interval for laptop PC connection.(1F4-29, 1F4-31, 1F4-32, 1F4-33)
- 1F4-29\* Microchip affinity electrophoresis for determination of protein kinase and phosphatase activities (Bioengineering Laboratory, RIKEN) HAN, Aishan; HOSOKAWA, Kazuo; MAEDA, Mizuo
- 1F4-31 Optimization of microchip phosphate-affinity electrophoresis (RIKEN; Japan Women's Univ.) USUDA, Yukiko; HAN, Aishan; SATO, Kae; HOSOKAWA, Kazuo; MAEDA, Mizuo
- 1F4-32 Surface and bulk modification of PDMS capillary sensor for sensitivity and hydrophilicity enhancement, and its application to multiple-sensing (Osaka Prefecture Univ., Graduated school of engineering, department of applied chemistry, laboratory of analytical chemistry) FUJII, Yuji; UCHIYAMA, Yousuke; AKAI, Kozo; KAWAMURA, Kunio; HISAMOTO, Hideaki
- 1F4-33 Fabrication of paper-based microfluidic chipby using UV ink (Keio Univ.) MAEJIMA, Kento; II, Tomoaki; SUZUKI, Koji; CITTERIO, Daniel

Chair: HISAMOTO, Hideaki (14:40~15:40)

- \* 14:30-14:40: interval for laptop PC connection.(1F4-35, 1F4-37, 1F4-38, 1F4-39, 1F4-40)
- 1F4-35\* Direct observation of transient interprotein interaction change of a blue light receptor PixD by time-resolved diffusion detection (Kyoto Univ.; The Univ. of Tokyo; Osaka Pref. Univ.) TANAKA, Keisuke; OKAJIMA, Koji; IKEUCHI, Masahiko; TOKUTOMI, Satoru; TERZIMA, Masahide
- 1F4-37 Basic study of the Bactericidal effects of electrolyzed water containing hypochlorous acid -Interaction with amino acids- (Kanagawa Univ.)

YASUTOMI, Mao; MURAOKA, Hikaru; IWASAWA, Atsuo; NISHIMOTO, Yuko

1F4-38 Water State in Methylcellulose Thermo Reversible Hydrogels Containing Salt (Kanagawa Univ.) UEHARA, Yuduru; INABA, Mayumi; NISHIMOTO, Yuko

#### Sensors

- **1F4-39** fabrication of a plastisized chitosan derivertive membrane and the application to ion sensing (Toyohashi Univ. of Tech.) KATO, Ryo; ETOU, Tomoki; HATTORI, Toshiaki
- 1F4-40 Ion Sensor Property of Ion-Sensing Membranes Based on Low-Molecular-Weight Gelators (Fac. Sys. Eng., Wakayama Univ.) TAKAMI, Kento; YAJIMA, Setsuko; KIMURA, Keiichi

Chair: TAKAHASHI, Toru (15:50∼16:50)

- \* 15:40-15:50: interval for laptop PC connection.(1F4-42, 1F4-43, 1F4-44, 1F4-45, 1F4-46)
- 1F4-42 Fluorometric analysis of the moisture in oil by using solvatochromic fluorophore (Toyohashi Univ. of Tech.; Hokkaido Univ.) NAGASAKA, Takahiro; KATO, Ryo; ZHOU, Hongbo; SON, Sang-hyun; HATTORI, Toshiaki; YAMADA, Kouji
- 1F4-43 Ion Sensor Property of Ion-Sensing Membranes Based on Polysilses-quioxane Modified Chemically with Crown Ether Derivatives (Fac. Sys. Eng., Wakayama Univ.) KISHI, Masato; YAJIMA, Setsuko; KIMURA, Keiichi
- 1F4-44 Withdrawn
- **1F4-45** Design and Function of Molecular Recognition Probe/Pyrene-Appended Cyclodextrin Complex Sensors (Faculty of Science and Technology, Sophia Univ.) TAKESHITA, Naoki; GOTO, Kayoko; HASHIMOTO, Takeshi; SUZUKI, Iwao; HAYASHITA, Takashi
- 1F4-46\* Solvent extraction taking advantage of fluidic performance of water-hydrophilic/hydrophobic organic solvent mixture in a micro-space (Faculty of Science and Engineering, Doshisha Univ.) JINNO, Naoya; HASHIMOTO, Masahiko; TSUKAGOSHI, Kazuhiko

Chair: TSUKAGOSHI, Kazuhiko (17:00~17:40)

- \* 16:50-17:00: interval for laptop PC connection.(1F4-49, 1F4-50, 1F4-51, 1F4-52)
- **1F4-49** Liquid-Liquid Extraction of Metal Ions with 4,5-Bis(diphenylphosphinoyl)-1,2,3-triazole using 1-Butanol as a Solvent (Kyoto Univ. of Educ.; Inst. for Chem. Res., Kyoto Univ.) MUKAI, Hiroshi; ONO, Shota; SOHRIN, Yoshiki
- 1F4-50 Ion-association of silicate-catechol complex with cationic dyes and its application of the determination of silicate (Tokoku Univ. Graduate School of Environmental Studies) KUWABARA, Hideharu; TAKAHASHI, Toru; HOSHINO. Hitoshi
- 1F4-51 Design and Evaluation of Dipicolylamine Fluorescent Probe/cyclo-dextrin Complex Sensors (Faculty of Science and Technology, Sophia Univ.) OGURA, Keiko; SAMIZO, Mariko; FUJII, Yuri; HASHIMOTO, Takeshi; HAYASHITA, Takashi

### Sensors

**1F4-52** Design and Ion Recognition Function of 2,2'-Bispyridylmethylamino Fluorescent Sensor/Cyclodextrin Complex sensors in Water (Sophia Univ.) SAMIZO, Mariko; OGURA, Keiko; HASHIMOTO, Takeshi; HAYASHITA, Takashi

### Sunday, March 27, AM

Chair: IKI, Nobuhiko (9:10  $\sim$ 10:10)

- \* 9:00-9:10: interval for laptop PC connection.(2F4-02, 2F4-04, 2F4-05, 2F4-06, 2F4-07)
- 2F4-02\* Development of microprobe for glucose sensing with regulation system for oxygen concentration (Univ. of Hyogo; Graduate School of Material Science) YASUKAWA, Tomoyuki; YOSHIMURA, Yuki; ONO, Ryohei; MIZUTANI, Fumio
- 2F4-04 Sensitive Detection of Tryptophan and 5-HT on Electrochemically Pretreated Glassy Carbon Paste Electrodes (Kumamoto Univ.) NISHIYAMA, Katsuhiko; INADA, Kazufumi; TOYA, Megumi
- 2F4-05 Highly sensitive determination of metal ions by stripping voltammetry with microporous membrane electrodes (Yamagata Univ.) MONMA, Chiaki; MIZUGUCHI, Hitoshi; IIYAMA, Masamitsu; TACHIBANA, Kazuhiro; NISHINA, Tatsuo; SHIDA, Junichi
- **2F4-06** Determination of single ion activities of H+ and Cl- ions in hydrochloric acid solutions by use of the ionic liquid salt bridge (Kyoto Univ.) SAKAIDA, Hideaki; KAKIUCHI, Takashi
- 2F4-07 Test method for thickness of anodic oxide films on aluminum by Glow Discharge Optical Emission Spectrometry (Tokyo Metropolitan Industrial Technology Research Institute) YUKAWA, Yasuyuki; NAKAMURA, Isao

Chair: KAKIUCHI, Takashi (10:20 $\sim$ 11:20)

- \* 10:10-10:20: interval for laptop PC connection.(2F4-09)
- **2F4-09** CSJ Award for Creative Works Development of Biosensing Devices and Systems Using Micro/Nanoelectrodes (WPI-AIMR, Tohoku

Univ.) MATSUE, Tomokazu

Chair: AOKI, Hiroshi (11:30∼12:20)

- \* 11:20-11:30: interval for laptop PC connection.(2F4-16, 2F4-17, 2F4-19)
- 2F4-16 Observation of the on-capillary complexation reaction of metal complexes in capillary electrophoretic separation process (Graduate school of environmental studies, Tohoku Univ.) TOMIYA, Yoriyuki; TAKAHASHI, Toru; IKI, Nobuhiko; HOSHINO, Hitoshi
- 2F4-17\* Highly Sensitive Microscale Electrophoresis Using Large-volume Sample Stacking with Electroosmotic Flow Pump. 3 (Kyoto Univ.) KAWAI, Takayuki; SUEYOSHI, Kenji; KITAGAWA, Fumihiko; OTSUKA, Koji
- 2F4-19\* Highly sensitive microscale electrophoresis based on transient trapping. 3 (Department of Material Chemistry, Graduate School of Engineering, Kyoto Univ.) SUEYOSHI, Kenji; KOINO, Hiroshi; TANAKA, Ryuta; KITAGAWA, Fumihiko; OTSUKA, Koji

### Sunday, March 27, PM

## Bioanalysis

Chair: YASUKAWA, Tomoyuki (14:00~14:40)

- \* 13:50-14:00: interval for laptop PC connection.(2F4-31, 2F4-33, 2F4-34)
- 2F4-31\* Rapid and high-sensitivity cell-based assays of protein-protein interactions using split click beetle luciferase complementation (Department of Chemistry, School of Science, The Univ. of Tokyo) HATTORI, Mitsuru; MISAWA, Naomi; KAFI, A.K.M.; OZAWA, Takeaki
- 2F4-33 in vivo Imaging of Transplanted Stem Cells using Quantum Dots (Nagoya Univ.) WATANABE, Masaki; YUKAWA, Hiroshi; KAJI, Noritada; MIYAMOTO, Yoshitaka; OKAMOTO, Yukihiro; TOKESHI, Manabu; HAYASHI, Shuji; BABA, Yoshinobu
- 2F4-34 Highly sensitive immunochromatography system using magnetic nanoparticles incorporated time-resolved fluorescent complexes (TOPPAN PRINTING CO.,LTD. Life Science Research Laboratory; Tokyo Tech) KATSUMATA, Masaru; HIRASE, Takumi; IRIE, Shinji; HOSHINO, Akihiro; TSUCHIYA, Makiko; NAKAYAMA, Masato; USHIDA, Hiroshi; NAITOU, Yasuyuki; KAWATA, Shintarou; SAKAMOTO, Satoshi; HANDA, Hiroshi

Chair: TOKESHI, Manabu (14:50~15:50)

- \* 14:40-14:50: interval for laptop PC connection.(2F4-36, 2F4-38, 2F4-39, 2F4-41)
- 2F4-36\* Development of Ratiometric Bioluminescence Probes for Detecting Cyclic AMP in Living Cells (Department of Chemistry, Graduate School of Science, The Univ. of Tokyo) TAKEUCHI, Masaki; NAGAOKA, Yasutaka; YAMADA, Toshimichi; TAKAKURA, Hideo; OZAWA, Takeaki
- 2F4-38 Visualization of Protein Release from Mitochondria Using Small-Tag Labeling in Live Cells (Univ. of Tokyo) NASU, Yusuke; Takeuchi, Masaki; Ozawa, Takeaki
- 2F4-39\* Synthesis and property of luminogenic nucleic acid. (Riken, Adnaced Science Institute, Nano medical engineering laboratory) SANEYOSHI, Hisao; ABE, Hiroshi; ITO, Yoshihiro
- 2F4-41 Liposome-based targeting system to genetically expressed tags (Keio Univ.) SATO, Sayaka; MASHIBA, Takuya; HONDA, Aki; CITTERIO, Daniel; SUZUKI, Koji

Chair: OZAWA, Takeaki (16:00∼17:00)

- \* 15:50-16:00: interval for laptop PC connection.(2F4-43, 2F4-45, 2F4-46, 2F4-47)
- **2F4-43\*** Ultra Sensitive Analysis of Biogenic Amines by LC-MS/MS Following Permanent Charge Derivatization with Iodomethane (Faculty of Pharmaceutical Sciences, Fukuoka Univ.) HAYAMA, Tadashi; ARIMOTO, Asami; TAKESHITA, Ryuji; TODOROKI, Kenichiro; ITOYAMA, Miki; YOSHIDA, Hideyuki; NOHTA, Hitoshi; YAMAGUCHI, Masatoshi
- **2F4-45** Detection of oligonucleotide ligation products by MALDI-TOF mass spectrometer (Faculty of Science and Engineering, Doshisha Univ.) YANAGIMOTO, Kousuke; HASHIMOTO, Masahiko; TUKAGOSHI, Kazuhiko
- 2F4-46 Department of Thin Layer Chromatography-Atmospheric Pressure Photoionization/Mass Spectrometer (TLC-APPI/MS) (Kanagawa Univ.) MOCHIDA, Yoshiyuki
- 2F4-47\*† Direct solid-state circular dichroism (CD) measurement by using multichannel-CD spectrophotometer (The Univ. of Tokyo) HARADA, Takunori: TAKAHASHI, Hiromi: KURODA, Reiko

## Monday, March 28, AM

### Probe microscope

Chair: SATO, Yukari (9:10  $\sim$ 10:10)

- \* 9:00-9:10: interval for laptop PC connection.(3F4-02, 3F4-04, 3F4-05, 3F4-06)
- **3F4-02\*** Single-molecular identification of nucleobase molecules using tunnneling current (ISIR, Osaka Univ.) MATSUBARA, Kazuki; OHSHIRO,

- Takahito; TSUTSYI, Makusu; FURUHASHI, Masayuki; TANIGUCHI, Masateru; KAWAI, Tomoji
- 3F4-04 Single-Molecule Indentification of Neurotransmitters by Tunneling Current (ISIR, Osaka Univ.) OHSHIRO, Takahito; TSUTSUI, Makusu; MATSUBARA, Kazuki; FURUHASHI, Hiroyuki; TANIGUCHI, Masateru; KAWAI, Tomoji
- 3F4-05 AFM Observation of Molecular Stretching Based on [7]Thiaheter-ohelicene (Fac. Sys. Eng., Wakayama Univ.) HIGASHI, Minako; NAKAHARA, Yoshio; OSUGA, Hideji; ODA, Masato; KADO, Sinpei; KIMURA, Keiichi
- 3F4-06\* Aqueous solution structures on functionalized alkanethiol self assembled monolayers investigated with atomic force microscopy (Graduate school of science, Kobe Univ.; Shimadzu Co.; JST; Graduate school of engineering, Kyoto Univ.; ICC, Kyoto Univ.) HIASA, Takumi; SUZUKI, Tomoko; KIMURA, Kenjiro; ONISHI, Hiroshi; OHTA, Masahiro; WATANABE, Kazuyuki; YAMAZAKI, Masashi; KOKAWA, Ryohei; OHYABU, Noriaki; KOBAYASHI, Kei; YAMADA, Hirofumi

### Bioanalysis

Chair: KIMURA, Keiichi (10:20~11:20)

- \* 10:10-10:20: interval for laptop PC connection.(3F4-09, 3F4-10, 3F4-11, 3F4-13)
- 3F4-09 Adsorption and Desorption Processes of Enzyme in a Single Silica Gel Microparticle/Water System by Confocal Laser Scanning Microscopy (Univ. of Tsukuba) HATTORI, Taiki; NAKATANI, Kiyoharu
- **3F4-10** Highly effective detection of lectins on the carbohydrate terminated mono-molecular layer (Nat'l. Inst. Adv. Indst. Sci. Tech. (AIST)) SATO, Yukari; YOSHIOKA, Kyoko; MURAKAMI, Teiichi; TANAKA, Mutsuo; NIWA, Osamu
- **3F4-11\*** Quantitative analysis of Cytochrome c in mitochondria by resonance Raman spectroscopy (Univ. of Tokyo, Department of Chemistry) KAKITA, Minoru; HAMAGUCHI, Hiro-o
- **3F4-13\*** Single-step synthesis of DNA-coded nanoparticles for fluorescence-Raman dual modal cell imaging (Hokkaido Univ.) WANG, Guoqing; ISHIKAWA, Ayako; NISHIO, Takashi; NAMBARA, Katsuyuki; MATSUO, Yasutaka; NIIKURA, Kenichi; IJIRO, Kuniharu

Chair: CITTERIO, Daniel (11:30~12:30)

- \* 11:20-11:30: interval for laptop PC connection.(3F4-16, 3F4-18, 3F4-19, 3F4-20)
- 3F4-16\* A new approach for label-free biosensor with nanostructures (Nagoya Univ.; FIRST, Nagoya Univ.; Nat. Inst. Mater. Sci.) YASUI, Takao; KAJI, Noritada; OKAMOTO, Yukihiro; TOKESHI, Manabu; HORIIKE, Yasuhiro; BABA, Yoshinobu
- **3F4-18** Protein Sequence Analysis by Using of Microwave Assisted Protein Hydrolysis (Kyushu Inst. Tech.; Dept. Biosci. and Bioinform.) NAKAMURA, Hiroyuki; YOSHIMURA, Takeo; OHUCHI, Shokichi
- 3F4-19<sup>†</sup> Microwave Assisted Enzymatic Reaction (Kyushu Inst. Tech.) YOSHIMURA, Takeo; SAKAEDA, Naohisa; TORIUCHI, Yuta; OHUCHI, Shokichi
- 3F4-20\* A Molecular Detection of Protease Reaction under Microfluidic Control (Nagoya Univ.) ONOSHIMA, Daisuke; KAJI, Noritada; TOKESHI, Manabu; BABA, Yoshinobu

### Monday, March 28, PM

Chair: OHUCHI, Shokichi (13:40~14:40)

- \* 13:30-13:40: interval for laptop PC connection.(3F4-29, 3F4-30, 3F4-31, 3F4-32, 3F4-33, 3F4-34)
- **3F4-29** Determination of single nucleotide variations using magnetic beads (Faculty of Science and Engineering, Doshisha Univ.) HAGIHARA, Kenta; HASHIMOTO, Masahiko; TUKAGOSHI, Kazuhiko
- **3F4-30** Detection of destruction effect of antibacterial peptide against to pseudocell (vesicle) of staphylococcus aureus. (Fac. Sys. Eng., Wakayama Univ.) SAKATA, Mamoru; NAKAMURA, Makoto; ISHIBASHI, Jun; NAKAHARA, Yoshio; KIMURA, Keiichi
- **3F4-31** Reagent-release capillary-based isoelectric focusing forsimple and highly sensitive enzyme activity assay (Osaka prefecture Univ.; Department of applied chemistry) NOGAWA, Yuto; YOKOYAMA, Hiroki; KAWAMURA, Kunio; HISAMOTO, Hideaki
- 3F4-32<sup>#</sup> Label-free detection of DNA binding proteins based on microfluidic solid state molecular beacon sensor (Graduate School of Engineering, Nagoya Univ.) WANG, Jun; OKAMOTO, Yurohiki; KAJI, Noritada; TOKESHI, Manabu; BABA, Yoshinobu

## Capillary chromatography

- 3F4-33 Screening of single nucleotide variations by hydrodynamic chromatography(HDC) (Faculty of Science and Engineering, Doshisha Univ.) SHIMASE, Koji; HASHIMOTO, Masahiko; TSUKAGOSHI, Kazuhiko
- **3F4-34** Development of chromatography using polyethylene glycol-coated capillary tube (Faculty of Science and Engineering, Doshisha Univ.) KOBAYASHI, Tomoya; JINNO, Naoya; HASHIMOTO, Masahiko; TSUKAGOSHI, Kazuhiko

### Tuesday, March 29, AM

Chair: NISHIMOTO, Yuko  $(9:10\sim10:10)$ 

- \* 9:00-9:10: interval for laptop PC connection.(4F4-02, 4F4-03, 4F4-04, 4F4-06, 4F4-07)
- 4F4-02 Capillary chromatography using a water-hydrophilic/hydrophobic organic solvent mixture as a carrier solution; consideration concerning separation performance based on phase diagram (Faculty of Science and Engineering, Doshisha Univ.) TANIGAWA, Yusuke; JINNO, Naoya; HASHIMOTO, Masahiko; TUKAGOSHI, Kazuhiko
- 4F4-03 Capillary chromatography using a water-hydrophilic/hydrophobic organic solvent mixture as a carrier solution; consideration from the data obtained by CE analysis (Faculty of Science and Engineering, Doshisha Univ.) TABATA, Kisuke; JINNNO, Naoya; NODA, Keiichi; HASHIMOTO, Masahiko; TSUKAGOSHI, Kazuhiko
- 4F4-04\* HPLC analysis of stress marker in saliva using dispersive liquid-liquid micro extraction (Pharm. Sci., Fukuoka Univ.) TODOROKI, Kenichiro; TAMASHIMA, Erina; MAEDA, Yuki; ITOYAMA, Miki; HAYAMA, Tadashi; YOSHIDA, Hideyuki; NOHTA, Hitoshi; YAMAGUCHI, Masatoshi
- 4F4-06 Preparation of silica gel coated by carbon nanotube for liquid chromatography stationary phase (Department of Applied Chemistry, Graduate School of Engineering, Kyushu Univ.) YOO, Jongtae; FUJIGAYA, Tsuyohiko; NAKASHIMA, Naotoshi
- 4F4-07 Determination of ethanol based on its reaction with Ce(IV) in the presence of thiosulfate and detection of Ce(III) (Tokai Univ.) SHIBAYAMA, Eri; ISHIHARA, Yoshimi; MIURA, Yasuyuki; MIKAMI, Ikko.

Chair: HAYASHITA, Takashi (10:20~11:30)

- \* 10:10-10:20: interval for laptop PC connection.(4F4-09, 4F4-10, 4F4-11, 4F4-12, 4F4-13, 4F4-14, 4F4-15)
- 4F4-09 Capillary chromatography using water-hydrophilic/hydrophobic organic solvent mixture as a career solution;introduction of absorption reagent and metal ion analysis (Faculty of Science and Engineering, Doshisha Univ.)
  FUJINAGA, Satoshi; JINNO, Naoya; HASHIMOOTO, Masahiko; TSUKAGOSHI, Kazuhiko
- 4F4-10 Capillary chromatography using a water-hydrophilic/hydrophobic organic solvent mixture as a carrier solution; introduction of cyclodextrin and biomolecule analysis (Faculty of Science and Engineering, Doshisha Univ.) TAKAHASHI, Naoya; JINNNO, Naoya; TUKAGOSHI, Kazuhiko; HASHIMOTO, Masahiko
- 4F4-11 Capillary chromatography using a water-hydrophilic/hydrophobic organic solvent mixture as a carrier solution; introduction of chemiluminescence reaction and anti-oxidant analysis. (Facuity of Science and Engineering, Doshisha Univ.) NISHIYAMA, Kei; ZINNO, Naoya; NODA, Keiichi; HASHIMOTO, Masahiko; TSUKAGOSHI, Kazuhiko

### Environmental analysis

- 4F4-12 Kinetic Analysis of Cadmium Dissolution Processes in Paddy Soils (Univ. of Tsukuba) MIZUSAWA, Keiichi; TAMAKI, Satoshi; NISHIMOTO, Naoya; NAKATANI, Kiyoharu
- 4F4-13 Influence of Carbonized Temperature on VOC-Adsorption and Desorption Properties of Woodceramics Prepared from Cedar (Kanagawa Univ.) ONUKI, Satomi; YAMADA, Saki; OKABE, Toshihiro; TSUGOSHI, Takahisa; NISHIMOTO, Yuko
- **4F4-14** Structural Analysis of Ni Supported Ceria-Zirconia Catalyst Prticle by Scanning Micro-XAFS (Univ. of Tokyo; IMS; JASRI) ISHIGURO, Nozomu; URUGA, Tomoya; TANIDA, Hajime; TERADA, Yasuko; OHKOSHI, Shin-ichi: TADA, Mizuki

# Laser analysis, X-ray analysis

4F4-15 Sensitivity Dependence on Laser Wavelength in Analyzing Polycyclic Aromatic Hydrocarbons by Laser Ionization (Tokyo Tech.) MISAWA, Kentaro; MATSUI, Yoshiko; IMAJO, Takashi; ISHIUCHI, Shun-ichi; FUJII, Masaaki

# Room F5

Bldg. 20 20-310

# Colloid and Interface Chemistry Saturday, March 26, AM

Chair: ISHIMARU, Yoshihiro (9:00  $\sim$ 10:00)

- \* 8:50-9:00: interval for laptop PC connection.(1F5-01, 1F5-03, 1F5-04, 1F5-05)
- 1F5-01\* Dendritic Molecular Glue (1): Non-covalent Adhesion to Protein Surfaces by Multivalent Salt-Bridge Formation and Its Applications (School

- of Engineering, The Univ. of Tokyo) OKURO, Kou; KINBARA, Kazushi; OBA, Makoto; NISHIYAMA, Nobuhiro; KATAOKA, Kazunori; AIDA, Takuzo
- **1F5-03** Dendritic Molecular Glue (2): Design of Molecular Glues with Photoaffinity Probes and Their Applications (School of Engineering, The Univ. of Tokyo) UCHIDA, Noriyuki; OKURO, Kou; AIDA, Takuzo
- 1F5-04 Dendritic Molecular Glue (3): Ion-permeability Regulation of Biomembrane by Photoresponsive Molecular Glues (School of Engineering, The Univ. of Tokyo) SUZUKI, Yushi; TAKEUCHI, Tadashi; OKURO, Kou; AIDA, Takuzo
- 1F5-05\* Cooperative Supramolecular Polymerization showing Nucleation-Elongation Behavior based on Allosteric Function (Department of Chemistry, Faculty of Science, Hokkaido Univ.; JST PRESTO) KAWAI, Hidetoshi; OBA, Fumi; ONO, Yuki; SATO, Takako; KATOONO, Ryo; FUJIWARA, Kenshu; SUZUKI, Takanori

Chair: YAMAMOTO, Youhei (10:10~11:20)

- \* 10:00-10:10: interval for laptop PC connection.(1F5-08, 1F5-09, 1F5-10, 1F5-11, 1F5-13)
- **1F5-08** Synthesis and inclusion phenomena of the cyclodextrin dimer with naphthalene moieties (2) (Saitama Univ., Graduate School of Science and Engineering) NISHIBAYASHI, Takanori; ISHIMARU, Yoshihiro
- 1F5-09 Synthesis of the cyclodextrin dimer linked at the 6-position and their inclusion phenomena of polymers (Saitama Univ., Graduate School of Science and Engineering) NAGANO, Yoshihiko; ISHIMARU, Yoshihiro
- 1F5-10 Synthesis of the two type of heterogeneous cyclodextrin dimers with benzene linker, and their inclusion phenomena of polymers (Saitama Univ., Graduate School of Science and Engineering) LI, Lin; ISHIMARU, Yoshihiro
- 1F5-11\* Synthesis and Property of Supramolecular Networks Using Various CD-containing Supramolecular Cross-linker (Department of Organic and Polymeric Materials, Tokyo Institute of Technology) JANG, keum hee; KOYAMA, Yasuhito; TAKATA, Toshikazu
- 1F5-13\* Synthesis and Structural Conversion of Polymers Containing Degradable Rotaxane Skeletons (Tokyo Institute of Technology) KOHSAKA, Yasuhiro; NAKAZONO, Kazuko; KOYAMA, Yasuhito; TAKATA, Toshikazu

Chair: SAKAI, Hideki (11:30~12:30)

- \* 11:20-11:30: interval for laptop PC connection.(1F5-16, 1F5-17, 1F5-18, 1F5-19, 1F5-20, 1F5-21)
- 1F5-16 Supramolecular Soft Matrix(1):Development of Cationic Supramolecular Hydrogel as Cell Culture Matrix (Kyoto Univ.) KOMATSU, Harunobu; IKEDA, Masato; MAMACHI, Itaru
- 1F5-17 Highly-sensitive detection of polyamine in supramolecular hydrogel and MMT hybrid material (Graduate School of Engineering. Kyoto Univ.) YOSHII, Tatsuuki; MATSUI, Toshihiro; KOMATSU, Harunobu; IKEDA, Masato; HAMACHI, Itaru
- 1F5-18 Development of pH responsive supramolecular hydrogel (Shizuoka Univ.) HARAYA, Nana; YAMANAKA, Masamichi
- **1F5-19** Supramolecular soft matrix(3): molecular design of photo-responsive gel based on peptides (Graduate School of Engineering, Kyoto Univ.; JST, CREST) IKEDA, Masato; YOSHII, Tatsuyuki; HAMACHI, Itaru
- 1F5-20 Supramolecular soft matrix (4): Biological application of stimuliresponsive peptide-based hydrogel (Graduate School of Engineering, Kyoto Univ.) TANIDA, Tatsuya; IKEDA, Masato; HAMACHI, Itaru
- 1F5-21 Supramolecular soft matrix(5):Construction of heat driven molecular self-assembly systemby means of retro-Diels-Alder reaction (Graduate School of Engineering, Kyoto Univ.) KURITA, Yushi; OCHI, Rika; IKEDA, Masato; HAMACHI, Itaru

### Saturday, March 26, PM

Chair: HARADA, Akira (13:40 $\sim$ 14:30)

- \* 13:30-13:40: interval for laptop PC connection.(1F5-29)
- **1F5-29**\* The Chemical Record Lecture Non-Covalent Synthesis of Complex Supramolecular Systems (Eindhoven Univ. of Technology, The Netherlands) E.W. Meijer

Chair: IKEDA, Masato (14:40 $\sim$ 15:30)

- \* 14:30-14:40: interval for laptop PC connection.(1F5-35, 1F5-36, 1F5-37, 1F5-38)
- **1F5–35** Synthesis of rotaxane containing  $\alpha$ ,  $\omega$ -diaminoalkane and cyclodextrin. (Tokyo Institute of technology) AKAE, Yosuke; KOHSAKA, Yasuhiro; KOYAMA, Yasuhito; NAKAZONO, Kazuko; OKAMURA, Hisashi; TAKATA, Toshikazu
- **1F5-36** Synthesis of Polyrotaxane Via End-Capping Reaction Using Nitril *N*-oxide (Department of Organic and Polymeric Materials, Tokyo Institute of Technology) MIURA, Kaori; JANG, Keumhee; NAKAZONO, Kazuko; KOYAMA, Yasuhito; TAKATA, Toshikazu
- 1F5-37 Redox-responsive Supramolecular Hydrogel by Molecular Recognition at Side Chain of Polymer (Grad. Sch. Sci., Osaka Univ.) NAKAHATA, Masaki; TAKASHIMA, Yoshinori; YAMAGUCHI, Hiroyasu; HARADA, Akira
- 1F5-38\* Photoswitchable carbon nanotube hydrogel by using cyclodextrin and

azobenzene polymers. (Grad. Sch. Sci., Osaka Univ.) TAMESUE, Shingo; TAKASHIMA, Yoshinori; YAMAGUCHI, Hiroyasu; SHINKAI, Seiji; HARADA, Akira

Chair: YAMAGUCHI, Hiroyasu (15:40∼16:30)

- \* 15:30-15:40: interval for laptop PC connection.(1F5-41, 1F5-43, 1F5-45)
- 1F5-41\* Design and Functionalization of Supramolecular Slimes (Tokyo Metropolitan Univ.) NISHIYABU, Ryuhei; YAMAMOTO, Nagisa; ITO, Katsunori; KOBAYASHI, Hiroyasu; KUBO, Yuji
- **1F5-43**\*† Development of New Hydrogelators Formed by Cyclic(dipeptide) Derivative (Interdisciplinary Graduate School of Science and Technology, Shinshu Univ.) HOSHIZAWA, Hiroko; SUZUKI, Masahiro; HANABUSA, Kenji
- 1F5-45 Electrophoresis of proteins using of supramolecular hydrogel (Shizuoka Univ.) JINNO, Yuki; OYOSHI, Takanori; YAMANAKA, Masamichi

Chair: YAMANAKA, Masamichi (16:40~17:40)

- \* 16:30-16:40: interval for laptop PC connection.(1F5-47, 1F5-48, 1F5-49, 1F5-50, 1F5-51, 1F5-52)
- 1F5-47 Synthesis of Insulated Origo(phenylene ethynylene)by Sequential Self-inclusion and Its Applications (Graduate School of Engineering, Kyoto Univ.) MASAI, Hiroshi; TERAO, Jun; FUJIHARA, Tetsuaki; TSUJI, Yasushi
- 1F5-48 Synthesis of insulated molecular wires oriented for wiring between nano gaps by polymerization (Graduate School of Engineering, Kyoto Univ.) HOMMA, Kyohei; TERAO, Jun; FUJIHARA, Tetsuaki; TSUJI, Yasushi
- 1F5-49 Synthesis of Insulated Molecular Wires through Sonogashira Copolymerization (Graduate School of Engineering, Kyoto Univ.) KONOSHIMA, Yohei; WADAHAMA, Akihisa; FUJIHARA, Tetsuaki; TERAO, Jun; TSUJI, Yasushi
- 1F5-50 β-sheet network induces supramolecular assembly of conventional block copolymer (Doshisha Univ.) KAMIWATARI, Soichi; KOGA, Tomoyuki; HIGASHI, Nobuyuki
- 1F5-51 Silica nanostructures templated with self-assembled peptides (Doshisha Univ.) TANIGUCHI, Tomoya; KOGA, Tomoyuki; HIGASHI, Nobuvuki
- 1F5-52 Programmed self-organization of three-armed collagen-mimetic peptides (Doshisha Univ.) NIKAIDO, Yuji; KOGA, Tomoyuki; HIGASHI, Nobuyuki

Chair: TERAO, Jun (17:50~18:50)

- \* 17:40-17:50: interval for laptop PC connection.(1F5-54, 1F5-55, 1F5-56, 1F5-57, 1F5-59)
- 1F5-54 Effect of central metal ions on the formation of silica-porphyrin mesostructured hybrids through self-assembly of porphyrin derivatives (Institute for Nanoscience and Nanotechnology, Waseda Univ.; Faculty of Science and Engineering, Waseda Univ.; Kagami Memorial Institute for Materials Science and Technology, Waseda Univ.) NASU, Shintaro; KURODA, Kazuyuki
- 1F5-55 Synthesis and Self-assembly of Zinc Chlorins Possessing a Photochromic Spiropyran Moiety (Ryukoku Univ.) MIYATAKE, Tomohiro; TAKAMORI, Yuki
- 1F5-56 Synthesis and Properties of Amphiphilic Compounds with Ruthenium (II) Tris(bipyridine) Complex (Wakayama Univ.) OKAZAKI, Akira; OSUGA, Hideji; KIMURA, Keiichi; SAKAMOTO, Hidefumi
- 1F5-57\*† Precise design of supramolecular structure using phenylazomethine dendrimers (Chemical Resources Laboratory, Tokyo Institute of Technology) OCHI, Yousuke; AZUMA, Keisuke; YAMAMOTO, Kimihisa
- 1F5-59 Preparation of Circularly Polarized Luminescent Film with Pyrene/gamma-Cyclodextrin inclusion complex and its chiroptical properties (NAIST) SHIBAGUCHI, Hiroshi; TAKIYAMA, Koujiro; NAITO, Masanobu

### Sunday, March 27, AM

Chair: NUMATA, Munenori (9:00  $\sim$ 10:00)

- \* 8:50-9:00: interval for laptop PC connection.(2F5-01, 2F5-02, 2F5-03, 2F5-04, 2F5-06)
- **2F5-01** Fabrication of Metal-Oxide Nanotubes using Ferritin and Their Catalytic Activity (Faculty of Sci. and Eng., Chuo Univ.) KATO, Ryunosuke: KOMATSU. Teruvuki
- 2F5-02 Synthesis of Albumin Nanotube Containing Au Nanoparticles (Faculty of Sci. and Eng., Chuo Univ.) GOTO, Shun; KOMATSU, Teruyuki
- 2F5-03 Synthesis of Protein Nanotubes having Lectin Surface Interior and Their Capturing Ability of Polysaccharide. (Faculty of Sci. and Eng., Chuo Univ.) SHIRAISHI, Yuta; KOMATSU, Teruyuki
- 2F5-04\* Molecular Chaperon Bionanotube (2): One-dimensional Assembly of Chemically Designed GroEL for Stimuli-responsive Advanced DDS (Department of Chemistry and Biotechnology, School of Engineering, The Univ. of Tokyo.) BISWAS, Shuvendu; KINBARA, Kazushi; ISHII, Noriyuki; TAGUCHI, Hideki; MIYATA, Kanjiro; KATAOKA, Kazunori; AIDA, Takuzo

2F5-06 Molecular Chaperon Bionanotube (2): Stimuli-Responsive Nanotubular Assembly of GroEL Mutants (Department of Chemistry and Biotechnology, School of Engineering, The Univ. of Tokyo) SENDAI, Toshihiro; BISWAS, Shuvendu; TAGUCHI, Hideki; AIDA, Takuzo

Chair: FUJIHARA, Hisashi (10:10∼11:10)

- \* 10:00-10:10: interval for laptop PC connection.(2F5-08, 2F5-10, 2F5-12, 2F5-13)
- 2F5-08\*† Preparation of gold-nanoshell containing viru like particle (Univ. of Hokkaido; RIES) NAGAKAWA, Keita; NUMURA, Takao; NIIKURA, Kenichi; SUZUKI, Tadaki; MATSUO, Yasutaka; SAWA, Hirohumi; IJIRO, Kuniharu
- 2F5-10\* Ultrasound Irradiation and Non-covalent Bonding/Interaction-Induced Porphyrin Nanocrystals: Syntheses and Photophysics (Faculty of Science and Technology, Keio Univ.) SAKAI, Hayato; ARAKI, Yasuyuki; WADA, Takehiko; ASANO, Atsushi; SEKI, Shu; HASOBE, Taku
- 2F5-12 Dynamic Spring-Like Expansion and Contraction of Semi-Artificial polysaccharide Driven by Self-Assembly of Small Molecules (Graduate School of Life and Environmental Science, Kyoto Prefectural Univ.) KINOSHITA, Daiki; NUMATA, Munenori; TAMIAKI, Hitoshi
- 2F5-13 Synthesis and self-assembling properties of amphiphilic chlorophyll with hydrogen-bonding ability (Graduate School of Life and Environmental Science, Kyoto Prefectural Univ.) TAKAYAMA, Momoko; NUMATA, Munenori; TAMIAKI, Hitoshi

Chair: KOMATSU, Teruyuki (11:20~12:20)

- \* 11:10-11:20: interval for laptop PC connection.(2F5-15, 2F5-16, 2F5-17, 2F5-18, 2F5-19, 2F5-20)
- 2F5-15 Synthesis and Function of Optically Active Ammonium-Polythiophene Nanotubes (Kinki Univ. Faculty of Science and Engineering) AMETANI, Yasuhiro; NAKAHODO, Tsukasa; FUJIHARA, Hisashi
- **2F5-16** Synthesis and Function of Fullerene and Metal Nanoparticle-Polythiophene Hybrid π-Tubes (Kinki Univ. Faculty of Science and Engineering) YOSHIDA, Ryusuke; NAKAHODO, Tsukasa; FUJIHARA, Hisashi
- 2F5-17 Synthesis and Functionalization of Redox-active Chiral Polymer Nanotubes (Kinki Univ. Faculty of Science and Engineering) UEHARA, Hitomi; NAKAHODO, Tsukasa; FUJIHARA, Hisashi
- 2F5-18 Luminescent Nanotapes Self-Assembled from Cyanine Dyes and Their Supramolecular Etching (Graduate School of Engineering, Kyushu Univ., IRCMS, JST CREST) MORIKAWA, Masa-aki; KIMIZUKA, Nobuo
- 2F5-19 Preparation of Fluorescent Nanoparticles by Self-assembly of Amphiphilic Polyhedral Oligomeric Silsesquioxanes (Kagoshima Univ.) KUWAHARA, Shin-ya; YAMAMOTO, Kazuya; KADOKAWA, Jun-ichi
- 2F5-20 Stimuli-responsive Soft Particles Constructed by Boron-Containing Dynamic Covalent Bonds (Tokyo Metropolitan Univ.) NISHIYABU, Ryuhei; TERAOKA, Shiori; KUBO, Yuji

### Sunday, March 27, PM

Chair: MIYATAKE, Tomohiro (13:30∼14:30)

- \* 13:20-13:30: interval for laptop PC connection.(2F5-28, 2F5-29, 2F5-30, 2F5-31, 2F5-33)
- 2F5-28<sup>†</sup> Supramolecular Organized Structures Based on Charge-by-Charge Assemblies (Institute of Science and Engineering, Ritsumeikan Univ.; Shanghai Jiao Tong Univ.; Max Planck Institute for Polymer Research; PRESTO, JST) HAKETA, Yohei; SAKAMOTO, Shohei; WU, Dongqing; FENG, Xinliang; MUELLEN, Klaus; MAEDA, Hiromitsu
- 2F5-29<sup>#</sup> Effects of Cations in Supramolecular Assemblies Consisting of Planar Receptor-Anion Complexes (Institute of Science and Engineering, Ritsumeikan Univ.; PRESTO, JST) DONG, Bin; TERASHIMA, Yoshitaka; HAKETA, Yohei; MAEDA, Hiromitsu
- 2F5-30 Synthesis and spectroscopic properties of self-assembled porphyrin nanoparticles organized by metal coordination (Faculty of Science and Technology, Keio Univ.) SAKUMA, Takao; SANDANAYAKA, Atula S. D.; SAKAI, Hayato; MIURA, Tomoaki; HASOBE, Taku
- **2F5-31\*** A New Mechanochromic Material Composed of an Assembled Metallotriphenylene (JST Aida Nanospace Project) HIRAHARA, Eri; YUSA, Hitoshi; YAMASHITA, Takashi; NAKATA, Kazuya; AIDA, Takuzo
- 2F5-33 Formation of Assemblies Based on π-Conjugated Charged Species (Institute of Science and Engineering, Ritsumeikan Univ.; PRESTO, JST) MAEDA, Hiromitsu; NARITANI, Kazumasa

### Monday, March 28, AM

Chair: SADA, Kazuki  $(9:00 \sim 10:00)$ 

- \* 8:50-9:00: interval for laptop PC connection.(3F5-01, 3F5-03, 3F5-04, 3F5-05)
- 3F5-01\* Development of efficient synthetic method of SPM and its application to catalytic reaction (Tokyo Univ. of Science) YAMASAKI, Ryu; SHIGETO, Atsushi; SAITO, Shinichi
- 3F5-03 Self-Assembly of Amphiphilic Chlorophyll on O/W Emulsion Surface (Graduate School of Life and Environmental Science, Kyoto Prefectural Univ.) KINOSHITA, Daiki; NUMATA, Munenori; TAMIAKI, Hitoshi
- 3F5-04 Creation of Hierarchical Polysaccharide Strand : Supramolecular

- Spinning of Nanofibers by Microfluidic Device (Graduate School of Life and Environmental Science, Kyoto Prefectural Univ.) TAKIGAMI, Yusuke; NUMATA, Munenori
- **3F5-05\*** Thermally-crosslinkable Stereoregular Polymer for Microcontact Printing (School of Engineering, The Univ. of Tokyo) MIYAMURA, Yasunao; KINBARA, Kazushi; AIDA, Takuzo

Chair: YAMASAKI, Ryu (10:10~11:10)

- \*10:00-10:10: interval for laptop PC connection.(3F5-08, 3F5-09, 3F5-10, 3F5-12, 3F5-13)
- 3F5-08 Aggregated Structure of Amphiphilic Trismaleimide Derivatives (Suzuka National College of Technology) TAKAKURA, Katsuto; INAGAKI, Naova
- **3F5-09** Functionalization and Self-Organization of Porous Coordination Polymers (Graduate School of Science, Hokkaido Univ.) SUGIKAWA, Kouta; FURUKAWA, Yuki; ISHIWATA, Takumi; NAGATA, Shunjiro; KOKADO, Kenta; SADA, Kazuki
- 3F5-10\* Self-Assembled Soft Nanotubes Having Morphological Transformation Ability by Photo Stimulus (NTRC-AIST) KAMETA, Naohiro; TANAKA, Asuka; AKIYAMA, Haruhisa; MINAMIKAWA, Hiroyuki; MASUDA, Mitsutoshi; SHIMIZU, Toshimi
- 3F5-12 Self-assembly of amphiphilic molecules bearing anthracene rings (Chemical Resources Laboratory, Tokyo Institute of Technology) KONDO, Kei; YOSHIZAWA, Michito; AKITA, Munetaka
- 3F5-13 self-assembly of tris-urea molecule with perfluoroalkyl chain (Shizuoka Univ.) MUNENOBU, Kanako; FUJII, Hiromitsu; YAMANAKA, Masamichi

Chair: TAKAKURA, Katsuto (11:20 $\sim$ 12:20)

- \* 11:10-11:20: interval for laptop PC connection.(3F5-15, 3F5-17, 3F5-18, 3F5-19, 3F5-20)
- 3F5-15\*\*#Surface Molecular Recognition and Water Retention Ability of Fluorous Fullerene Vesicle (The Univ. of Tokyo) HOMMA, Tatsuya; HARANO, Koji; NAKAMURA, Ejichi
- 3F5-17<sup>#</sup> Surface Functionalization of Water-soluble Fluorous Fullerene Vesicle by Fluorous Tagging Method (The Univ. of Tokyo) MIZUNO, Shinichiro; HOMMA, Tatsuva: HARANO, Koji: NAKAMURA, Ejichi
- 3F5-18<sup>#</sup> Incorporation of hydrophobic molecules in surface-modified fullerene vesicles (The Univ. of Tokyo) GORGOLL, Ricardo Mizoguchi; HARANO, Koji: NAKAMURA, Ejichi
- 3F5-19 Control of Solubility of Polymers with Urea Groups by Additives (Graduate School of Engineering, Kyushu Univ.) AMEMORI, Shogo; KOKADO, Kenta; SADA, Kazuki
- 3F5-20 Construction and Assembly Modulation of the Supramolecular PolymersComposed of Tris(spiroborate) Molecular Connecting Modules (Dept. of Chem. Konan Univ.) HIRATA, Kadzuya; DANJO, Hiroshi; KAWAHATA, Masatoshi; AZUMAYA, Isao; YAMAGUCHI, Kentaro; MIYAZAWA, Toshifumi

# Monday, March 28, PM

Chair: TANAKA, Kentaro (13:30~14:30)

- \* 13:20-13:30: interval for laptop PC connection.(3F5-28, 3F5-30, 3F5-31, 3F5-32)
- **3F5-28\*** Design of Liquid Crystalline Organic Semiconductors from Fused Porphyrin Oligomers (1): Hole and Electron Transporting Materials from A Fused Porphyrin Dimer Using Incompatible Side Chains (The Univ. of Tokyo, Kyoto Univ., Osaka Univ.) SAKURAI, Tsuneaki; SAEKI, Akinori; SEKI, Shu; OSUKA, Atsuhiro; AIDA, Takuzo
- **3F5-30** Design of Liquid Crystalline Organic Semiconductors from Fused Porphyrin Oligomers (2): Homeotropically Oriented Liquid Crystal from meso-Alkyl Derivative (The Univ. of Tokyo, Kyoto Univ., Osaka Univ.) KOBAYASHI, Yoshiyuki; SAKURAI, Tsuneaki; SAEKI, Akinori; SEKI, Shu; OSUKA, Atsuhiro; AIDA, Takuzo
- 3F5-31 Design of Liquid Crystalline Organic Semiconductors from Fused Porphyrin Oligomers (3): Synthesis and Properties of Liquid Crystalline Semiconductors from Fused Porphyrin Oligomers (The Univ. of Tokyo, Kyoto Univ., Osaka Univ.) TANAKA, Seiya; SAKURAI, Tsuneaki; SAEKI, Akinori: SEKI. Shu: OSUKA. Atsuhiro: AIDA. Takuzo
- **3F5–32\*** Formation of Solvent-Dependent Assemblies from Anion-Responsive π-Conjugated Molecules (Institute of Science and Engineering, Ritsumeikan Univ.; PRESTO, JST) TERASHIMA, Yoshitaka; MAEDA, Hiromitsu

Chair: SAEKI, Akinori (14:40∼15:40)

- \* 14:30-14:40: interval for laptop PC connection.(3F5-35, 3F5-37, 3F5-38, 3F5-40)
- 3F5-35\* Self-Assembly and Synthesis of Macrocyclic Metal Complexes Directed Toward Functionalized Chemical Nano-Space (Graduate School of Science, Nagoya Univ.) KAWANO, Shin-ichiro; IDETA, Kohei; TANAKA, Kentaro
- 3F5-37 Efficient Synthesis of Salen-Bridged Dibenzothiopghene Macrocycles and the Metal Complex for Nano Spaces (Graduate School of Science, Nagoya Univ.) SUZUKI, Atsushi; KAWANO, Shin-ichiro; TANAKA, Kentaro
- **3F5-38\***<sup>†</sup> Alignment Control of Photoluminescent Smectic Liquid Crystals and

- Their Polarized Photoluminescent Properties (The Univ. of Tokyo) YAMANE, Shogo; SAGARA, Yoshimitsu; KATO, Takashi
- 3F5-40<sup>#</sup> Synthesis of Liquid Crystals Having π-Conjugated and Ionic Moieties (The Univ. of Tokyo) ZHENG, Zhen; YAZAKI, Sanami; FUNAHASHI, Masahiro; KATO, Takashi

Chair: KATO, Takashi (15:50~16:50)

- \* 15:40-15:50: interval for laptop PC connection.(3F5-42, 3F5-43, 3F5-45, 3F5-46)
- **3F5-42**\* Fused Nonathiophenes Capable of Self-Assembling into Discotic Columnar Liquid Crystals (The Univ. of Tokyo) XIAO, Qi; AIDA, Takuzo
- 3F5-43\* Novel discotic liquid crystals capable of large-area homeotropic alignment on various substrates (The Univ. of Tokyo; RIKEN Advanced Science Institute) OSAWA, Terutsune; KAJITANI, Takashi; FUKUSHIMA, Takanori; AIDA, Takuzo
- **3F5-45**\* Design of block copolymers having imidazolium ion-appended polymethacrylate segments for hybridization with carbon nanotubes (Univ. of Tokyo; RIKEN) LONG, Xiaoyu; HOSONO, Nobuhiko; KAJITANI, Takashi; FUKUSHIMA, Takanori; AIDA, Takuzo
- **3F5-46\*** Template polymerization of the micellar aggregate of carbon nanotube with a polymerizable surfactant: Creation of composite materials imprinting the anisotropic alignment of carbon nanotube (RIKEN, Advanced Science Institute) OHTANI, Masataka; ISHIDA, Yasuhiro; AIDA, Takuzo

Chair: FUKUSHIMA, Takanori (17:00~17:50)

- \* 16:50-17:00: interval for laptop PC connection.(3F5-49, 3F5-51, 3F5-52, 3F5-53)
- **3F5-49\*** Structure Control of Charged-Species Assemblies Based on Anion-Responsive Molecules (Institute of Science and Engineering, Ritsumeikan Univ.; PRESTO, JST) BANDO, Yuya; SAKAMOTO, Shohei; MAEDA, Hiromitsu
- 3F5-51 Sonication Induced Homo- and Heterochiral Aggregation of Cyclic Dinuclear Platinum Complexes (Graduate School of Engineering Science, Osaka Univ) TAKAHASHI, Koichi; MIYANAGA, Maiko; KOMIYA, Naruyoshi; NAOTA, Takeshi
- 3F5-52 Nanoporous Liquid Crystalline Materials Alignable to Electric Field: Hexagonal Columnar Assembly of Macrocyclic Peptide Derivatives (The Univ. of Tokyo) SATO, Kohei: ITOH, Yoshimitsu: AIDA, Takuzo
- **3F5-53** Development of Functionalized π-Conjugated Liquid Crystals Having Oxyethylene Moieties (The Univ. of Tokyo) SHIMIZU, Tomohiro; YASUDA, Takuma; KATO, Takashi

### Tuesday, March 29, AM

Chair: NONOMURA, Yoshimune  $(9:00\sim10:10)$ 

- \* 8:50-9:00: interval for laptop PC connection.(4F5-01, 4F5-02, 4F5-03, 4F5-04, 4F5-06)
- **4F5-01** Surface Characterization and Aggregation Properties in Aqueous Solution of Amphiphilic Multi-Sugar Type Oligomers (Graduated School of Nara Women's Univ.) NAKATANI, Yuka; IWASE, Hiroki; SHIBAYAMA, Mitsuhiro; OBA, Yojiro; OHNUMA, Masato; YOSHIMURA, Tomokazu
- 4F5-02 Properties in Aqueous Solution of the Systems for Cetyltrimethylammonium Bromide / Sodium Alkyl Sulfates (Nagoya Institute of Technology) TOMITA, Takashi; YAMAMOTO, Yasushi; YOSHINO, Akihiro; TAGA, Kejiiro
- 4F5-03 Lamellar/onion/lamellar transition with varying temperature under shear flow (Tokyo Metropolitan Univ.) SATOH, Daijiro; KAWABATA, Youhei: KATO, Tadashi
- 4F5-04\* Aggregate properties of the DBS/HTAC mixed system in aqueous solution by a spin-probe ESR technique (Meisei Univ., GESC) HORIUCHI, Teruo; HIDAKA, Hisao; KOIKE, Takayoshi; KUBO, Ayako; ARAI, Yuta
- 4F5-06\* Development of Topology-Directed Functionalities: Construction of a Stimuli-Responsive Micelle by a Cyclic Amphiphilic Block Copolymer (Tokyo Tech) HONDA, Satoshi; YAMAMOTO, Takuya; TEZUKA, Yasuyuki

Chair: YOSHIMURA, Tomokazu (10:20 $\sim$ 11:20)

- \* 10:10-10:20: interval for laptop PC connection.(4F5-09, 4F5-10, 4F5-11, 4F5-12, 4F5-13)
- 4F5-09 Heat sensitive viscosity change by morphological transition of giant micelle (Tokyo Univ. of Science) MORITA, Clara; IMURA, Yoshiro; ENDO, Hiroshi; KAWAI, Takeshi
- 4F5-10 Synthesis and characterization of polymer gel using low molecular weight gelator with self-crosslinking ability (Tokyo Univ. of Science) KIKUCHI, Aoi; ENDO, Hiroshi; KAWAI, Takeshi
- **4F5-11** Preparation of the hydrophobic capsules covered with fatty acids (Yamagata Univ.) KAWAMURA, Yuki; NONOMURA, Yoshimune
- 4F5-12 Collapse process of the emulsions stabilized by solid particles (Yamagata Univ.) NAKAGAWA, Naoki; NONOMURA, Yoshimune
- 4F5-13\*<sup>†</sup> Synthesis and characterization of water in scCO<sub>2</sub> microemulsions encapsulated Cu(II) complex (Tokyo Tech; RLNR) MIYAMOTO, Naomi; TSUKAHARA, Takehiko; WAI, Chien M.; IKEDA, Yasuhisa

Chair: KAWAI, Takeshi (11:30 $\sim$ 12:40)

\* 11:20-11:30: interval for laptop PC connection.(4F5-16, 4F5-17, 4F5-18, 4F5-19, 4F5-20, 4F5-21)

- 4F5-16 Studies of the change over time of mixed oil-gel system containing dextrin fatty acid ester and hydrophobized silica (Nippon Menard Cosmetic Co.,Ltd.) OKUURA, Tomoko; ASANO, Hiroyuki; KITAHARA, Michirou; NAKATA, Satoru
- 4F5-17 Factors for gelation of amino acid ionic liquid/zwitterion mixture. (Tokyo Univ. of Agriculture & Technology) MATSUMOTO, Takuro; TAGUCHI. Satomi: OHNO. Hirovuki
- **4F5-18** Hardness and its Variation with Time of Oil-wax gel Consisting of Normal and Branched Paraffin Waxes (Tokyo Univ. of Technol.) ISHII, Yohei; ISHII, Miyuki; AKATSU, Kanae; HONDA, Ayako; SHIBATA, Masashi
- 4F5-19 Effect of aromatic structure in aprotic low-molecular weight organic gelators on gelation properties (Yamaguchi Univ) HASHIMOTO, Yosuke; MORITA, Yuki; OKAMOTO, Hiroaki
- 4F5-20 Wetting dynamics on agar gel surfaces (Yamagata Univ.) SEINO, Eri; MAYAMA, Hiroyuki; NONOMURA, Yoshimune
- 4F5-21\* Quantitative Evaluation of Mechanosensing of cellsDynamically Tunable Hydrogel (Inst. of Phys. Chem., Univ. of Heidelberg) YOSHIKAWA, Hiroshi; ROSSETTI, Fernanda R.; KAUFMANN, Stefan; KAINDL, Thomas; MADSEN, Jeppe; ENGEL, Ulrike; LEWIS, Andrew L.; ARMES, Steven P.; TANAKA, Motomu

# Room G5

Blda. 23 23-208

# Energy and Related Chemistry Saturday, March 26, AM

### Solar Thermal Energy

Chair: KUWANO, Jun  $(9:00 \sim 10:00)$ 

- \* 8:50-9:00: interval for laptop PC connection.(1G5-01, 1G5-02, 1G5-03, 1G5-04, 1G5-05, 1G5-06)
- 1G5-01 Oxygen releasing reaction mechanism of CeO<sub>2</sub>-ZrO<sub>2</sub> ceramics (Tokyo Tech, Tamaura laboratory) SHIGETA, Satoshi; LEE, Chon-il; KANEKO, Hiroshi; TAMAURA, Yutaka
- 1G5-02 Relationship between oxygen releasing reactivity of CeO<sub>2</sub> based ceramics and oxygen partial pressure (Tokyo Tech solution's research laboratory, Tamaura laboratory) TAMAURA, Yutaka; SHIGETA, Satoshi; LEE, Chon-il; KANEKO, Hiroshi
- 165-03 Chemical Energy Conversion of Concentrated Solar Energy (85) Development of Simulation Model of Oxygen-Releasing Reaction of Rotary-Type Solar Reactor (Tamaura Lab, Tokyo Tech.) TAMURA, Yutaka; KANEKO, Hiroshi; TAMAURA, Yutaka
- 165-04 Conversion of Concentrated Solar Energy to Chemical Energy (97)
  Reduction of Ceria-based Oxide using Rotary-type Solar Reactor with
  Concentrated Solar Heat at High Temperature (Tokyo Tech Solutions
  Research Laboratory) KANEKO, Hiroshi; LEE, Chon-il; ISHIKAWA,
  Yosuke; TAMAURA, Yutaka
- 1G5-05<sup>#</sup> Chemical Energy Conversion of Concentrated Solar Energy (98)Solar Upgrade of CH4 by reforming with CO2 in Carbonate Based Molten Salt System (Tamaura Lab, Tokyo Tech.) ALALI, Khalid; KANEKO, Hiroshi; TAMAURA, Yutaka

## Electrolyte

1G5-06 Preparation of graphite supported Li-N-H hydrogen storage material and investigation of their hydrogen desorption property (Kanagawa Univ.) TERADA, Tomoyuki; YOSHIMURA, Hana; YOSHIDA, Akihiro; NAITO, Shuichi

Chair: HARADA, Hisashi (10:10∼11:10)

- \* 10:00-10:10: interval for laptop PC connection.(1G5-08, 1G5-09, 1G5-10, 1G5-12)
- 1G5-08 DP dependence of the proton conductivity for proton-conductivity-enhanced poly(aspartic acid) (PRESTO, JST; Kyoto Univ.; Tohoku Univ.) NAGAO, Yuki; IMAI, Yuzuru; MATSUI, Jun; OGAWA, Tomoyuki; MIYASHITA, Tokuji
- 1G5-09 Wide range ammonia concentration analyzer using mesoporous titanium dioxide thin film (The Institute of Biophotochemonics Co.Ltd.; Ibaraki Univ.) OOKI, Manabu; UENO, Hirohito; NEMOTO, Junichi; FUJII, Yuki; IZUOKA, Akira; KANEKO, Masao
- 1G5-10\* Single-Step Synthesis of Nano-Sized Perovskite-Type Oxide / Carbon Nanotube Composites and Their Electrocatalytic Oxygen-Reduction Activities (Kyoto Univ.) MIYAZAKI, Kohei; KAWAKITA, Ken-ichi; ABE, Takeshi; FUKUTSUKA, Tomokazu; KOJIMA, Kazuo; OGUMI, Zempachi
- 1G5-12\* Redox behavior of B<sub>12</sub>-modified-hyperbranched polymer and its application to dehalogenation catalyst (Kyushu Univ.) TAHARA, Keishiro; SHIMAKOSHI, Hisashi; ABE, Masaaki; TANAKA, Akihiro; HISAEDA, Yoshio

Chair: KANEKO, Masao (11:20~12:10)

- \* 11:10-11:20: interval for laptop PC connection.(1G5-15, 1G5-16, 1G5-17, 1G5-18, 1G5-19)
- 1G5-15 Electric discharge method for high yield trapping of atomic hydrogen in cage-shaped silsesquioxane (Hiroshima Univ.) OKA, Kazuyuki; KOMAGUCHI, Kenji; OOYAMA, Yousuke; IMAE, Ichiro; HARIMA, Yutaka
- 1G5-16 Analysis of Mechanism for Oxygen Reduction Reaction in Alkaline Solution by Scanning Electrochemical Microscopy (Osaka Prefecture Univ.) TERANISHI, Rie; HIGUCHI, Eiji; CHIKU, Masanobu; INOUE, Hiroshi
- 165-17 Acceleration of enzymatic hydrolysis of enolesters under ultrasonic irradiation (Meisei Univ.) AKASAKA, Takuro; MATSUMOTO, Kazutsugu; HARADA, Hisashi

#### Solid electrolyte

- 1G5-18 Hydroxide ion conduction of Ni-Al-layered double hydroxide (Osaka Prefecture Univ.) TADANAGA, Kiyoharu; KUBO, Daiju; TATSUMISAGO, Masahiro
- 1G5-19 A new SO<sub>2</sub> gas sensor based on Zr<sup>4+</sup> ion conducting solid electrolyte (Osaka Univ.) UNEME, Yasuhisa; TAMURA, Shinji; IMANAKA, Nahuhita

### Saturday, March 26, PM

Chair: MATSUI, Jun (13:20∼14:20)

- \* 13:10-13:20: interval for laptop PC connection.(1G5-27, 1G5-28, 1G5-29, 1G5-30, 1G5-31)
- 1G5-27 Phase transition behavior and characterization of pyrrolidinium dihydrogenphosphate based plastic crystals (Department of Materials and Life Sciences, Sophia Univ.) NAKAZAWA, Masanori; FUJITA, Masahiro; TAKEOKA, Yuko; RIKUKAWA, Masahiro

#### Battery

- 1G5-28 Mechanochemical synthesis and characterization of highly proton-conductive MHAO<sub>4</sub>-Azole composites (Toyohashi Univ. of Technology) UCHIHORI, Daisuke; OH, Song-yul; KAWAMURA, Go; MUTO, Hiroyuki; MATSUDA, Atsunori
- 165-29 Development of proton conductive membrane using biopolymer and multivalent organic phosphonic acid (Univ. Nagoya) KOBAYASHI, Yutaro; MORIYA, Makoto; SAKAMOTO, Wataru; YOGO, Toshinobu
- 165-30 Carbon Alloy-wrapped Carbon Nanotubes: A New Oxygen Reduction Catalyst for Fuel Cell (Graduate School of Engineering, Kyushu Univ.) UCHINOUMI, Takeshi; FUJIGAYA, Tsuyohiko; NAKASHIMA, Naotoshi
- 165-31\* Application of Rh porphyrins to CO-tolerant anode catalysts (AIST) YAMAZAKI, Shin-ichi; YAO, Masaru; SIROMA, Zyun; MIYAZAKI, Yoshinori

Chair: TOMITA, Yasumasa (14:30 $\sim$ 15:30)

- \* 14:20-14:30: interval for laptop PC connection.(1G5-34, 1G5-36, 1G5-37, 1G5-38, 1G5-39)
- 1G5-34\* Withdrawn
- 1G5-36 Electrochemical performance of graphitized carbon nanosheets as lithium ion battery anodes (Faculty of Textile Science and Technology, Shinshu Univ.) KOJIMA, Rikio; HATTORI, Yoshiyuki; KONDOU, Atsushi; TAKAGI, Eiichi; KAWASUMI, Naoto; TANAKA, Toshihisa; OKINO, Fujio; TOUHARA, Hidekazu
- 1G5-37 Preparation of titanium sulfide thin film electrodes by pulsed laser deposition and their application to all-solid-state lithium secondary batteries (Osaka Prefecture Univ.) HAYASHI, Akitoshi; MATSUYAMA, Takuya; SAKUDA, Atsushi; TATSUMISAGO, Masahiro
- 1G5-38 Preparation of all-solid-state lithium secondarybatteries using solid electrolytes of pyrrolidinium based plasticcrystals (Osaka Prefecture Univ. Graduate School of Engineering) HAYASHI, Akitoshi; YAMAUCHI, Akihiro; SAKUDA, Atsushi; TATSUMISAGO, Masahiro
- 1G5-39 Mechanochemical synthesis of zinc phosphide activematerials and their application to all-solid-statelithium secondary batteries (Osaka Pref. Univ.; Idemitsu Kosan Co.) HAYASHI, Akitoshi; UEDA, Ai; NAGAO, Motohiro; SEINO, Yoshikatsu; OTA, Tsuyoshi; TATSUMISAGO, Masahiro

Chair: YASUDA, Satoshi (15:40~16:40)

- \* 15:30-15:40: interval for laptop PC connection.(1G5-41, 1G5-42, 1G5-43, 1G5-44, 1G5-45)
- 1G5-41 Synthesis of plastic crystalline lithium salt with solid state ionic conductivity (Nagoya Univ.) KATO, Daiki; MORIYA, Makoto; SAKAMOTO, Wataru; YOGO, Toshinobu
- **1G5-42** New type rechargeable battery based on electrochemical intercalation of PF<sub>6</sub><sup>-</sup> (2) study on PF<sub>6</sub><sup>-</sup> intercalation property (Kyushu Univ.) NAGANO, Hiroki; TOKUNAGA, Ryuji; IDA, Shintaro; ISHIHARA, Tatsumi
- 1G5-43 Preparation of LiMn<sub>2</sub>O<sub>4</sub> cathode thin films for lithium secondary batteries by mist CVD process (Osaka Prefecture Univ.) TADANAGA, Kiyoharu; YAMAGUCHI, Akihiro; TATSUMISAGO, Masahiro; DURAN, Alicia; APARICIO. Mario
- 1G5-44 Improvement of charge-discharge properties of iron trifluoride

- cathode. (Univ. of Shizuoka) TOMITA, Yasumasa; KATO, Jinta; KOBAYASHI, Kenkichiro
- **1G5-45\*** Quinone Derivatives as Positive-Electrode Materials for Use in Rechargeable Lithium Batteries (Research Institute for Ubiquitous Energy Devices, National Institute of Advanced Industrial Science and Technology (AIST)) YAO, Masaru; SENOH, Hiroshi; SAKAI, Tetsuo; TANIMOTO, Kazumi

#### Photoelectrochemistry

Chair: IDA, Shintaro (16:50~17:40)

- \* 16:40-16:50: interval for laptop PC connection.(1G5-48, 1G5-50, 1G5-51, 1G5-52)
- 1G5-48\* Mechanoluminescent ubiquitous light source driven photocatalysis (National Institute of Advanced Industrial Science and Technology (AIST), Measurement Solution Research Center) TERASAKI, Nao; YAMADA, Hiroshi; XU, Chao-nan
- 1G5-50 Visible light-induced photocurrent in Au-modified titaniumdioxide thin film electrodes (Hokkaido Univ.) OIKAWA, Takashi; NABIKA, Hideki; IKEDA, Katsuyoshi; MURAKOSHI, Kei
- 1G5-51 Photocurrent generation in a single crystalline titaniumdioxide electrode with Au nanostructures under visible and near-infraredlight irradiation (Hokkaido Univ.) NARA, Masanobu; IKEDA, Katsuyoshi; MURAKOSHI, Kei
- 1G5-52 Photoinduced electron transfer in porphyrin-linked ultrathinmolecular layers. (Hokkaido Univ.) SATOH, Shino; IKEDA, Katsuyoshi; MURAKOSHI, Kei

### Sunday, March 27, AM

#### Titanium Dioxide

Chair: NAKAZAKI, Jotaro  $(9:00\sim10:00)$ 

- \* 8:50-9:00: interval for laptop PC connection.(2G5-01, 2G5-02, 2G5-03, 2G5-04, 2G5-05, 2G5-06)
- 2G5-01 Dielectric Properties of Single Oxide Nanosheets (Kyushu Univ.) OKAMOTO, Yohei; IDA, Shintaro; HAGIWARA, Hidehisa; MATSUMOTO, Yasumichi: ISHIHARA, Tatsumi
- 2G5-02 Water splitting by connecting p-type CaFe<sub>2</sub>O<sub>4</sub>/n-type oxide semi-conductor electrodes under illumination without applying an external voltage (Kyushu Univ.) YAMADA, Keisuke; IDA, Shintaro; MATSUNAGA, Takuya; HAGIWARA, Hidehisa; MATSUMOTO, Yasumich; ISHIHARA, Tatsumi

### Dye-sensitized Solar Cell

- 2G5-03 Fabrication and Characterization of Dye-Sensitized Solar Cell incorporating Au Nanorods (KAST) MATSUBARA, Tomohiro; NAKATA, Kazuya; SHAKAI, Munetosi; OCHIAI, Tsuyoshi; SAKAI, Hideki; MURAKAMI, Taketoshi; ABE, Masahiko; TAKAGI, Katsuhiko; FUJISHIMA, Akira
- 2G5-04 Effect of surface modification of TiO<sub>2</sub> photoelectrode on performance of dye-sensitized solar cells with black dye (Department of Industrial Chemistry, Faculty of Engineering, Tokyo Univ. of Science) OKUYAMA, Yu; OZAWA, Hironobu; ARAKAWA, Hironori
- 2G5-05 Study on thermal stability of dye-sensitized solar cell with N719 dye (Department of Industrial Chemistry, Faculty of Engineering, Tokyo Univ. of Science) MITA, Kazutaka; OZAWA, Hironobu; ARAKAWA, Hironori
- 2G5-06 Photovoltaic performances of the plastic-substrate dye-sensitized solar cells with TiO<sub>2</sub> films fabricated by the roll press method (Department of Industrial Chemistry, Faculty of Engineering, Tokyo Univ. of Science) WATANABE, Naoya; OZAWA, Hironobu; ARAKAWA, Hironori

Chair: OZAWA, Hironobu (10:10 $\sim$ 11:10)

- \* 10:00-10:10: interval for laptop PC connection.(2G5-08, 2G5-09, 2G5-11, 2G5-12)
- 2G5-08 Dye-sensitized Solar Cells with Iminopyridine Ru(II) Complex as a Near-IR Sensitizer (RCAST, Univ. of Tokyo) KINOSHITA, Takumi; FUJISAWA, Jun-ichi; NAKAZAKI, Jotaro; UCHIDA, Satoshi; KUBO, Takaya: SEGAWA, Hiroshi
- **2G5-09\*** Molecular Design of novel terpyridyl Ru(II) Sensitizers toward Improvement of Near-IR Sensitivity for Dye-sensitized Solar Cells (RCAST, Univ. of Tokyo) KINOSHITA, Takumi; DY, Joaane Ting; FUJISAWA, Junichi; NAKAZAKI, Jotaro; UCHIDA, Satoshi; KUBO, Takaya; SEGAWA, Hiroshi
- 2G5-11 Dye-Sensitized Solar Cells using Terpyridyl Ru(II) Sensitizers with Near-IR Spectral Responce- Effect of the Alkyl Chain Length on the Ligand - (RCAST, Univ. of Tokyo) ONO, Takaoki; KINOSHITA, Takumi; UCHIDA, Satoshi; KUBO, Takaya; SEGAWA, Hiroshi
- 2G5-12\*\* Dye-Sensitized Solar Cells with Donor-substituted Ethynyl-Linked Porphyrin Heterodimers (Tsinghua Univ.; RCAST, Univ. of Tokyo) LIU, Yizhu; DY, Joanne Ting; LIN, Hong; TAMAKI, Koichi; NAKAZAKI, Jotaro; UCHIDA, Satoshi; KUBO, Takaya; SEGAWA, Hiroshi

Chair: HAYASE, Shuji (11:20∼12:10)

- \* 11:10-11:20: interval for laptop PC connection.(2G5-15, 2G5-17, 2G5-19)
- 2G5-15\* Dye-sensitized Solar Cells using Push-pull Type Organic Dyes with Thienylmethine Bridge (RCAST, The Univ. of Tokyo) KOMATSU, Makoto; NAKAZAKI, Jotaro; UCHIDA, Satoshi; KUBO, Takaya; SEGAWA, Hiroshi
- 2G5-17\*† Dye-sensitized Solar Cells Using the Fused Ruthenium Porphyrin Dimers with Multi-carboxyl Groups (RCAST, The Univ. of Tokyo) TAMAKI, Koichi; DY, Joanne Ting; NAKAZAKI, Jotaro; UCHIDA, Satoshi; KUBO, Takaya; SEGAWA, Hiroshi
- 2G5-19 Porphyrin sensitized solar cells using Br Br<sub>3</sub> redox mediator (the Univ. of Tokyo) AWAI, Fumiyasu; ARAI, Yonbon; UCHIDA, Satoshi; KUBO, Takaya; SEGAWA, Hiroshi

#### Sunday, March 27, PM

Chair: MURAKAMI, Takurou (14:20~15:20)

- \* 14:10-14:20: interval for laptop PC connection.(2G5-33, 2G5-34, 2G5-35, 2G5-36, 2G5-38)
- 2G5-33 Fabrication and characterization of dye-sensitized solar cells based on electrospun TiO2 tubes (KAST) KAGAWA, Tomoya; NAKATA, Kazuya; SAKAI, Munetoshi; OCHIAI, Tsuyoshi; SAKAI, Hideki; MURAKAMI, Taketoshi; ABE, Masahiko; TAKAGI, Katsuhiko; FUJISHIMA, Akira
- 2G5-34 Synthesis of a novel ruthenium complex bearing a curcumin derivative ligand and its application to dye-sensitized solar cells (Department of Industrial Chemistry, Faculty of Engineering, Tokyo Univ. of Science) KAWAGUCHI, Hiroki; OZAWA, Hironobu; ARAKAWA, Hironori
- 2G5-35 Synthesis and characterization of a novel ruthenium complex dye having heteroleptic bipyridine ligands (Department of Industrial Chemistry, Faculty of Engineering, Tokyo Univ. of Science) HONDA, Syunsuke; OZAWA, Hironobi; ARAKAWA, Hironori
- 2G5-36\* Effect of ZnS coating on the photovoltaic properties of PbS quantum dot-sensitized solar cells (Univ. of Electro-Communications, PREST JST) HACHIYA, Sojiro; SHEN, Qing, TARO, Toyoda
- 2G5-38 Structures of perylene derivatives for dye sensitized solar cells (CST, Nihon Univ.) TAKAHASHI, Daichi; TAKAGUCHI, Yusho; PALANISAMY, Kalimuthu; OTSUKI, Joe; ASHRAFUL, Islam; HAN, Liyuan

Chair: FUJISAWA, Jun-ichi (15:30 $\sim$ 16:20)

- \* 15:20-15:30: interval for laptop PC connection.(2G5-40, 2G5-41, 2G5-42, 2G5-43, 2G5-44)
- 2G5-40 Perylene-derived dyes having polar groups for DSSC (CST, Nihon Univ.) TAKAGUCHI, Yusho; TAKAHASHI, Daichi; OTSUKI, Joe; PALANISAMY, Kalimuthu; ISLAM, Ashraful; HAN, Liyuan
- 2G5-41<sup>#</sup> Tuning of HOMO Energy Levels of 9-Substituted 3,4-Perylenedicar-boxilic Anhydrides for Dye-Sensitized Solar Cells (CST, Nihon Univ.) PALANISAMY, Kalimuthu; TAKAHASHI, Daichi; TAKAGUCHI, Yusho; OTSUKI, Joe; HAN, Liyuan; ISLAM, Ashraful
- 2G5-42 Dye-Sensitized Solar Cells Using Near-Infrared Absorbing Dyes Having Various Alkyl Groups (Gifu Univ.) FUNABIKI, Kazumasa; TANAKA, Nagisa; MIZUHATA, Noriko; KUBOTA, Yasuhiro; MATSUI, Masaki; YOSHIDA, Tsukasa; SAITO, Yasuteru; KATO, Kazuyuki
- 2G5-43 Synthesis and Photovoltaic Properties of Near-Infrared Absorbing 5-Substituted Heptamethine-Cyanine Dyes (Gifu Univ.) FUNABIKI, Kazumasa; HIBINO, Atsuhiko; KUBOTA, Yasuhiro; MATSUI, Masaki; YOSHIDA, Tsukasa; SAITO, Yasuteru; KATO, Kazuyuki
- 2G5-44 Synthesis and Photovoltaic Properties of Bisquinoxaline Porphyrin (Kyoto Univ.; Kyoto Univ., iCeMS) TOUDE, Yuuki; IIJIMA, Hiroaki; UMEYAMA, Tomokazu; MATANO, Yoshihiro; ITO, Seigo; IMAHORI, Hiroshi

# Monday, March 28, AM

# Dye-sensitized Solar Cell

Chair: NAKATA, Kazuya (9:00  $\sim$ 10:00)

- \* 8:50-9:00: interval for laptop PC connection.(3G5-01, 3G5-03, 3G5-05, 3G5-06)
- **3G5-01\*** Polymer-sensitized solar cells with hetero-layered polythiophene photoanode (RCAST, The Univ. of Tokyo; NISSAN CHEMICAL INDUSTRIES, LTD.) AKITSU, Kenta; KUBO, Takaya; UCHIDA, Satoshi; SEGAWA, Hiroshi; OTANI, Naoki; TOMURA, Misayo; TAMURA, Takayuki; MATSUMURA, Mitsunobu
- 3G5-03\* Development of New-type D-pi-A Organic Photosensitizers without Carboxyl Group and Their Applications to Dye-Sensitized Solar Cells (Hiroshima Univ.) OOYAMA, Yousuke; INOUE, Shogo; NAGANO, Tomoya; OHSHITA, Joji; KOMAGUCHI, Kenji; IMAE, Ichiro; HARIMA, Yutaka
- 3G5-05 Dye aggregation correlating with the performance of dye-sensitized solar cells based on TEMPO-introduced-naphthooxazole dye (Hiroshima Univ.) KUSHIMOTO, Kohei; INOUE, Shogo; KOMAGUCHI, Kenji; OOYAMA, Yousuke; IMAE, Ichiro; HARIMA, Yutaka

#### Capacitor

3G5-06 Electrochemical behaviors of graphene oxide and application to electrochemical double layer capacitor (Hiroshima Univ.) SETODOI, Sunao; OOYAMA, Yousuke; KOMAGUCHI, Kenji; IMAE, Ichiro; HARIMA, Yutaka

### Photocatalyst

Chair: AMANO, Fumiaki (10:10∼11:00)

- \* 10:00-10:10: interval for laptop PC connection.(3G5-08, 3G5-09, 3G5-10, 3G5-11)
- 3G5-08 Study on water splitting reaction catalyzed by Y<sub>1-x</sub>Bi<sub>x</sub>VO<sub>4</sub> photocatalysts (Department of Industrial Chemistry, Faculty of Engineering, Tokyo Univ. of Science) OYAMA, Takeshi; OZAWA, Hironobu; ARAKAWA, Hironori
- **3G5-09** Studies on the water splitting using the Ta-doped α-iron(III) oxide photoelectrode catalyst under solar light (Department of Industrial Chemistry, Faculty of Engineering, Tokyo Univ. of Science) OSHIMA, Norihiko; OZAWA, Hironobu; ARAKAWA, Hironori
- 3G5-10 Water splitting under solar light using the TiO<sub>2</sub> nanorod photoelectrode catalyst fabricated by the facile hydrothermal process (Department of Industrial Chemistry, Faculty of Engineering, Tokyo Univ. of Science) SATO, Yohei; OZAWA, Hironobi; ARAKAWA, Hironori
- **3G5-11\***<sup>†</sup> Time-resolved *in situ* XAFS study on the formation andphase separation of Pt<sub>3</sub>Sn nanopariticles supported on γ-Al<sub>2</sub>O<sub>3</sub> (KEK-PF) UEMURA, Yohei; INADA, Yasuhiro; BANDO, Kyoko; SASAKI, Takehiko; EGUCHI, Koichi; KAMIUCHI, Naoto; YAGISHITA, Akira; NOMURA, Masaharu; TADA, Mizuki; IWASAWA, Yasuhiro

Chair: ARAKAWA, Hironori (11:10~12:10)

- \* 11:00-11:10: interval for laptop PC connection.(3G5-14, 3G5-15, 3G5-16, 3G5-18)
- 3G5-14 Study on Cu<sub>2</sub>ZnSnS<sub>4</sub> (CZTS) photocathodes modified with non-noble metal compounds as cocatalysts for H2 evolution (Univ. of Tokyo, Nagaoka National College of Tech.) YOKOYAMA, Daisuke; MINEGISHI, Tsutomu; JIMBO, Kazuo; HISATOMI, Takashi; MA, Guijun; KATAYAMA, Masao; KUBOTA, Jun; KATAGIRI, Hironori; DOMEN, Kazunari
- 3G5-15 Photoelectrochemical properties of AgGa<sub>5</sub>Se<sub>8</sub> (Dept. of Engineering, The Univ. of Tokyo) MIWADA, Chika; MINEGISHI, Tsutomu; KUBOTA, Jun; DOMEN, Kazunari
- 3G5-16\* Influence of Titanium Doping on the Photoelectrochemical Properties of Iron Oxide Electrodes (Hokkaido Univ.) AMANO, Fumiaki; OHTANI, Bunsho
- 3G5-18\* Gap-mode plasmon enhancement of photoinduced uphill electron transfer (Hokkaido Univ.; NIMS-MANA) IKEDA, Katsuyoshi; TAKAHASHI, Kenji; MURAKOSHI, Kei; UOSAKI, Kohei

# Asian International Symposium -Electro Chemistry-

### Monday, March 28, PM

Chair: MATSUE, Tomokazu (13:00~16:00)

- **3G5-25**<sup>#</sup> Keynote Lecture Combined Computational and Experimental Studies on Fuel Cell Catalysis (Wuhan Univ., China) Lin Zhuang (13:00 ∼ 12:20)
- **3G5-28**<sup>#</sup> Keynote Lecture Understanding underlying processes in formic acid fuel cells (Gwangju Institute of Science and Technology, Korea) Jaeyoung Lee (13:30∼14:00)
- 3G5-31<sup>#</sup> Invited Lecture Experimentally Determined Redox Potentials of Single-Walled Carbon Nanotubes (Kyushu Univ.) TANAKA, Yasuhiko (14:00∼14:30)
- 3G5-34<sup>#</sup> Invited Lecture Direct electrochemical detection of DNA molecules using a sputterednanocarbon film (AIST) KATO, Dai (14:30∼ 15:00)
- **3G5-37<sup>#</sup> Invited Lecture** Electrochemically Controlled Pd-Catalyzed Coupling Reactions (Okayama Univ.) MITSUDO, Koichi (15:00∼15:30)
- 3G5-40<sup>#</sup> Invited Lecture Electrochemiluminescence and Electrochemiluminescent Biochips Modified with Nano-structured Gold (Tokyo Tech) Li Feng (15:30~16:00)

# Energy and Related Chemistry Tuesday, March 29, AM

# Organic Solar cell

Chair: ITO, Seigo (9:00 ∼10:00)

- \* 8:50-9:00: interval for laptop PC connection.(4G5-01, 4G5-02, 4G5-03, 4G5-04, 4G5-05, 4G5-06)
- 4G5-01<sup>#</sup> Molecular Packing Structure, Electrochemical Property, and Photo-voltaic Performance of the Penta(organo)[60]fullerene, C<sub>60</sub>Me<sub>5</sub>(Octyl) (Dept. of Chem., Univ. of Tokyo) LI, Baolin: MATSUO, Yutaka: OBATA, Naoki:

- TANAKA, Hideyuki; NAKAMURA, Eiichi
- **4G5-02** Studies of Fullerene's Structure and Halogenated Alkane Additive on OPV (RIKEN) ARAI, Sho; SASAKI, Takeo; TAJIMA, Yusuke; KIMOTO, Atsushi; FUKUCHI, Eiichiro; HITOMI, Atsushi; DOMON, Takaaki
- 465-03 Fabrication of electrodeposited-polythiophene/fullerene hetero structure film and its solar cell application (Univ. of Shiga Pref.) AKIYAMA, Tsuvoshi; GOTO, Koji; OKU, Takeo
- 4G5-04 Fabrication of Organic Potovoltaic Cells based on spray vapor deoposition (Kyushu Inst. Tech.,) OGOMI, Yuhei; SHIMOJI, Takayuki; TOKUSHIGE, Naoki; TANAKA, Hiroki; PANDY, Shyam S; HAYASE, Shuzi
- 4G5-05 Hybrid type dye-sensitized solar cells consisting of porous titania sheet supported by glass cloth (Kyushu Inst. Tech..) SADAMASU, Kengo; MURASATO, Yuu; OGOMI, Yuhei; PANDY, Shyam S; HAYASE, Shuzi
- 4G5-06 Investigating the factors affecting the efficiency of cylinder type TCO-less dye sensitized solar cells (Kyushu Inst. Tech) USAGAWA, Jun; KOGO, Takeshi; KAYA, Masaki; TOKUSHIGE, Naoki; OGOMI, Yuhei; Shyam, Sudhir, Pandey; HAYASE, Shuzi

Chair: GOKON, Nobuyuki (10:10~11:10)

- \* 10:00-10:10: interval for laptop PC connection.(4G5-08, 4G5-09, 4G5-10, 4G5-11, 4G5-12, 4G5-13)
- 4G5-08 Design of Fulleropyrrolidine Derivatives as a Bulk-Hetero Junction Type Thin Layer Organic Solar Cell (Tottori Univ., Sumitomo Chemical Co., Ltd.) SAKUMICHI, Shigeki; MATSUMOTO, Kei; HASHIMOTO, Koji; YOSHIMURA, Ken; UETANI, Yasunori; HAYASE, Shuichi; KAWATSURA, Motoi; ITOH, Toshiyuki

#### Solar Cell

- 4G5-09 Orbital energy of fulleropyrrolidine derivatives (Tottori Univ.; Sumitomo Chemical Co., Ltd.) HAYASE, Shuichi; IWAMOTO, Koji; MATSUMOTO, Kei; HASHIMOTO, Kohji; YOSHIMURA, Ken; UETANI, Yasunori; KAWATSURA, Motoi; ITOH, Toshiyuki
- 4G5-10 Investigation of Wide Full Photonic Band Gap of TiO2 Photonic Crystals filled with Electrolyde by Simulation (Tokyo Institute of Technology) HAYASHI, Mikiro; MATSUTANI, Akihiro; ISOBE, Toshihiro; MATSUSHITA, Sachiko; NAKAJIMA, Akira
- 4G5-11 Optimization Of Spray-deposited CuInS<sub>2</sub> Solar Cells (Univ. of Hyogo) RYO, Toshihiro; ITO, Seigo
- 4G5-12 CuZnS<sub>2</sub> Solar Cells Fabricated by Spray Pyrolysis Deposition (Univ. of Hyogo; Osaka Gas Co.,Ltd.) KITAGAWA, Noriyuki; ITO, Seigo; MATSUYOSHI, Hiroaki; NISHINO, Hiroshi
- 4G5-13 Sb2S3 sensitized Extreamely thin absorber Solar Cell using several blocking layers (Univ. of Hyogo; Osaka Gas Co.,Ltd.) TSUJIMOTO, Kazuki; ITO, Seigo; MATSUYOSHI, Hiroaki; NISHINO, Hiroshi

Chair: HAYASE, Shuichi (11:20~12:00)

- \* 11:10-11:20: interval for laptop PC connection.(4G5-15, 4G5-16, 4G5-17, 4G5-18)
- 4G5-15 Stacking of p-type and n-type nanosheets and their photoelectrochemical propaties (Kyushu Univ.) TAKASHIBA, Akihide; IDA, Shintaro; HAGIWARA, Hidehisa; ISHIHARA, Tatsumi

### Solar Thermal Energy

- 4G5-16<sup>#</sup> Chemical Energy Conversion of Concentrated Solar Energy (91)
  Reducibility of Ce<sub>0.95</sub>M<sub>0.05</sub>O<sub>1.95</sub> (M=Mg, Ca and Sr) in O<sub>2</sub>-releasing reaction (Tamaura Lab, Department of Chemistry, Tokyo Institute of Technology)
  MENG, Qing-long; LEE, Chong il; KANEKO, Hiroshi; TAMAURA, Yutaka
- **4G5-17** Chemical Energy Conversion of Concentrated Solar Energy (92) Solar Hydrogen Generation with Ce<sub>X</sub>Sc<sub>1-x</sub>O<sub>2-y</sub> Reactive Ceramics via Two-Step Water Splitting (Tamaura Lab, Tokyo Tech.) NAITO, Seiichi; LEE, Chong il; KANEKO, Hiroshi; TAMAURA, Yutaka
- 465-18 Chemical Energy Conversion of Concentrated Solar Energy (93) Oxygen Releasing Reaction with Pt doped CeO<sub>2</sub> (Tamaura Lab, Tokyo Tech.) LEE, Chong il; KANEKO, Hiroshi; TAMAURA, Yutaka

### Tuesday, March 29, PM

Chair: KANEKO, Hiroshi (13:10 $\sim$ 14:10)

- \* 13:00-13:10: interval for laptop PC connection.(4G5-26, 4G5-27, 4G5-28, 4G5-29, 4G5-30, 4G5-31)
- 4G5-26 Thermochemical water-splitting by reactive ceramic materials (19) Rietvelt analysis of ferrite particles for two-step thermochemical water-splitting cycle (Niigata Univ.) KONDO, Ken; SUDA, Yoshitsugu; HATAMACHI, Tsuyoshi; GOKON, Nobuyuki; KODAMA, Tatsuya
- **4G5–27** Thermochemical water-splitting by reactive ceramic materials (20) solar demonstration of NiFe<sub>2</sub>O<sub>4</sub>/m-ZrO<sub>2</sub>/MPSZ foam device (Niigata Univ.) SATO, Naoki; IMAIZUMI, Nobuki; HATAMACHI, Tsuyoshi; SEO, Taebeom; GOKON, Nobuyuki; KODAMA, Tatsuya
- 4G5-28 Thermochemical water-splitting by reactive ceramicmaterials (21) Thermochemical Two-step water splitting cycle using CeO<sub>2</sub> particles (Niigata Univ.) AOYAGI, Daiki; KAKENO, Ayaka; HATAMACHI, Tsuyoshi; GOKON, Nobuyuki; KODAMA, Tatsuya

- 4G5-29 Solar thermochemical reforming of methane (23)Kinetics of CO<sub>2</sub>r-eforming at high-temperatures using catalytically-activated ceramic form device (Niigata Univ.) SHIMAWAKI, Kazunori; YAMAWAKI, Yuuhei; HATAMACHI, Tsuyoshi; GOKON, Nobuyuki; KODAMA, Tatsuya
- 4G5-30 Solar thermochemical reforming of methane(24)Double-walled reactor tube using alkaline carbonate/ceramic composites as a thermal storage medium-V (Niigata Univ.) TAKAHASHI, Shogo; YAMASHITA, Shingo; YOSHIMURA, Shumpei; HATAMACHI, Tsuyoshi; SAKURAI, Atsushi; SEO, Taebeom; GOKON, Nobuyuki; KODAMA, Tatsuya
- 465-31 Solar gasification of coal by Direct Irradiation (11)Solar gasification with a fluidized bed of coal cokes by 3kW beam irradiation. (Niigata Univ.) ONO, Ryuta; TAKADA, Yasuhiro; HATAMACHI, Tsuyoshi; GOKON, Nobuyuki; KODAMA, Tatsuya

# Room G6

Bldg. 23 23-209

# Organic Crystals Sunday, March 27, PM

# Construction of Molecular Assembly Systems

Chair: TOHNAI, Norimitsu (13:00 $\sim$ 14:00)

- \* 12:50-13:00: interval for laptop PC connection.(2G6-25, 2G6-26, 2G6-27, 2G6-28, 2G6-29, 2G6-30)
- 2G6-25 Intermolecular interactions in the crystal structure ofbisazomethine dyes synthesized from 4-diethylamino-2-alkoxybenzaldehydes (Yokohama Natl. Univ.; Chungnam Natl. Univ.; Kyungpook Natl. Univ.) JINDO, Takumi; KIM, Byung-soon; MATSUMOTO, Shinya; SON, Young-a; KIM, Sung-hoon
- 2G6-26 Crystal structure of novel bisazomethine dyes synthesized from 4-dimethylamino-2-alkoxybenzaldehydes (Yokohama Natl. Univ.; Chungnam Natl. Univ.; Kyungpook Natl. Univ.) KIM, Byung-soon; MATSUMOTO, Shinya; SON, Young-a; KIM, Sung-hoon
- 2G6-27 Hydrogen-bonding molecular networks of adamantane-based bisphenol molecules: toward the preparation of porous organic materials (Tokushima Bunri Univ.) MASU, Hyuma; TOMINAGA, Masahide; AZUMAYA, Isao
- 2G6-28 Chiral Symmetry Breaking of Succinimide and Isoindolinone Derivatives by Crystallization (Graduate School of Eng., Chiba Univ.) SAKAMOTO, Masami; ONUKI, Tatsuo; MINO, Takashi; FUJITA, Tsutomu
- 2G6-29 Polymorphism of aromatic sulfonamides having fluorine group (Tokushima Bunri Univ.) TERADA, Sho; KATAGIRI, Kosuke; MASU, Hyuma; TOMINAGA, Masahide; AZUMAYA, Isao
- 2G6-30 Pseudopolymorphism of an Aromatic Sulfonamide with channel structure constructed by weak intermolecular interactions (Tokushima Bunri Univ.) SAKAI, Takahiro; UEMURA, Yuki; KATAGIRI, Kosuke; MASU, Hyuma; TOMINAGA, Masahide; AZUMAYA, Isao

Chair: AZUMAYA, Isao (14:10∼15:20)

- \* 14:00-14:10: interval for laptop PC connection.(2G6-32, 2G6-33, 2G6-34, 2G6-35, 2G6-37)
- 2G6-32 Preparation of Pyrene Crystals with Twisted Morphologyand Its Formation Mechanism (Keio Univ.) IBE, Soichiro; ISE, Ryuta; OAKI, Yuva: IMAI, Hiroaki
- 2G6-33 The diversity of self-assemblied sodium oleate in aqueous solution and the structural analysis of the assemblies (Hokkaido Univ.; The Univ. of Tokyo) KAGEYAMA, Yoshiyuki; IWAKI, Sachiko; SUZUKI, Kentaro; SUGAWARA, Tadashi; TAKEDA, Sadamu
- 2G6-34 Formation of Three-component Mixed Crystals in Organic Layered Crystals (Department of Chemistry, Faculty of Science, Hokkaidou Univ.) KOMATSU, Hiromu; KOKADO, Kenta; SADA, Kazuki
- **2G6-35\*** Construction of Superstructures with One-dimensional Inclusion Space based on Dehydrobenzo[12]annulene Derivatives (Graduate School of Engineering, Osaka Univ.) SHIGEMITSU, Hajime; SENGA, Hirofumi; HISAKI, Ichiro: TOHNAI, Norimitsu: MIYATA, Mikiji
- 2G6-37\* First principle lattice energy calculations of organic crystals: Effects of CCSD(T) level correction (Univ. of Japan Chemical; Japan Chemical Co. Ltd) TSUZUKI, Seiji; ORITA, Hideo; HONDA, Kazumasa; MIKAMI, Masuhiro

### Structure and Physical Properties

- Chair: YAMADA, Junichi (15:30~16:30)
- \* 15:20-15:30: interval for laptop PC connection.(2G6-40, 2G6-42, 2G6-44, 2G6-45)
- 2G6-40\* In-plane orientation control of epitaxial organic monolayer (Univ. Tokyo; Hokkaido Univ.) OHTOMO, Manabu; HASEGAWA, Tetsuya; SHIMADA, Toshihiro

- 2G6-42\* C<sub>60</sub> Fulleride Single-Crystal Semidonductors (Toho Univ.; ISSP, The Univ. of Tokyo) MORIYAMA, Hiroshi; NAKAMURA, Tetsuya; UENO, Hiroshi; MORI, Hatsumi
- 2G6-44 Crystal Structures and Physical Properties of [Ni(dmit)<sub>2</sub>] Salts of Pyridazinium /Crown-ether Derivatives Supramolecule Cation (Research Institute of Electronic Science, Hokkaido Univ.) LIU, Zunqi; LI, Lin; KUBO, Kazuya; NORO, Shin-ichiro; AKUTAGAWA, Tomoyuki; NAKAMURA, Takayoshi
- 2G6-45 Crystal Structure and Physical Properties of [Ni(dmit)<sub>2</sub>] Salt of 3-Fluoroadamantylammonium/Crown Ether Derivatives Spramolecule cations (Research Institute for Electronic Science, Hokkaido Univ.) YAN, Yin-nan; AKUTAGAWA, Tomoyuki; KUBO, Kazuya; NORO, Shin-ichiro; NAKAMURA, Takayoshi

Chair: AKUTAGAWA, Tomuyuki (16:40 $\sim$ 17:30)

- \* 16:30-16:40: interval for laptop PC connection.(2G6-47, 2G6-48, 2G6-50)
- 2G6-47 X-rays crystal structure analysis of quinoid type indacene derivatives (Interdisciplinary Grad. School of Science and Engineering, Tokyo Institute of Technology) TSUKAGUCHI, Shingo; NISHIDA, Jun-ichi; YAMASHITA, Yoshiro
- **2G6-48\*** Mechanofluorochromism of Organoboron Comlexes (Grad. Sch. of Eng., Osaka Pref. Univ.; Res. Inst. Mol. Elect. Dev., Osaka Pref. Univ.) IKEDA, Hiroshi; YOSHIMOTO, Yuichi; MIZUNO, Kazuhiko
- 2G6-50\* Crystal structure and Photoluminescence properties of multinuclear d¹0 metal complexes having flexible frameworks (Univ. of Hyogo) OZAWA, Yoshiki; KITAGAWA, Hakuba; IMAGAWA, Rie; UETA, Kouhei; TORIUMI, Koshiro

# Monday, March 28, AM

# Structure and Physical Properties

Chair: NISHIDA, Jun-Ichi (9:00  $\sim$ 9:40)

- \* 8:50-9:00: interval for laptop PC connection.(3G6-01, 3G6-02, 3G6-03, 3G6-04)
- 3G6-01 Crystal Stuctures and Solid-state Optical Properties of Tetracene Octaesters (Univ. of Hyogo) KITAMURA, Chitoshi; TAKENAKA, Akira; KAWASE, Takeshi
- 3G6-02 Supramolecular assemblies and the luminescence properties of 9,10-bisaminophenylanthracene mineral acid salts (Graduate School of Engineering, Osaka Univ.) SUGINO, Misa; TOHNAI, Norimitsu; HISAKI, Ichiro; MIYATA, Mikiji
- 3G6-03 Dehydration Induced Color Switching of 5-Aminoisophthalic Acid Crystal (Tokyo Inst. of Tech.) SAKON, Aya; SEKINE, Akiko; UEKUSA, Hidehiro
- **3G6-04** Control of Photochromism by Photoisomerization of Cobaloxime Complexes (Tokyo Inst. of Tech.) INA, Sayaka; JOHMOTO, Kohei; SEKINE, Akiko; UEKUSA, Hidehiro

### Reaction

Chair: AKAZOME, Motohiro (9:50  $\sim$ 10:50)

- \* 9:40-9:50: interval for laptop PC connection.(3G6-06, 3G6-07, 3G6-08, 3G6-09, 3G6-10)
- **3G6-06** Photomechanical Function of Chiral Salicylideneaniline Crystals (Ehime Univ.) KOSHIMA, Hideko; MATSUO, Risa; UCHIMOTO, Hidetaka
- **3G6-07** Phase transformation of sodium naproxen pseudopolymorphs (Tokyo Institute of Technology) MIYAMOTO, Takashi; SEKINE, Akiko; UEKUSA, Hidehiro
- **3G6-08** Structural Phase Transitions in complex of 2-Pyrrolidone-Chloranilic Acid (Kyoto Univ.) MORIKAWA, Shota; IKEDA, Ryuichi; YAMADA, Teppei; KITAGAWA, Hiroshi
- 3G6-09 Solid-State polymerization of Butadiyne-Derivative Crystals by Initiators and the Nanocrystal Reaction Using the Modified surfaces (Yamagata Univ.) OKADA, Shuji; KINEMUCHI, Takahiro; MORITANI, Yuto; TATEWAKI, Yoko
- 3G6-10\* Chiral amplification through cocrystallization: Sergeants-and-soldiers principle and majority-rule (Graduate School of Arts and Sciences, The Univ. of Tokyo) SEKIYA, Ryo; KURODA, Reiko

Chair: UEKUSA, Hidehiro (11:00 $\sim$ 12:00)

- \* 10:50-11:00: interval for laptop PC connection.(3G6-13,  $\,$  3G6-15,  $\,$  3G6-17)
- 3G6-13\* Mechanochemical preparation of Cd(II) coordination polymers and their structural transformation responding to annealing treatments (Sch. Sci., Kitasato Univ.) YOSHIDA, Jun; YUGE, Hidetaka; KURODA, Reiko; NISHIKIORI. Shin-ichi
- 3G6-15\*† Active molecular transportation in ratchet type tunnel crystal (Okayama Univ.; Rigaku Corporation) KATAOKA, Keisuke; YASUMOTO, Tetsuaki; MANABE, Yousuke; KATAGIRI, Toshimasa; YAMANO, Akihito; SATO, Hiroyasu
- 3G6-17\* Difference in the Excited-State Charge-Transfer and Proton-Transfer Dynamics between Solution and Organic Crystals (Faculty of Science, Kyushu Univ.; Graduate School of Education, Hiroshima Univ.; BASE, Tokyo Univiversity of Agriculture and Technology; Aichi Univ. of

Education) SEKIYA, Hiroshi; KIYOTA, Ittsui; NAGAO, Saori; AMIMOTO, Kiichi; SEKINE, Masahiko; NAKATA, Munetaka; HINO, Kazuyuki; NAKAJIMA, Kiyohiko

# Asian International Symposium -Organic Crystals-Monday, March 28, PM

(13:10~13:20)

**3G6−26**<sup>#</sup> Opening address (The Univ. of Tokyo) KURODA, Reiko (13:10∼ 13:20)

Chair: TAMURA, Rui (13:20~14:30)

- **3G6-27**<sup>#</sup> Keynote Lecture Pharmaceutical cocrystals: Polymorphism and improved physicochemical properties (Inst. Chem. Engineer. Sci., Singapore) AITIPAMULA, Srinivasulu (13:20∼13:50)
- 3G6-30<sup>#</sup> Invited Lecture Systematic investigation of luminescence properties in solid-state by using organic salts (Osaka Univ.) TOHNAI, Norimitsu (13:50~14:10)
- **3G6-32**<sup>#</sup> Invited Lecture Polymorphism, pseudopolymorphism and phase transition in molecular crystals of inositols (Kyoto Univ.) GONNADE, G. Rajesh (14:10∼14:30)

Chair: SUGAWARA, Tadashi (14:40 $\sim$ 15:50)

- **3G6-35**<sup>#</sup> Keynote Lecture Meso Size Effect: Property changes when molecules grow into geometrically well-defined crystals (Pohang Univ. Sci. Technol., Korea) CHOI, Hee Cheul (14:40∼15:10)
- 3G6-38\* Invited Lecture Controlled intramolecular electron transfers in cyanide-bridged molecular squares (Univ. of Tsukuba) NIHEI, Masayuki (15:10~15:30)
- 3G6-40<sup>#</sup> Invited Lecture Tracking ligand-migration pathways of sperm whale myoglobin (Tokyo Tech) TOMITA, Ayana (15:30∼15:50)

Chair: SATO, Naoki (16:00~17:30)

- **3G6-43**<sup>#</sup> Keynote Lecture Functional phenylene ethynylene macrocycles: Properties in the crystalline and liquid crystalline states (Pecking Univ., P. R. China) ZHAO, Dahui (16:00∼16:30)
- **3G6-46**<sup>#</sup> Invited Lecture Impact of isomeric structures on transistor properties in naphthodithiophene semiconducting polymers (Hiroshima Univ.) OSAKA, Itaru (16:30∼16:50)
- 3G6-48<sup>#</sup> Invited Lecture Organic solid-state luminescent materials control of electronic state based on the mode of molecular packing (The Univ. of Tokyo) MUTAI, Toshiki (16:50∼17:10)
- 3G6-50<sup>#</sup> Invited Lecture Supramolecular nanowire constructed with halogen bonding (RIKEN) YAMAMOTO, Hiroshi (17:10∼17:30)

# Room H2

Bldg. 23 23-304

# **Education and History**

### Saturday, March 26, PM

Chair: INOUE, Masayuki  $(12:40{\sim}13:40)$ 

- \* 12:30-12:40: interval for laptop PC connection.(1H2-23, 1H2-26)
- 1H2-23 CSJ Award for Merits for Chemical Education Contribution to Instructions in High School Club Activities and Developments in Regional Chemical Education (Izumo High School) KATSUBE, Hideko
- 1H2-26 CSJ Award for Merits for Chemical Education Contribution to Chemistry Education through Enlightenment Activities for the Youth (Naragakuen Junior High Sch., High Sch.) KUDO, Hiroyuki

Chair: WATANABE, Tadashi (13:50~14:50)

- \* 13:40-13:50: interval for laptop PC connection.(1H2-30)
- 1H2-30 CSJ Award for Chemical Education International Contribution to Chemical Education with the Aid of Internet (Fac. Eng., Soka Univ.) ITO, Masato

Chair: OGINO, Kazuko (15:00 $\sim$ 16:00)

- \* 14:50-15:00: interval for laptop PC connection.(1H2-37,  $\,$  1H2-40,  $\,$  1H2-41,  $\,$  1H2-42)
- 1H2-37 CSJ Award for Merits for Chemical Education Development of Micro Scale Chemical Experiments Using a Microscope (Okayama Pref. Senior High School; Kibi International Univ.) NINOMIYA, Akio
- 1H2-40 Density Measurement of Ethanol and Water using Microscale Experiment (Kobe College) NAKAGAWA, Tetsuo
- 1H2-41 Small Scale Experimental Material of Cumene Process (Tokyo Univ. Sci.) HIROSE, Jun; INOUE, Masayuki
- 1H2-42 The Simplest Programming Method for the 3D Molecular Viewer (Tokyo Metropolitan Univ., Univ. Education Center, Center for Priority Areas) TACHIBANA, Hiroshi; INOUE, Haruo

Chair: TAKAGI, Yumiko (16:10∼17:10)

- \* 16:00-16:10: interval for laptop PC connection.(1H2-44, 1H2-46, 1H2-48, 1H2-49)
- 1H2-44\* Science experiments for elementary school students-Students love science- (Tatuno Municipal Ibogawa Public Hall) TANIBAYASI, Yosikazu; TODA, Mika; SOTANI, Noriyuki
- 1H2-46\* Themed scent, lifelong learning in chemistry at science museum (Osaka Science Museum) ONO, Masahiro
- 1H2-48 Practice of the Chemical Experiments Study for Elementary and Junior High School Students in the Sendai Astronomical Observatory (Miyagi Univ. of Educ.) KASAI, Kayoko; BENI, Tomohiro
- 1H2-49 Science class for SSH from corporate labolatories (Nippon Telegraph and Telephone Corporation) SAITO, Hiroyuki

Chair: KASAI, Kayoko (17:20~18:30)

- \* 17:10-17:20: interval for laptop PC connection.(1H2-51, 1H2-52, 1H2-54, 1H2-55, 1H2-56)
- 1H2-51 Junior High School Student's Attitude toward School Sciencein China and Japan (kagawa Univ.) TAKAGI, Yumiko; WANG, Shan; SASAKI, Nobuyuki; NISHIHARA, Hiroshi
- 1H2-52\* Recent Trends in the College Textbooks on General Chemistry in USA (Tohoku Univ.) OGINO, Kazuko
- 1H2-54 Development of environmental-benign teaching material using ionic liquids;application for open campus (Kagawa Univ.) TAKAGI, Yumiko; ONISHI, Hirokuni; SASAKI, Nobuyuki; NISHIHARA, Hiroshi
- 1H2-55 Community-based education campaigns for scientific integrated study curriculums (Okayama Univ.) YONEDA, Mika; NAKANISHI, Makoto; OSHIKI, Toshiyuki; ONOYAMA, Kazuo; SUGA, Seiji; TAKADA, Jun
- 1H2-56\* New chemical structural formula of the transition state in reaction (LOGES) SANO, Hirosi

# Sunday, March 27, AM

Chair: KARAYAMA, Masaki  $(9:00\sim10:00)$ 

- \* 8:50-9:00: interval for laptop PC connection.(2H2-01, 2H2-02, 2H2-03, 2H2-04)
- 2H2-01 Experiment to estimate nitrous oxide as Greenhouse gas (Hirosaki Univ.) YANO, Makoto; NUMATA, Satoshi; CHOUNAN, Yukiyasu
- 2H2-02 Teaching material for the observation of the whisker growth of potassium chloride. (Chiba Univ.) HAYASHI, Hideko; OSHIMA, Sachiko
- **2H2-03** Discussion of Demonstrations in Chemical Class (NIER) GOTO, Kenichi; IWATA, Hisamichi
- 2H2-04 CSJ Award for Merits for Chemical Education Development of Chemistry Experiments and Cultivation of Excellent Science Teachers (Center for Higher Educational Development, Tokyo Univ. of Agriculture and Technology) SATO, Tomohisa

Chair: SAITO, Koichi (10:10∼11:10)

- \* 10:00-10:10: interval for laptop PC connection.(2H2-08)
- 2H2-08 CSJ Award for Chemical Education Long-time Contribution to Advancement and Spread of Chemistry through Chemical Demonstrations (Emeritus Prof., Tokyo Metropolitan Univ.) IKEMOTO, Isao

Chair: SATO, Tomohisa (11:20 $\sim$ 12:00)

- \* 11:10-11:20: interval for laptop PC connection.(2H2-15, 2H2-16, 2H2-17, 2H2-18)
- 2H2-15 Development of experimental materials using gold (III) compound supported on chitin (2) (Tokyo Univ. Sci.) KITO, Mayumi; INOUE, Masayuki
- 2H2-16 The convenient detection of esters by chemical color reaction. Induction from esters to hydroxamic acids accelerated with cationic surfactants (Tokyo Univ. Sci.) BANBA, Wataru; TSUTSUMI, Emina; INOUE, Masayuki
- 2H2-17 Learning about chemical bond and allotropy from the Nobel Prize in Physics 2010 (Institute for Molecular Science, Public Afairs Office) TERAUCHI, Kaede
- 2H2-18 Ethanol Fermentation using Bioreactor. (Hirosaki Univ.) ONODERA, Mika; YANO, Makoto; CHOUNAN, Yukiyasu

# Room H3

Bldg. 23 23-305

# Environmental and Green Chemistry, Geo and Space Chemistry

Saturday, March 26, AM

Environmental chemistry
Chair: MANAGAKI, Satoshi (10:00~11:00)

\* 9:50-10:00: interval for laptop PC connection.(1H3-07, 1H3-08, 1H3-10,

1H3-11, 1H3-12)

- 1H3-07 Analysis of cadmium removal processes using iron powder in a paddy soil (Univ of Tsukuba) MAKINO, Yuichi; SAKAI, Masaru; NAKATANI, Kiyoharu
- 1H3-08\* Simple separation method for impurity in gyupsum and its application to on-site analysis (Toyama national college of technology) MANAKA, Atsushi: TAFU. Masamoto; CHOHJI, Tetsuji
- 1H3-10 Secondary aerosol formation from reactions of amines in the atmosphere (Natl. Inst. for Environmental Studies; Mitsubishi Heavy Industries, Ltd.) SATO, Kei; IMAMURA, Takashi; HORIZOE, Kouji; FUJII, Shuji; NAGAYASU, Hiromitsu; INUI, Masayuki; KAMIJO, Takashi
- 1H3-11 Chemical composition of acid fog and its acidification mechanism (Kanagawa Univ.) YOSHIMOTO, Osamu; NANZAI, Ben; IGAWA, Manabu
- 1H3-12 Analysis of trans-boundary pollution from East Asiausing the continuous measurement of NO<sub>y</sub> and HNO<sub>3</sub> concentrations in Cape Hedo, Okinawa (Osaka Prefecture Univ.) SHIGETOMI, Yosuke; YUBA, Akie; SADANAGA, Yasuhiro; TAKAMI, Akinori; HATAKEYA, Shiro; TAKENAKA, Norimichi; BANDOW,Hiroshi

Chair: IGAWA, Manabu (11:10~12:10)

- \* 11:00-11:10: interval for laptop PC connection.(1H3-14, 1H3-16, 1H3-18)
- 1H3-14\*\*\* Characterization and Cancer Risk Assessment of Polycyclic Aromatic Hydrocarbons in Suspended Particulate Matter in Yokohama (Yokohama National Univ.) SALAM, Mohammed, Abdus; MANAGAKI, Satoshi; SHIRASUNA, Yuichiro; HIRANO, Koichiro; MASUNAGA, Shigeki
- 1H3-16\* Analyses for the variations of nitrogen oxides at Cape Hedo, Okinawa (Osaka Pref. Univ.) YUBA, Akie; SADANAGA, Yasuhiro; TAKAMI, Akinori; HATAKEYAMA, Shiro; MASUI, Yoshihiko; OHARA, Toshimasa; YOKOUCHI, Yoko; YONEMURA, Seiichiro; KATO, Shungo; KAJII, Yoshizumi; TAKENAKA, Norimichi; BANDOW, Hiroshi
- 1H3-18\* Formal blind intercomparison of OH and HO<sub>2</sub> measurements in the ambient atmosphere and simulation chamber SAPHIR: the HOxComp campaign (JAMSTEC) KANAYA, Yugo; KAJII, Yoshizumi; NISHIDA, Satoshi; YOSHINO, Ayako; MIYAMOTO, Kazuaki; WATANABE, Keisuke; SCHLOSSER, E.; FUCHS, H.; DORN, H.P.; BRAUERS, T.; HAESELER, R.; HOFZUMAHAUS, A.; HOLLAND, F.; WAHNER, A.; KUBISTIN, D.; MARTINEZ, M.; RUDOLF, M.; HARDER, H.; BERRESHEIM, H.; ELSTE, T.; PLASS-DUELMER, C.; STANGE, G.; LOU, S.; SCHURATH, II

# Saturday, March 26, PM Environmental chemistry

Chair: KOBAYASHI, Kensei (13:20 $\sim$ 14:20)

- \* 13:10-13:20: interval for laptop PC connection.(1H3-27, 1H3-28, 1H3-29, 1H3-30, 1H3-31, 1H3-32)
- 1H3-27<sup>†</sup> Removal Characteristics of Na<sup>+</sup> exchanged Acid Clay for heavy metal in multi systems (Okayama Univ.) SHA, Rula; KAMESHIMA, Yoshikazu; NISHIMOTO, Shyunsuke; MIYAKE, Michihiro
- 1H3-28 Reductive amination of glutaraldehyde 2,4-dinitrophenylhydrazones using 2-picoline borane and high-performance liquid chromatographic analysis (Natl. Inst. Public Health) SAKAMOTO, Hironari; UCHIYAMA, Shigehisa; INABA, Yohei; NAKAGOME, Hideki; KUNUGITA, Naoki
- 1H3-29 Particle size distribution of PAHs emitted from cooking (Univ of Japan Women's; CRIEPI) AKAI, Emi; MIYAZAKI, akane; TSUZAKI, Masaharu; TANAKA, Nobuyuki
- 1H3-30 Investigation of the processes affecting indoor HONO concentration (Osaka Prefecture Univ.) IMANISHI, Katsuma; FUZIWARA, Kazumi; TAKENAKA, Norimichi; SADANAGA, Yasuhiro; BANDOW, Hiroshi
- 1H3-31 Determination of volatile organic compounds in air by a head-space gas chromatography using 2-hydroxypyridine as the desorption sorbent (Natl. Inst. Public Health) OHTA, Mayu; UCHIYAMA, Shigehisa; INABA, Yohei; GOTO, Sumio; KUNUGITA, Naoki
- 1H3-32 Determination of carbonyl compounds in electronic cigarette smoke using coupled silica cartridges impregnated with hydroquinone and 2,4-dinitrophenylhydrazine (Natl. Inst. Public Health) OHTA, Kazushi; UCHIYAMA, Shigehisa; INABA, Yohei; NAKAGOME, Hideki; KUNUGITA, Naoki

#### Geo/Environmental Chemistry

Chair: MIYAZAKI, Akane (14:30 $\sim$ 15:30)

- \* 14:20-14:30: interval for laptop PC connection.(1H3-34, 1H3-36, 1H3-37, 1H3-38, 1H3-39)
- 1H3-34\* Formation of amino acid precursors with high molecular weights from simulated primitive atmospheres and formation of organic aggregates in simulated submarine hydrothermal systems (Grad. School of Eng., Yokohama Natl. Univ.; Grad. School of Sci., Osaka Univ.; Fukuoka Institute of Technology) KOBAYASHI, Kensei; KURIHARA, Hironari; OBAYASHI, Yumiko; KANEKO, Takeo; YABUTA, Hikaru; MITA, Hajime
- 1H3-36 Microspheres from polyamino acids produced in molten urea. (Fukuoka Inst. Technol.; Univ. Tsukuba) MITA, Hajime; KUWAHARA,

Yusuke; KANAMARU, Hiroshi; TSURUYAMA, Mami; NOMOTO, Shinya 1H3-37 Artifact of chlorophyll a found in algae (Institute of Materials Science, Univ. of Tsukuba) AKUTSU, Shinya; ITOH, Shingo; AOKI, Keisuke; FURUKAWA, Hayato; OKUDA, Masaaki; MIYASHITA, Hideaki; IWAMOTO, Koji: SHIRAIWA, Yoshihiro; KOBAYASHI, Masami

**1H3-38** Nonenzymatic Chl *a* to Chl *d* conversion (Institute of Materials Science, Univ. of Tsukuba) AOKI, Keisuke; ITOH, Shingo; HURUKAWA, Hayato; OKUDA, Masaaki; NAKAZATO, Masataka; IWAMOTO, Koji; SHIRAIWA, Yoshihiro; MIYASHITA, Hideaki; KOBAYASHI, Masami

1H3-39 Withdrawn

### **Environmental chemistry**

Chair: KOBAYASHI, Masami (15:40~16:40)

- \* 15:30-15:40: interval for laptop PC connection.(1H3-41, 1H3-42, 1H3-43, 1H3-44, 1H3-45, 1H3-46)
- 1H3-41 Developmet of new fibrous adsorbents for rapid and selective removal of nitrate from water (Kumamoto Univ. Graduate School of Science and Technology) NAKAATARI, Hiroshi; KITAGAKI, Masahiro; MATSUURA, Hirotaka; JYO, Akinori; TAMADA, Masao; SEKO, Noriaki
- 1H3-42 Environmental purification by use of photoactive cerium dioxide 1. Combination of Fe(III)/Fe(II) redox system. (Toyohsashi Univ. of Technol.) NAKABAYASHI, Ai; OHKITA, Hironobu; MIZUSHIMA, Takanori; KAKUTA, Noriyoshi
- 1H3-43 Preparation and characterization of square rod titanium dioxide by ligand-controlled sol-gel method (Toyohashi Univ. of Technology) TI, Lien Ghee; KOBAYASHI, Bungaku; HASEGAWA, Akira; OHKITA, Hironobu; MIZUSHIMA, Takanori; KAKUTA, Noriyoshi
- 1H3-44 Instantaneous decomposition of formaldehyde by thermally activated oxide semiconductors (Graduate School of Eng., Yokohama National Univ.) TAKAHASHI, Hiroo; SHIMA, Hideki; SUZUKI, Shigeru; MIZUGUCHI, Jin
- 1H3-45 Decomposition of chlorine-containing compounds using thermally activated oxide semiconductors and their associated problems (Graduate School of Eng., Yokohama National Univ.) HIRAMATSU, Hirotaka; TAKAHASHI, Hiroo; SUZUKI, Shigeru; MIZUGUCHI, Jin
- 1H3-46 Removal of NO<sub>x</sub> utilizing reductive properties of TiO<sub>x</sub> (Graduate School of Eng., Yokohama National Univ.) HIRAMA, Akira; MIZUGUCHI, Jin

### Sunday, March 27, AM

#### Green Chemistry

Chair: SATOKAWA, Shigeo (10:10 $\sim$ 11:10)

- \* 10:00-10:10: interval for laptop PC connection.(2H3-08, 2H3-10, 2H3-12)
- 2H3-08\* Development of an Air-Purifier Using a Photocatalysis-Plasma Hybrid Reactor (Titan-Plasma<sup>TM</sup>) (KAST; U-VIX Corporation; Masuda research Inc.; Tokyo Univ. of Science) OCHIAI, Tsuyoshi; NAKATA, Kazuya; MURAKAMI, Taketosi; MORITO, Yuko; HOSOKAWA, Shunsuke; FUJISHIMA, Akira
- 2H3-10\*# Green synthesis of platinum mono- and bimetallic supported hydrotalcite catalyst for selective oxidation of glycerol (Sch. Mat. Sci., JAIST) TONGSAKUL, Duangta; NISHIMURA, Shun; EKGASIT, Sanong; EBITANI, Kohki
- 2H3-12\* Deoxygenation of Epoxides into Alkenes Using Water-Gas Shift Reaction Catalyzed by Supported Gold Nanoparticles (Osaka Univ.) NOUJIMA, Akifumi; MORALES, Carlos; MIKAMI, Yusuke; MITSUDOME, Takato; MIZUGAKI, Tomoo; JITSUKAWA, Koichiro; KANEDA, Kiyotomi

Chair: HORI, Hisao (11:20 $\sim$ 12:00)

- \* 11:10-11:20: interval for laptop PC connection.(2H3-15)
- 2H3-15 CSJ Award for Technical Development Development and Industrialization of Surfactant Production Process Synthesized with Subcritical Water (Kao Corporation) SAITO, Akira; SHIRASAWA, Takeshi; OKUTSU, Munehisa; TANAHASHI, Shin-ichiro; UNO, Mitsuru

### Sunday, March 27, PM

### **Green Chemistry**

Chair: EBITANI, Kohki (14:30 $\sim$ 15:30)

- \* 14:20-14:30: interval for laptop PC connection.(2H3-34, 2H3-36, 2H3-38) **2H3-34\*** N-Alkylation of Amines and Ammonia by a Supported Ruthenium Hydroxide Catalyst (School of Engineering, The Univ. of Tokyo) YAMAGUCHI, Kazuya; HE, Jinling; OISHI, Takamichi; MIZUNO, Noritaka
- 2H3-36\* Efficient Decomposition of Perfluorinated Ion-Exchange Membrane to Fluoride Ions by Using Subcritical Water and Iron Powder (Kanagawa Univ.; National Institute of Advanced Industrial Science & Technology (AIST)) HORI, Hisao; MURAYAMA, Misako; KUTSUNA, Shuzo
- 2H3-38\* Effects of catalyst for glycolysis-type depolymerization of PET under microwave irradiation (Sojo Univ.) IKENAGA, Kazutoshi; MAEHARA, Kohei; IKEDA, Syogo; YAMAMOTO, Masahiro; DEKURA, Tsuyoshi;

KAMEYAMA, Takehiko

Chair: TAKEUCHI, Masato (15:40∼16:40)

- \* 15:30-15:40: interval for laptop PC connection.(2H3-41, 2H3-42, 2H3-43, 2H3-44, 2H3-45, 2H3-46)
- 2H3-41 Development of Hydrogen Production with ZnO Photocatalyst (Graduate School of Engineering, Mie Univ.) HACHISUKA, Katsumasa; KANECO, Satoshi; KATSUMATA, Hideyuki; SUZUKI, Tohru; OHTA, Kiyohisa
- 2H3-42 Synthesis of tetrahydrofuran from 1,4-butanediol in high temperature water by flow system (AIST; Research Center for Compact Chemical System) SATO, Osamu; YAMAGUCH, Aritomo; MURAKAMI, Yuka; HIYOSHI, Norihito; SHIRAI, Masayuki
- 2H3-43 Synthesis of 2,5-furandicarboxylic acid from HMF using hyrotalcite-supported gold catalyst (Japan Adv. Inst. of Sci. Tech.; Sch. of Mater. Sci.) TAKAGAKI, Atsushi; GUPTA, Navneet Kumar; NISHIMURA, Shun; EBITANI. Kohki
- 2H3-44 One-pot synthesis of 2,5-diformylfuran from sugars using solid catalysts (Sch. Mat. Sci., JAIST) TAKAHASHI, Miho; NISHIMURA, Shun; TAKAGAKI, Atsushi; EBITANI, Kohki
- 2H3-45 Mechanochemical treatment of vermiculite and its effect on lead adsorption ability (Seikei Univ., Facul. of Science and Technology) HONGO, Teruhisa; YOSHINO, Shota; YAMAZAKI, Atsushi; SATOKAWA, Shigeo
- 2H3-46 Activation and application of molecular oxygen in air for polymerization using polyaniline (Graduate School of Engineering, Toin Univ. of Yokohama) WATANABE, Hiroo; SAITO, Kiyoshi

Chair: TAKAGAKI, Atsushi (16:50~17:20)

- \* 16:40-16:50: interval for laptop PC connection.(2H3-48, 2H3-49, 2H3-50)
- **2H3-48** Application of iron-treated hydroxyapatite to a catalyst for photo-Fenton reaction (Dept. of Chem., Saitama Medical Univ.; Taihei Chem. Industrial Co.,Ltd.) MORIGUCHI, Takeshi; NAKAGAWA, Souhei; KAJI, Fumihiro
- 2H3-49 Remediation of drugs by TiO<sub>2</sub>/O<sub>3</sub> (Meisei Univ., GESC) OOTSU, Tomohiko; HIDANO, Yasuyuki; KOIKE, Takayoshi; OYAMA, Toshiyuki; HODAKA. Hisao
- 2H3-50 Investigation of the charge carriers of TiO2 photocatalyst by using time-resolved photoluminescence spectroscopy (Osaka Prefecture Univ., Graduate school of Engineering) TAKEUCHI, Masato; SHIMIZU, Yukari; ANPO. Masakazu

# Room H7

Bldg. 23 23-310

# Resources Utilization Chemistry Saturday, March 26, PM

### Biomass/Polymer

Chair: OGINO, Chiaki (13:00∼14:00)

- \* 12:50-13:00: interval for laptop PC connection.(1H7-25, 1H7-27, 1H7-28, 1H7-29, 1H7-30)
- 1H7-25\*† Synthesis of new types of lignin hybrids-Cross Rearrangement of primary chains in native lignin- (MIE Univ., Graduate School of Bioresources) JUNG, Minho; FUNAOKA, Masamitsu
- 1H7-27 Functionality control of native lignin using self- and cross-condensations (Mie Univ., Graduate School of Bioresources, Funaoka LAB.)
  TSUKAMOTO, Yuuki; FUNAOKA, Masamitsu
- 1H7-28 Sequential transformation of native lignin by environmental control (Functionality control of phytomaterials Laboratory, Mie Univ.) TAMURA, Hiroki; FUNAOKA, Masamitsu
- 1H7-29 Study on Solvent Recycle System for Direct Liquefaction of Wood Biomass (Nihon Univ.) OHTANI, Hiroshi; SATOU, Keniti; KAKUTA, Yusuke; SUGANO, Motoyuki; HIRANO, Katsumi
- 1H7-30 Study on Direct Liquefaction Process of Wood Biomass using Light Oil as Solvent (College of Science and Technology, Chemical laboratory of resources Utilization) TAKIHANA, Takashi; WATANABE, Hiroyuki; KAKUTA, Yusuke; SUGANO, Motoyuki; HIRANO, Katsumi

Chair: YANAGIHARA, Naohisa (14:10~15:10)

- \* 14:00-14:10: interval for laptop PC connection.(1H7-32, 1H7-34, 1H7-35, 1H7-37)
- 1H7-32\* Functionality control of lignophenol by esterification (Graduate School of Bioresources Mie Univ.) AOYAGI, Mitsuru; FUNAOKA, Masamitsu
- **1H7-34** Development of fibrillation and shape forming from woody biomass (Fujita corp. Technol. Develop. Div.) ISHIKAWA, Mitsuyoshi; YAJIMA,
- 1H7-35\* Bioethanol production from cellulosic biomass pretreated with ionic

liquid (Organization of Advanced Science and Technology, Kobe Univ.Dep. Chemical Science and Engineering, Graduate School of Engineering, Kobe Univ.Biotechnology Lab., Sustainable Materials Div. Toyota Central R&D Labs Inc.Biomass Engineering Development Dept. Vehicle Material Engineering Div. Toyota Motor Co. Ltd.) NAKASHIMA, Kazunori; TANIGUCHI, Naho; YAMAGUCHI, Koji; YAMADA, Ryosuke; KATAHIRA, Satoshi; ISHIDA, Nobuhiro; TOKUHARA, Wataru; NORITAKE, Yoshiyuki; OGINO, Chiaki; KONDO, Akihiko

1H7-37 Design of ionic liquids as dissolving agent for cellulose (Tottori Univ.) OHIRA, Kazutaka; ABE, Yoshikazu; HAYASE, Shuichi; KAWATSURA, Motoi; ITOH, Toshiyuki

Chair: HIRANO, Katsumi (15:20~16:20)

- \* 15:10-15:20: interval for laptop PC connection.(1H7-39, 1H7-40, 1H7-41, 1H7-42, 1H7-43, 1H7-44)
- 1H7-39 A new depolymerization reaction of cellulose by microwave irradiation in ionic liquids (Yamaguchi Univ.) OHYAMA, Natsumi; KAMIMURA, Akio
- 1H7-40 A new depolymerization of cellulose in supercritical methanol (Yamaguchi Univ.) ITO, Yoshitaka; YAMADA, Kazuo; KAMIMURA, Akio
- 1H7-41 Hydrogenolysis of xylan and cellulose catalyzed by noble metal nanocolloids (Chemical Resources Laboratory, Tokyo Institute of Technology) OSAKA, Yuriko; AKIYAMA, Katsuhiro; IWAMOTO, Masakazu
- 1H7-42 Enhanced water content in hydrophobic ionic liquid by mixing zwitterions (Tokyo Univ. of Agriculture & Technology) ITO, Yoritsugu; KOHNO, Yuki; OHNO, Hiroyuki
- 1H7-43<sup>†</sup> Synthesis and properties of graft copolymers derived from macromonomer having different lactic acid chain length (Kyoto Institute of Technology) ISHIMOTO, Kiyoaki; OHARA, Hitomi; KOBAYASHI, Shiro; ISHII, Masahiko; MORITA, Kouji; YABUUCHI, Naoya
- 1H7-44 Synthesis and copolymerization of macromonomer derived from itaconic acid and L-lactic acid (Kyoto Institute of Technology) OKUDA, Tomoya; OHARA, Hitomi; KOBAYASHI, Shiro

Chair: KAMIMURA, Akio (16:30~17:30)

- \* 16:20-16:30: interval for laptop PC connection.(1H7-46, 1H7-48, 1H7-49, 1H7-50)
- 1H7-46\* Synthesis of fully biomass-based poly(butylene succinate) from inedible biomass-based furfural and the evaluation of its biomass carbon ratio (AIST) TACHIBANA, Yuya; MASUDA, Takashi; FUNABASHI, Masahiro; KUNIOKA, Masao
- 1H7-48 Preparation of sawdust functional material and its adsorption behavior toward novel metal ions. (Department of Applied Chemistry, College of Engineering, Chubu Univ.) HAYASHI, Daiki; SUZUKI, Masashi; MIYAUCH, Toshiyuki; MORI, Hidehiko
- 1H7-49 The performance evaluation of the small biomass methane fermentation device (College of Engineering, Nihon Univ.) KIMURA, Kazuki; HIRAYAMA, Kazuo
- 1H7-50\*\* Green crude extraction yield on several microalgae by liquefied DME compared to the Bligh-Dyer's method (Ctl. Res. Ins. of Electric Power Industry) LI, Peng; KANDA, Hideki

### Sunday, March 27, AM

Chair: FUNAOKA, Masamitsu (9:50  $\sim$ 10:50)

- \* 9:40-9:50: interval for laptop PC connection.(2H7-06, 2H7-07, 2H7-08, 2H7-10, 2H7-11)
- 2H7-06 Study on seaweed Pyrolysis for Alternate Fuel (College of Science and Technology, Nihon Univ.; Chemical Laboratory for Resources Utilization) TAKAHASHI, Kohsuke; ENDO, Miwa; HASHIMOTO, Jun; KAKUTA, Yusuke; SUGANO, Motoyuki; HIRANO, Katsumi
- 2H7-07<sup>#</sup> Saccharization of Carrageenan by Hydrothermal Methods (Fac. Sci., Kochi Univ.) GAO, Yuhan; ONDA, Ayumu; HIRAOKA, Masanori; NAGATA, Shinji; OHNISHI, Kouhei; TSUDA, Masashi; YANAKIZAWA, Kazumichi
- 2H7-08\* Development of New Photofunctional MaterialUsing Egg Shell Membrane (Yonago National College of Technology) TANIFUJI, Naoki; SHIMIZU, Kaho; KANETSUKI, Chiaki; SHIMIZU, Akihiro
- 2H7-10 Effect of acid catalyst during hydrolysis of the wool textile waste (Nihon Univ.; chemical Laboratory for Resources Utilization) KANDA, Yoshitaka; MAGAMI, Noriko; KAKUTA, Yusuke; SUGANO, Motoyuki; HIRANO, Katsumi
- 2H7-11 A new depolymerization reaction of FRP by microwave irradiation in ionic liquids (Yamaguchi Univ.) YAMAMOTO, Shigehiro; YAMADA, Kazuo; KAMIMURA, Akio

Chair: IHARA, Manabu (11:00 $\sim$ 12:10)

- \* 10:50-11:00: interval for laptop PC connection.(2H7-13, 2H7-14, 2H7-15, 2H7-16, 2H7-17, 2H7-18, 2H7-19)
- 2H7-13 Selective Bromination Reaction of Silicon in a Flow System (Materials Chemistry, Graduate School of Science and Engineering, Yamaguchi Univ.) OKAMURA, Yuuki; TOMONO, Kazuaki; FURUYA, Hirotoshi; SATOH, Miu; KOMATU, Ryuichi; NAKAYAMA, Masaharu
- 2H7-14 Release of hydrogen bromide from high impact polystyrene containing

- a brominated flame retardant (Tohoku Univ.; School of Engineering) MOCHIZUKI, Tomoyuki; GURAUSE, Guido; KAMEDA, Tomohito; YOSHIOKA. Toshiaki
- 2H7-15 The debromination of high impact polystyrene containing brominated flame retardant (Tohoku Univ.; Graduate School of Environmental Studies)
  TANAKA, Hisatoshi; GRAUSE, Guido; KAMEDA, Tomohito; YOSHIOKA, Toshiaki
- 2H7-16 Thermal degradation of X-ray film and Ag recovery (Tohoku Univ.; Graduate School of Environmental Studies) KUMAGAI, Shogo; GURAUSE, Guido; KAMEDA, Tomohito; YOSHIOKA, Toshiaki
- 2H7-17 Capture of carbon dioxide in amine impregnated porous glass (NTT Energy and Environment Systems Labs.) MARUO, Yasuko; NAKAMURA, liro
- 2H7-18 Study on reactions between amine aqueous solutions and CO<sub>2</sub> by Raman and NMR Spectroscopy (Waseda Univ., Graduate School of Advanced Science and Engineering; Waseda Univ., Faculty of Science and Engineering; IHI Corporation) HIROSE, Masaki; ABE, Toru; FURUKAWA, Yukio; KANOMATA, Nobuhiro; YAMAMOTO, Hiroyuki; SATO, Hiroshi
- 2H7-19 Methanation of Carbon Dioxide on NiO/SBA-15 (National Institute for Environmental Studies) LU, Baowang; KAWAMOTO, Katsuya

### Sunday, March 27, PM

### Reduction of CO<sub>2</sub> emission

Chair: OKAZAKI, Ken-Ichi (14:30~15:40)

- \* 14:20-14:30: interval for laptop PC connection.(2H7-34, 2H7-36, 2H7-38, 2H7-39, 2H7-40)
- 2H7-34\*\* Influence of Peptide Nucleic Acids on the Internal Quantum Efficiency of DSSCs and Control of the Distance between TiO2 and Silver Nanoparticles (Tokyo Tech) LOEW, Noya; IKENOUCHI, Shun; IHARA, Manabu
- 2H7-36\*† Electrochemical Performance of Anodes with Proton Conductor Fabricated by Spray Pyrolysis in Solid Oxide Fuel Cells (Tokyo Tech; Tokyo Electric Power Company) SHIMADA, Hiroyuki; TAKEI, Chikara; OHBA, Fuhito; HAGIWARA, Akifusa; IHARA, Manabu
- 2H7-38 Improvement of dye-sensitized solar cell by using localized surface plasmon of gold nanoparticle and the bonding state in photo electrode. (Tokyo Tech) TANIGUCHI, Katsuhiko; ENOMOTO, Mikio; TANAKA, Yuki: HASEGAWA, Takeshi; IHARA, Manabu
- 2H7-39 Electrochemical reduction of carbon dioxide on boron-doped diamond electrode (KAST) KIMURA, Hiroaki; NAKATA, Kazuya; OCHIAI, Tsuyoshi; SAKAI, Hideki; MURAKAMI, Taketoshi; ABE, Masahiko; FUJISHIMA, Akira
- 2H7-40 Fabrication of composite porous Si films with metal nanoparticles and the effects of localized surface Plasmon on the optical properties (Tokyo Tech) HACHIMURA, Hironori; TANAKA, Yuki; IHARA, Manabu

# Room P

## Bldg. 13 Gymnasium

### Saturday, March 26, AM

 $(10:00{\sim}11:30)$ 

### Education and History

- 1PA-031 Lecture on chemical thermodynamics intending to qualitative understanding. (Okayama Univ. of Sci.) TAKAHARA, Shuichi
- **1PA-032** Chemical Education using the Illustration of the Elements (Aichi Univ. of Education, STEP) SASADA, Toshio
- **1PA-033** The development of the environmental education teaching materials using the Styrofoam (Fac. Educ., Ehime Univ.) OHASHI, Atsushi; YAMASHITA, Yu-ki
- 1PA-034 Educational Practice about "Hydrolysis of Salt" in High-School Chemistry by Use of Molecular Models (Kyoto Univ. of Education) ONO, Shota: MUKAI, Hiroshi
- 1PA-035 Improvements to the Dumas' Method in University Experimental Classes (Univ. of Electro-Communications; Kobe colledge) OHASHI, Kazutaka; WAKATUKI, Youji; NAKAGAWA, Tetsuo
- 1PA-036 The simplification study of the fixed-quantity experiment of vitamin C using iodine (Fac. Educ., Ehime Univ.) OHASHI, Atsushi; SASADA, Kimihito
- **1PA-037** The distinction of sugars with Au supported on Chitosan (Tokyo Univ. Sci.) ISHII, Haruna; KITOU, Mayumi; INOUE, Masayuki
- 1PA-038 Detection of reductive sugars utilizing copper(II) compound supported on chitosan (Tokyo Univ. Sci.) OGURA, Shohei; INOUE, Masayuki
- 1PA-039 The detection of esters by chemical color reaction Distinction of isomer by hydroxamic acids reaction - (Tokyo Univ. Sci.) TSUTSUMI, Emina; BANBA, Wataru; INOUE, Masayuki

- **1PA-040** Development of silver mirror reaction without stink (Tokyo Univ. Sci.) KANEKO, Sayaka; INOUE, Masayuki
- 1PA-041 Development of Teaching Materials of Chemical reactions Using Enzymes Added in Laundry Soap (Oyama Natl. Coll. of Tech.) MUNEGUMI. Toratane
- 1PA-042 Saponification of esters accelerated by cationic surfactants application to synthesized soap - (Tokyo Univ. Sci.) KATO, Yuko; YAMAMOTO, Tuyosi; INOUE, Masayuki
- 1PA-043 Synthesis of Phenol by Hydrolysis of Diazonium Salts (Tokyo Univ. Sci.) FUJITANI, Toshiyuki; INOUE, Masayuki
- 1PA-044 Oxidation of alcohols catalyzed by chitin-supported gold (Tokyo Univ. Sci.) HASEGAWA, Sho; INOUE, Masayuki
- 1PA-045 Oxidation of benzaldehyde with sodium percarbonate, utilizing cobalt salt-surfactant catalyst (Tokyo Univ.Sci) NAITO, Kumie; INOUE, Masavuki
- 1PA-046 Development and application of biofuel cell using baker's yeast (Nara National College of Technology; Department of Chemical Engineering) FUNABIKI, Ayumu; MIKI, Kojiro
- 1PA-047 Introduction of dys-sensitized solar cells into Elementary Practice of Engineering IV (Osaka Pref. College of Tech.) HIGASHIDA, Suguru
- 1PA-048 Development of the novel chemical experiment using season as a familiar material (Ibaraki Univ.) MATSUKAWA, Satoru; SEKI, Hiromi
- **1PA-049** Web Educational Materials on Biomolecules for Learning of "Rikasougou" (Univ. of Niigata Prefecture) HONMA, Yoshio
- 1PA-050 Illustrations of electron clouds in chemical bonds and their application to teaching materials (Kitasato Univ.) DAIGOKU, Kota; NOTO, Kaori
- 1PA-051 Some Investigations of Nominal Compounds in Coordination Chemistry Papers written in English using the PERC Corpus (Sophia Univ.) INOMATA, Yoshie; HASHIMOTO, Takeshi; HOWELL, F.S.
- 1PA-052<sup>†</sup> The Research by a New Method for Sicence Literacy -Media Research around Sience Ecucation (Private Reserch) MITSUDA, Miyuki; HASEGAWA, Masatoshi
- 1PA-053<sup>†</sup> The Research by a New Method for Sicence Literacy -Science Education by applying Tanka (Japanese Traditional Poem) in a case of Element Symbol (Private Reserch) MITSUDA, Miyuki

# Biofunctional Chemistry; Biotechnology

#### **Functional Molecules**

- 1PA-055 Control of photophysical properties of pyrene using monoclonal antibody for pyrene dimers. (Grad. Sch. Sci., Osaka Univ.) TADA, Mayako; YAMAGUCHI, Hirovasu: HARADA, Akira
- 1PA-056 Cleft-Type Dihydrogen Phosphate Receptors Based on Indole and pyrrole Derivatives (Yamagata Univ) SUZUKI, Ryouta; KONDO, Masayuki; ITO, Kazuaki
- 1PA-057 Synthesis of Cyclodexrin Derivatives: Anion Recognition Using Alcoholic Hydroxyl Groups (Yamagata Univ.) MURAKAWA, Maiko; KARUBE, Nobuyuki; ITO, Kazuaki
- 1PA-058 Development of Diazaporphyrin-based Photosensitizers for Photodynamic Therapy (Univ. of Yamanashi; Toyama Prefectural Univ.) KOBAYASHI, Kazuki; KAWABATA, Shigeki; SHINMORI, Hideyuki
- **1PA-059** Synthesis of hematoporphyrin-platinum complex (Univ. of Yamanashi) MORI, Tomoyo; OGAWA, Kazuya
- 1PA-060 Control of Singlet Oxygen Generation utilizing Ligand Exchange Reactions in Porphyrin Appended Gold Nanoparticles (Univ. of Yamanashi) SHINMORI, Hideyuki; SHINOHARA, Akira
- 1PA-061 Synthesis of chlorin e6 dimer for photodynamic therapy (Univ. of Yamanashi; Graduate School of Yamanashi) SHIMURA, Kyosuke; OGAWA, Kazuya
- 1PA-062 Synthesis of porphyrin-cyanine dye conjugate (Univ. of Yamanashi; Graduate School of Yamanashi) HORIGUCHI, Yoshikazu; OGAWA, Kazuya
- 1PA-063 Development of Novel Fluorescent Molecular Probes for the Detection of Proteins Based on Merocyanine Structure (AIST) SUZUKI, Yoshio; YOKOYAMA, Kenji
- **1PA-064** Photosensitized damage of folic acid and protein by water-soluble porphyrins (Shizuoka Univ.) INOUE, Shiori; HIRAKAWA, Kazutaka
- 1PA-065<sup>#</sup> Conjugation of Organic-Metallic Hybrid Polymers and Calf-Thymus DNA (Univ Tsukuba; NIMS; JST-CREST) LI, Jinghua; TATSUYA, Murakami; HIGUCHI, Masayoshi
- 1PA-066 Construction of new supramolecular compounds with feature of thioamide (Univ. of Tsukuba TIMS) TATSUTA, Masahiro; KUWABARA, Junpei: KANBARA, Takaki
- 1PA-067 Development of fluorescent sensors based on the modulationofin-tramolecular heterodimer formation oftricarbocyanine dye (Instit. Biomat. Bioeng., Grad. Sch. Biomed. Sci., Tokyo Med. Dent. Univ.) HIRANO, Tomova: AKIYAMA, Jun: FUJIWARA, Takashi: KAGECHIKA, Hirovuki
- 1PA-068 Methodology to determine the NMR chemical shifts of carbon atoms with radical character in low-spin ferric porphyrinates (School of Medicine, Toho Univ., Faculty of Science, Toho Univ.) NIIBORI, Yuka; IKEZAKI, Akira; NAKAMURA, Mikio
- **1PA-069** Design and synthesis of new caged Ca2+ chelators (Toho Univ.) ASABA, Takaichi; SUZUKI, Akinobu; FURUTA, Toshiaki

- 1PA-070 New caged firefly luciferins for two photon excitation (Toho Univ.) OKUIZUMI. Atsushi: SUZUKI. Akinobu: FURUTA. Toshiaki
- 1PA-071 Synthesis and photochemistry of caged oligonucleotides (Toho Univ.) SAITO, Takatsugu; SUZUKI, Akinobu; FURUTA, Toshiaki
- 1PA-072 Design and synthesis of targetable caged compounds (Toho Univ.) MANABE, Kaori: SUZUKI, Akinobu: FURUTA, Toshiaki
- 1PA-073 Photochemical Properties of Caged Peptide Nucleic Acids (Toho Univ.) MATSUURA, Junichi; KISHI, Mariko; SUZUKI, Akinobu; FURUTA, Toshiaki
- 1PA-074 Synthesis and Evaluation of Crosslinking Dye to Determine Helical Peptides Orientation (Faculty of Science, Toho Univ.; RIKEN; Research Center for Materials with Intergrated Properties, Toho Univ.) KAMIMURA, Yasuhiro; TABAYASHI, Saori; YAMAGUCHI, Shoichi; TAHARA, Tahei; HOSOI, Haruko; WATANABE, Soichiro
- 1PA-075 Synthesis of glycosyl-porphyrin metal complexes by click chemistry and their photochemical properties (Nara Institute of Science and Technology; Univ. of Yamanashi) KAWASAKI, Yuji; TOBA, Masaya; YUASA, Jnnpei; KAWAI, Tsuyoshi; OBATA, Makoto; TERADA, Kayo; HIROHARA, Shiho; ANDO, Tsuyoshi; TANIHARA, Masao
- 1PA-076 Synthesis and supramolecular complexes with avidin of water soluble cyclophanes having a biotin moiety (Fukuoka Univ., Faculty of Science) ICHIMURA, Kazuaki; HAYASHIDA, Osamu
- 1PA-077 Self-Aggregates of Zinc Chlorins in Aqueous Polypeptide Solutions (Ryukoku Univ.) MIYATAKE, Tomohiro; WATANABE, Mikiya; MUKAI, Yumi
- 1PA-078 Sonication Effect on Self-Aggregation of Zinc Chlorins Possessing a Hydrophobic Group (Ryukoku Univ.; Ritsumeikan Univ.) MIYATAKE, Tomohiro; SHIMIZU, Tomohiro; TAMIAKI, Hitoshi
- 1PA-079<sup>#</sup> Efficient Electrochemical Oxidation Reaction Catalyzed by Novel Manganese Porphyrin Tethered with Doubly Phosphonic Acid Groups (Institute for Materials Chemistry and Engineering, Kyushu Univ.) PRABHALA, Pavan Kumar; ZAKI, Zaharan; ISHIDA, Masatoshi; NARUTA, Yoshinori
- 1PA-080 Isolation of chlorophyll c from Okinawa Mozuku by using high-speed counter current chromatography (Osaka City Univ.; South Product Ltd.) FUJII, Ritsuko; SENJU, Naoki; IHA, Masahiko; HASHIMOTO, Hideki
- 1PA-081 Preparation and Characteristics of Gold Nanoparticles which Release Fluorescent Molecules by Intracellular Enzymatic Hydrolysis (Graduate School of Engineering, Kyoto Univ.) KUSAKA, Eriko; ITO, Takeo: ISOBE, Yu: NISHIMOTO, Sei-ichi
- 1PA-082 Effect Of Electron Acceptors In Self-Organized Porphyrin Assemblies With Function Of Charge Separation (Kyoto Institute of Technology) KURODA, Yasuhisa; KAWABATA, Tatsuya; YAMAMOTO, Taku; SASAKI, Ken
- 1PA-083 Synthesis of pyridine-substituted calix[4]pyrrole and its supramolecular anion capsule (Fac. Eng., Gifu Univ.) KIRIYAMA, Naoaki; MIYAJI, Hidekazu
- 1PA-084 Synthesis of cyclodextrin derivatives having inhibitory effect on quorum sensing. (Fac. Eng., Utsunomiya Univ.) NAGAYAMA, Yuki; ITO, Satoshi; MOROHOSHI, Tomohiro; KATO, Norihiro; IKEDA, Tsukasa; OBA, Toru; HIRATANI, Kazuhisa
- 1PA-085 Interaction between DNA and carboxyhydrazide schiff base dicopper (II) complexes with cationic side chains (Chuo Univ.) HARA, Yoshie; ASAHINA, Akiyosi; KITAMURA, Yusuke; CHIKIRA, Makoto
- 1PA-086 DNA binding affinity of cationic salen type Schiff base complexes of nickel(II) and copper(II) with asymmetric bridging group (Chuo Univ.) TARUNO, Yoko; MORI, Norihumi; KITAMURA, Yusuke; CHIKIRA, Makoto
- 1PA-087 Synthesis of N-methylpyridinium Schiff base copper (II) complexes and the evaluation of DNA binding mode and affinity (Chuo Univ.) TAKAKITA, Shota; MIYOSHI, Masanobu; KITAMURA, Yusuke; CHIKIRA, Makoto
- 1PA-088 Synthesis of new dinuclear copper(II) complexes of phenanthroline and the evaluation of DNA cleavage activity (Chuo Univ.) MATSUO, Atsushi; KITAMURA, Yusuke; CHIKIRA, Makoto
- 1PA-089 Molecular imprinting by using protein-immobilized polymeric nanoparticle (Graduate School of Engineering, Kobe Univ.) YOSHIZAWA, Satoshi; OOYA, Tooru; TAKEUCHI, Tshifumi
- 1PA-090 Molecular interaction between glycerol dendron and proteins (Graduate School of Engineering, Kobe Univ.) OKADA, Kentaro; OOYA, Tooru: TAKEUCHI, Tshifumi
- 1PA-091 Molecular imprinting of bisphenol A in aqueous solution (Graduate School of Engineering, Kobe Univ.) INOUE, Naoko; OOYA, Tooru; TAKEUCHI Tshifumi
- 1PA-092 Preparation of antibiotics receptors with synergetic recognition sites bearing synthetic prosthetic groups (Graduate School of Engineering, Kobe Univ.) KUWAHARA, Atsushi; OOYA, Tooru; TAKEUCHI, Tshifumi

#### Nucleic Acid

- 1PA-093 Synthesis of novel siRNA and miRNAs containing acyclonucleoside analogs and their capabilities to suppress gene expression (Gifu Univ.) OGATA, Aya; UENO, Yoshihito; KITADE, Yukio
- 1PA-094 Nucleic acid probes containing fluorescent tricyclic base-linkedacy-

- clonucleosides for detection of single nucleotide polymorphisms (Gifu Univ.) HATTORI, Mayumi; UENO, Yoshihito: TESHIGAWARA, Yukio
- 1PA-095 Synthesis and cross-linking properties of oligodeoxyribonucleotides containing a caged alpha-chloroaldehyde derivative (Kyoto Inst. of Tech.) KOBORI, Akio; NAGAE, Yuko; YAMAUCHI, Takemune; YAMAYOSHI, Asako; MURAKAMI, Akira
- 1PA-096 Development of novel photoreactive antisense oligonucleotides having psoralen, conjugated nucleobases (Kyoto Inst. of Tech.) KOBORI, Akio; TOMITA, Koji; YAMAYOSHI, Asako; MURAKAMI, Akira
- 1PA-097 A diagnostic method for cytosine related single nucleotide mutations using etheno cytosine forming reactions. (Kyoto Inst. of Tech) KOBORI, Akio; KAKUTANI, Keita; YAMAYOSHI, Asako; MURAKAMI, Akira
- **1PA-098** Structural optimization of DNA-peptide conjugate aiming at potassium ion sensing reagent (Kyushu Inst. Tech.) OHZAWA, Shinsuke; OHTSUKA, Keiichi; SATO, Shinobu; TAKENAKA, Shigeori
- 1PA-099 Evaluation of naphthalene diimide derivative as a telomerase inhibitor (Kyutech) FUKUNAGA, Yusuke; WATANABE, Sadayoshi; SATO, Shinobu; TAKENAKA, Shigeori
- 1PA-100 AFM observation of the DNA complex with a naphthalene diimide derivative carrying two thiol termini (Kyushu Inst. Tech.) IKEDO, Hideyuki; SATO, Shinobu; TAKENAKA, Shigeori
- 1PA-101 Reversible photocircularization of DNA and its analytical use (Kumamoto Univ.) IHARA, Toshihiro; ARSLAN, Pelin; JYO, Akinori
- 1PA-102 Synthesis and property of transmembrane molecule with DNA (ISIR, Osaka Univ.) CHEN, Xi; SHIBATA, Tomonori; TAKEI, Fumie; DHONO, Chikara; NAKATANI, Kazuhiko
- 1PA-103 Screening of DNA aptamers that recognize amino acid by AFM-SELEX strategy (Kobe Univ.) OGINO, Chiaki; HAYASE, Taiji; MIYACHI, Yusuke; KONDO, Akihiko
- 1PA-104 Selection of DNA aptamers to the somatostatin (Kobe Univ.)
  AMINO, Tomokazu; OGINO, Chiaki; MIYACHI, Yusuke; KONDO, Akihiko
- 1PA-105 Selection DNA aptamer using Atomic Force Microscopy (Kobe Univ.) OKUMURA, Yuzo; OGINO, Chiaki; MIYACHI, Yusuke; KONDO, Akihiko
- 1PA-106 Withdrawn
- 1PA-107 Withdrawn
- 1PA-108 Identification of DNA binding specificity of transcription factor TAF15 (Shizuoka Univ.) YUKAWA, Nina; TAKAHAMA, Kentaro; OYOSHI, Takanori
- 1PA-109 Analysis of the G-quadruplex DNA structures in the presence of TLS and hnRNP AI (Shizuoka Univ.) OKAZAKI, Motoki; TAKAHAMA, Kentarou: OYOSHI, Takanori
- 1PA-110 Design and Synthesis of small Molecule ligand libraries for binding RNA Secondary Structures (ISIR, Osaka Univ.) FUKUZUMI, Takeo; MURATA, Asako; HARADA, Yoshie; IM, Seongwang; NAKATANI, Kazuhiko
- 1PA-111 Synthesis of the DNA conjugates with metal chelator through cysteine moiety and the application to SNPs analysis (Chuo Univ.) SAKURAI, Yuji; NAKANO, Atsusi; NOGAMI, Ayami; KITAMURA, Yusuke; IHARA, Toshihiro; CHIKIRA, Makoto
- 1PA-112 Cleavage activity of 8-17DNAzyme in the presence of metal chelators (Chuo Univ.) TANAKA, Takeshi; UENO, Masayoshi; KITAMURA, Yusuke; CHIKIRA, Makoto
- 1PA-113 Synthesis of modified siRNA having a photoremovable MeNP group at the O<sup>6</sup> position of guanosine (Teikyo Univ. Sci.) IIJIMA, Rie; AOKI, Minako; TOYAMA, Takaaki; IWASE, Reiko
- 1PA-114 Development of a method for the detection of methylated DNA by using DNA probes that form non-canonical DNA structures. (Tokyo Univ. of Technol.) TAKANASHI, Kenta; KATO, Teru
- 1PA-115 Acquisition and characterization of DNA aptamers which recognize CD4 (Tokyo Univ. of Technology Graduate School,) ASAJI, Tomoya; INOUE, Rino; SHIMIZU, Masafumi; YANO, Kazuyoshi
- 1PA-116 Synthesis of morpholino nucleic acids containing 2,6-diaminopurine bases. (Tokyo Institute of Technology) HARAKAWA, Taro; SUZUKI, Makoto; TSUNODA, Hirosuke; OHKUBO, Akihiro; SEKINE, Mitsuo
- 1PA-117 Synthesis and properties of base-modified nucleoside 5'-triphosphate derivatives (Tokyo Institute of Technology) ISHII, Nozomi; TSUNODA, Hirosuke; OHKUBO, Akihiro; SEIO, Kohji; SEKINE, Mitsuo
- 1PA-118 Synthesise of pyrimidine derivative has cross-linking reactivity using glycosylation as a key reaction (Institute of Multidisciplinary Research for Advanced Materials Tohoku Univ.) KUSANO, Shuhei; HAGIHARA, Shinya; NATSUGI, Humi
- 1PA-119 Synthesis of vinylpurine derivatives to clarify the regulatory factor of cross-linking reactivity (IMRAM, Tohoku Univ.) SAKURABA, Tomoya; CHAO, Shougoan; HAGIHARA, Shinya; NAGATSUGI, Fumi
- 1PA-120 Photo-regulation of thermal stability about DNA nanostructure by using of DNA reversible photocrosslinking (School of Material Science, Japan Advanced Institute of Science and Technology) NAKAMURA, Shigetaka; SAKAMOTO, Takashi; FUJIMOTO, Kenzo
- 1PA-121 Selective DNA amplification based on clamp PCR by using photocrosslinking. (JAIST) WATANABE, Takashi; SAKAMOTO, Takashi; FUJIMOTO, Kenzo

#### **Proteins**

- 1PA-122 Spectroscopic Properties of Human HematopoieticProstaglandin D<sub>2</sub> Synthase (Grad. Sch. Sci. Eng., Ibaraki Univ.) SAKAIRI, Tsuyoshi; FUJIWARA, Koko; URADE, Yoshihiro; KOHZUMA, Takamitsu
- 1PA-123 Electron Transfer Reaction Mechanism of Cu-containing Nitrite Reductase (Grad. Sch. Sci. Eng., Ibaraki Univ.) TANAKA, Yuki; TAKAHASHI, Rika; FUJITA, Mika; MUROYA, Yusa; UESAKA, Mitsuru; KOHZUMA, Takamitsu
- 1PA-124 Functional analysis of heme oxygenase mutants with respect to the fluctuated amino acids which are found on the enzyme surface by NMR R<sub>2</sub> dispersion (Kurume Univ. Sch. of Med.; Suntory Ins. for Bioorg. Res.; Osaka Univ.) HARADA, Jiro; HARADA, Erisa; HIGASHIMOTO, Yuichiro; SUGISHIMA, Masakazu; TAIRA, Junichi; SATO, Hideaki; FUKUYAMA, Keiichi; SUGASE, Kenji; NOGUCHI, Masato
- 1PA-125 Construction of photoinduced electron transfer system by the accumulation of metal complexes in myoglobin crystals (iCeMS Kyoto Univ.) KOSHIYAMA, Tomomi; SHIRAI, Masanobu; TANAKA, Koichiro; KITAGAWA, Susumu; UENO, Takafumi
- 1PA-126 Organogels based on self-assembly of oligopeptide and the mechanism of gel formation. (Kyoto institute of technology) NOZAKI, Masamichi; WAKU, Tomonori; KUNUGI, Shigeru; TANAKA, Naoki
- 1PA-127 Design of HSP binding cancer antigenic peptide for delivery to antigen-presenting cells (Kyoto Institute of Technology) WAKU, Tomonori; WATANABE, Yukari; KUNUGI, Shigeru; TANAKA, Naoki
- 1PA-128 Study on the conformational change leading to dimer formation of the novel EF-hand protein Iba1 (Kagawa Univ.; National Institute of Neuroscience) KAMITORI, Shigehiro; YOSHIDA, Hiromi; TERAOKA, Misa: OHSAWA. Keiko: KOHSAKA, Shinichi
- 1PA-129 SUS316L surfaces modification with vascular endothelial cell adhesive peptide and its functions (Department of Biomedical Engineering, National Cerebrate and Cardiovascular Center Research Institute) TAKASAKI, Kensuke; KAKINOKI, Sachiro; HIRANO, Yoshiaki; YAMAOKA, Tetsuzi
- 1PA-130 Electron transfer dissociation of multiply protonated disulfide linked polypeptides by using alkali metal target (Graduate School of Science Osaka Prefecture Univ.) MATSUMOTO, Shinya; SASAOKA, Emiko; HUJIHARA, Akimasa; HAYAKAWA, Shigeo; NAGAO, Hirohumi; TOYODA, Michisato; SHIGERI, Yasushi; WADA, Yoshinao; TAJIRI, Michiko
- 1PA-131 Activity of horseradish peroxidase in sugar ester reverse micelles (Tokyo Metropolitan Univ.) IRISAWA, Hayato; NORITOMI, Hidetaka; KATOU, Satoru
- 1PA-132 Withdrawn
- 1PA-133 Folding and enzymatic activity of ribonuclease A encapsulated in a porous silica gel. (Tokai Univ.) TAKAHASHI, Kohei; SANO, Nobukazu; IWAOKA, Mitio
- 1PA-134 The analysis of unconventional invertase secretionmechanisms in a yeast Candida utilis (Tokyo Institute of Technology) YANO, Michiko; OURA, Takahiro; KAJIWARA, Susumu
- 1PA-135 The roles of Ecm33p and Bgl2p in Candida albicans adhesion via saliva component. (Tokyo Insutitute of Technology) IWABUCHI, Ken-ichi; OURA, Takahiro; CANNON, Richard; HOLMES, Ann; KAJIWARA, Susumu
- 1PA-136 Expression of Malassezia phospholipase in Candida utilis (Tokyo Institute of Technology) Truong Thi, Thuy Linh; KAJIWARA, Susumu; OURA, Takahiro
- 1PA-137 Development of a target protein labeling method using a photoaffinity probe (Tokyo Univ. of Agriculture and Technology) TAWA, Masaki; OKADA, Ayumi; SATO, Noriyuki; SAKURAI, Kaori
- 1PA-138 The seasonal change of Hokki clam retractor muscle protein, tropomyosin(TM), content and Ca sensivitity of Mg-ATPase activity. (Misaki Marine biolgical station, Univ. of Tokyo, Hokkido univ. of Education) YAZAWA, Yoichi
- 1PA-139 Substrate candidates synthesis and enzyme activity analyses of rat GATF-C (Faculty of Science, Toho Univ.; Research Center for Materials with Integrated Properties, Toho Univ.) SUZUKI, Fumito; WATANABE, Soichiro; KISHIMOTO, Toshihiko
- 1PA-140 The importance of arginine residue of ZIF 268 zinc finger domain for DNA binding. (Faculty of Pharmaceutical Science, Doshisha Women's Univ.) SASAKI, Maeko; TATUTANI, Kazuya; NEGI, Shigeru; IMANISHI, Miki; FUTAKI, Shiroh; SUGIURA, Yukio
- 1PA-141 Effect of Oxidation of GAGA zinc finger protein on structure and function (Faculty of Pharmaceutical Science, Doshisha Women's Univ.) NEGI, Shigeru; MASUYAMA, Sakeko; YAMAOKA, Makiko; SUGIURA,
- 1PA-142 Study on cell penetrating ability of GAGA zinc finger peptide (Faculty of Pharmaceutical Science, Doshisha Women's Univ.) TERADA, Yuka; NEGI, Shigeru; HONBO, Akino; KIRIYAMA, Akiko; IGA, Katumi; SUGIURA, Yukio
- 1PA-143 Creation of biomolecules with a switchable function of optical properties based on protein conformational changes (Graduate School of Materials Science, Nara Institute of Science and Technology (NAIST)) FUJII, Akira: MATSUO, Takashi; HIROTA, Shun

- **1PA-144** Alcohol effect on aggregation of β-lactoglobulin with neutron scattering (Fukuoka Univ.; Helmholtz-Zentrum Berlin fur Materialien und Energie; Laboratoire Leon Brillouin(CEA-CNRS)) YOSHIDA, Koji; YAMAGUCHI, Tosho; VOGTT, Karsten; BELLISSENT-FUNEL, Marieclaire
- 1PA-145 Raman Spectra of Model Compound of Proteins in the Imidazolium-based Ionic Liquids-Water Mixture Solutions (Nat. Def. Acad.) TAKEKIYO, Takahiro; YAMAGUCHI, Erika; HATANO, Naohiro; ABE, Hiroshi; YOSHIMURA, Yukihiro
- 1PA-146 Preparation and characterization of designed-protein/polythoiphenenanoparticle composite (Nagoya Inst. of Tech.) UKON, Takuya; MIZUNO, Tosihisa; SUGIYASU, Kazunori; TAKEUCHI, Masayuki; DEWA, Takehisa; NANGO, Mamoru; TANAKA, Tosiki
- 1PA-147 Design and characterization of gemini surfactants including peptide sequences (Nagoya Inst. of Tech.) UMEZAKI, Katsunari; MIZUNO, Tosihisa; YAMAMOTO, Yasushi; TAGA, Keijiro; DEWA, Takehisa; NANGO, Mamoru; TANAKA, Tosiki
- 1PA-148<sup>#</sup> Search for a model mitochondrial precursor protein suitable for fluorescence resonance energy transfer (FRET) during import into mitochondria (Nagoya Univ.; Biochemistry Laboratory) OKUGAWA, Maho; YAMANO, Koji; KAWANO, Shin; ENDO, Toshiya
- **1PA-149** Heavy-atom Database System HATODAS ver. III (RIKEN) SUGAHARA, Michihiro; KUNISHIMA, Naoki
- 1PA-150<sup>†</sup> Interaction of PEGylated antibody with antigen in organic solvents (RIKEN ASI) LIU, Mingzhe; XU, Muye; ABE, Hiroshi; ITO, Yoshihiro

### Sugar

- 1PA-151 Synthesis of glycopolymer library and analysis of its biofunctions (Kyushu Univ.) NISHIMURA, Yuri; HOSHINO, Yu; MIURA, Yoshiko
- 1PA-152 Relation between spectroscopic properties and molecular structures of D-psicose and D-fructose in aqueous solution (Kagawa Univ.) FUKADA, Kazuhiro; OKAMITSU, Masakazu; SATO, Masashi
- 1PA-153 Synthesis and Protein Detection Ability of Metal Nanoparticles Conjugated Polysaccharides (Univ. of Yamanashi) TSUKAHARA, Yuya; SHINMORI, Hideyuki
- 1PA-154 Self-assembling properties of semi-artifical curdlan derivatives (sojo Univ.) MATHUDA, Sayaka; TAMARU, Shun-ichi; SINKAI, Seiji
- 1PA-155 Simple preparation of functionalized saccharide thin films (Sojo Univ.) NAKAGAKI, Takafumi; TAMARU, Shun-ichi; SHINKAI, Seiji
- 1PA-156 Affinity Evaluation between Glycolipid and HIV-1 Envelope Protein (Tokyo Univ. of Technol., Graduate School of Bionics) KIMURA, Arisa; OKADA, Tomoko: MINOURA, Norihiko
- 1PA-157 Syntheses of Novel Glycolipid Probe Conjugated with Ruthenium Complex (Tokyo Univ. of Technol.Graduate School of Bionics) TANOKURA, Daichi; IMAIZUMI, Ryuichi; OKADA, Tomoko; MINOURA, Norihiko
- 1PA-158 Characterization of Artificial Glycopeptides Forming Helical Structure (Tokyo Univ. of Technology) ISOBE, Chika; WADA, Takeaki; OKADA, Tomoko; MINOURA, Norihiko
- 1PA-159 Paper Mache Glycomimetics Made Of Ethylen Glycol Module. (Tokyo Institute Of Technology; Graduate School Of Bioscience and biotechnology) ITO, Yuki; YUASA, Hideya
- 1PA-160 Development of a molecular tweezer based on hinge sugar (Graduate School of Biosci & Biotechnol, Tokyo Tech.) ABE, Fumiaki; YUASA, Hideya
- 1PA-161 Synthesis of inulin tosylates and the subsequent chemical conversion to develop various biomaterials having b-1,2-fluctane main chain (Toyo Univ.) IZAWA, Kazumi; SATO, Akiyo; HASEGAWA, Teruaki
- 1PA-162 Large-scale synthesis of various glucose derivatives through C6-selective and quantitative modification on curdlan and the subsequent acid-catalyzed hydrolysis (Toyo Univ.) ABE, Haruka; HASEGAWA, Teruaki
- 1PA-163 Fabrications of gold nanoparticles embedded in cellulose shells carrying oligosaccharide appendages and their binding properties with lectins (Toyo Univ.) MASHIKO, Yoichi; NEGISHI, Kaori; HASEGAWA, Teruaki
- 1PA-164 Synthesis of new anti cancer agent using click chemistry (yonago national college of technology) EDATANI, Marie; DOE, Matsumi; URUMA, Yoshiyuki

### Lipid

- 1PA-165 Incorporation of Bile Acids into the Lipopolysaccharide Aggregates and Influence on Their Biological Activity and Physicochemical Behaviors (National Institute for Advanced Industrial Science and Technology; Univ. clinic Jena; Research Center Borstel; European Molecular Biology Laboratory) FUKUOKA, Satoshi; RICHTER, Walter; HOWE, Joerg; ANDRAE, Joerg; ROESSLE, Manfred; ALEXANDER, Christian; GUTSMANN, Thomas: BRANDENBURG, Klaus
- 1PA-166 Analysis of the sterol-uptake mechanism in budding yeast Saccharomyces cerevisiae (Tokyo Institute of Technology) INAZAWA, Tomoka; OURA, Takahiro; KAJIWARA, Susumu
- 1PA-167 Fabrication of Giant Vesicle-Immobilized Substrate for the Transport of Molecular Information (Grad. Sch. Mater. Sci., Nara Inst. Sci. and Technol.) OKUDA, Shizuyo; YASUHARA, Kazuma; KIKUCHI, Jun-ichi;

- HIYAMA, Satoshi; MORITANI, Yuki
- 1PA-168 Encapsulation of Water-soluble Molecules in the Organic-inorganic Hybrid Vesicle 'Cerasome' (Grad. Sch. Mater. Sci., Nara Inst. Sci. and Technol.) YASUHARA, Kazuma; KAWATAKI, Takahiro; KE, Xu; KIKUCHI, Jyun-ichi
- 1PA-169<sup>†</sup> Improvement of photodynamic activity by using the liposomes containing both protoporphyrin IX (PpIX) and [60]fullerene (C60) derivatives (Graduate School of Materials Science, Nara Institute of Science and Technology) KOMEDA, Chikako; IKEDA, Atsushi; AKIYAMA, Motofusa; KIKUCHI, Jun-ichi.; KONISHI, Toshifumi

#### Cell

- 1PA-170 Effect of the extracellular matrix protein on the myocardial differentiation of P19CL6 cells. (Department of Biomedical Engineering, National Cerebral and Cardiovascular Center) DAN, Takaaki; YAMASHITA, Atsushi; NAKAOKI, Takahiko; YAMAOKA, Tetsuji
- 1PA-171 Protein delivery to neuronal cells by peptide derived from Rabies virus glycoprotein (Graduate School of Engineering, Osaka Univ.) HORI, Yuichiro; EGASHIRA, Yuka; MURAMATSU, Shin-ichi; KIKUCHI, Kazuya
- 1PA-172 Localization and cell uptake of Ruthenium complex (Tokyo Univ. of Technology) SAKAMOTO, Mio; SUZUKI, Ikuro; GOTOH, Masao
- 1PA-173 Effect of thymoquinone on amyloid beta induced toxicity on rat hippocampus neurons using multi electrodes array (tokyo Univ. of technology) ALHEBSHI, ALHEBSHI AMANI HASAN; SUZUKI, Ikuro; GOTOH, Masao
- 1PA-174 Transfection to Cultured Hippocampal Neurons by Employing Cerasome (Grad. School of Mater. Sci, Nara Inst. of Sci. and Technol.; Grad. School of Biol. Sci., Nara Inst. of Sci. and Technol.) HIROTA, Akira; YASUHARA, Kazuma; TORIYAMA, Michinori; INAGAKI, Naoyuki; KIKUCHI, Jun-ichi

#### Information

1PA-175 Approach for Agrobacterium -mediated transformation of Rhodosporidium toruloides (Tokyo Institute of Technology School and Graduate School of Bioscience and Biotechnology Kajiwara laboratory) SAITA, Atsushi

#### Environment

- 1PA-176 Development of high performance immunochromatography using Pd colloid or Pt colloid (Winered Chemical Co. Ltd) WATABE, Masatoshi
- 1PA-177 Construction of GNP doped ZnO particles for photo-catalytic inactivation of bacteria (Kyusyu Institute of Technology) SANO, Keiichi; IKENO, Shinya; HANEDA, Hajime; SAITO, Noriko; HARUYAMA, Tetsuva
- 1PA-178 Characteristic analysis and experimental evaluation of gold nanoparticle immobilized LSPR sensor substrate produced by seed mediated growth method (Dept. Appl. Phys., Osaka Univ.) YOSHIKAWA, Hiroyuki; NAKAGAMI, Yasuhiro; YAMAMOTO, Hidetaka; TAMIYA, Eiichi
- 1PA-179 Investigation of the interaction between GPCR and ligand by AFM equipped with bio-molecule modified cantilever (Kobe Univ.) OGINO, Chiaki; NOSAKA, Kazuki; ISHII, Jun; MIYACHI, Yusuke; KONDO, Akihiko
- 1PA-180 Examination of enzymatic reaction process in amino acids sensing (Hiroshima City Univ.) KUGIMIYA, Akimitsu; MATSUZAKI, Emi; BABE, Fumie
- 1PA-181 Examination of Spectrophotometric Measurement Conditions of Amino Acids (Hiroshima City Univ.) FUNAMOTO, Daiki; FUKADA, Rie; KUGIMIYA, Akimitsu
- 1PA-182 Construction of RIfS sensor chip using molecularly imprinted polymer (Department of Nanobiochemistry, FIRST, Konan Univ.) OHTA, Yasunori; MATSUI, Jun
- 1PA-183 Detection of Thrombin Using Reflectometric Interference Spectroscopic Sensor with Aptamer-immobilized Chip (Department of Nanobiochemistry, FIRST, Konan Univ.) GOJI, Sho; MATSUI, Jun

## Medical

- 1PA-184 Visual diagnosis of virus strain by using triplex-forming peptide nucleic acid (Osaka Univ., ISIR) KANNO, Takashi; SAWADA, Shinjiro; KATO, Nobuo; KAIHATSU, Kunihiro
- 1PA-185 QSAR analysis of Alkyl-and Arylpyrazins as anti-platelet aggregation agents using Molecular Operating Environment(MOE) (Josai Univ.) YOSHINO, Ryunosuke; KURIHARA, Teruo
- 1PA-186 QSAR analysis of 4-Trifluoromethylimidazoles and 3-Formylchromone derivatives as cytotoxic agents using Molecular Operating Environment (MOE) (Josai Univ.) MATSUZAKA, Takuya; FUJINAMI, Naohiro; KURIHARA, Teruo
- 1PA-187 Improvement of emission probe on firefly bioluminescence (The Univ. of Electron-CommunicationsKeio Univ.) MATSUHASHI, Akimitsu; KIYAMA, Masahiro; MIURA, Chihiro; SAITOU, Tsuyoshi; NISHIYAMA, Shigeru; KOJIMA, Satoshi; MAKI, Shoujirou; HIRANO, Takashi; NIWA,

Haruki

- 1PA-188 Withdrawn
- 1PA-189 The syntheses of firefly luciferin analogs and bioluminescence activity evaluation (The Univ. of Electron-Communications) MATSUMOTO, Mitsuhisa; OBATA, Rika; MAKI, Shojiro; HIRANO, Takashi; NIWA, Haruki
- 1PA-190 Volatile components of Rosa rugosa and Lavandula angustifolia in Aomori. (Graduate School of Sci. & Techn., Hirosaki Univ.) NAGAKI, Masahiko; GOTO, Yoshifumi; SAKAIDA, Shiho; ABE, Kaoru; KUDO, Shipermitsu
- 1PA-191 Antimicrobial assay of isoprenoids contained for the plants from Aomori (Graduate School of Sci. & Techn., Hirosaki Univ.) NAGAKI, Masahiko; NARITA, Takashi; GOTO, Yoshifumi; NAKANE, Akio
- 1PA-192 Biotransformation of useful compound by biocatalyst (Graduate School of Sci. & Techn., Hirosaki Univ.) NAGAKI, Masahiko; KIKUCHI, You; TANABE, Shingo; SATO, Ryoko; TANAKA, Kazuaki
- 1PA-193 Useful material synthesis by the Redox control using cultured cells (Graduate School of Sci. & Techn., Hirosaki Univ.) NAGAKI, Masahiko; TANABE, Shingo; KIKUCHI, You; SATO, Ryoko; TANAKA, Kazuaki
- 1PA-194 Substrate specificities of E and Z -farnesyl diphosphate synthases with respect to allylic substrate homologs having a hydrophilic group (Graduate School of Sci. & Techn., Hirosaki Univ.) MUSASHI, Tohru; KOBASHI, Rikiya; YOKOTA, Saki; OHYA, Norimasa; SAGAMI, Hiroshi; NAGAKI, Masahiko
- 1PA-195 Chemoenzymatic Synthesis of Glucosyl Esters of Aromatic Hydroxy Acids (Graduate School of Science, Osaka Prefecture Univ.) USA, Ryosuke; IHAYA, Kota; KOJIMA, Hideo
- 1PA-196 Dynamic Kinetic Resolution of Alcohols by Immobilized Lipases in Flow Systems (Graduate School of Science, Osaka Prefecture Univ.) URANISHI, Yosuke; SATO, Masaaki; KOJIMA, Hideo
- 1PA-197 Oxidation of 2,6-disubstituted triptycene derivatives by a soil bacterium *Pseudomonas nitroreducens* (Tokyo Uniersity of Science, Department of Chemistry, Faculty of Science,Graduate School of Science) TAKEMURA, Tetsuo; KITAOKA, Tsukasa; KAMI, Kyouhei; KATOU, Hiroko; UMENO, Nobuaki; OHTA, Hisataka; IWATA, Seiya; HASEGAWA, Masashi; YAMAMOTO, Gaku; MAZAKI, Yasuhiro
- 1PA-198 Asymmetric reduction of ketones by chlorella (College of Science and Technology, Nihon Univ.) ITOH, Ken-ichi; MATSUBA, Ryusuke; AOYAMA, Tadashi; MURAKAMI, Masahiko; YAMANAKA, Rio; MURANAKA, Toshiya; SAKAMAKI, Hiroshi; NAKAMURA, Kaoru; TAKIDO, Toshio

### Saturday, March 26, AM

(12:30~14:00)

### Inorganic Chemistry

### Polyoxometalate

- **1PB-031** ESI-MS study of photochemical self-assembly reaction of  $\beta$   $[{\rm Mo_8O_{26}}]^{4-}$  to  $[{\rm H_{14}Mo_{37}O_{112}}]^{12-}$ . (Dept. of Applied Chemistry, College of Engineering, Chubu Univ.) ISHIKAWA, Eri; TOYODA, Kei
- 1PB-032 Synthesis and Properties of Reduced Molybdophosphate Alkaline-Earth Metal Salts (Chubu Univ.) IZUMITA, Kazunari; IMAEDA, Kenichi; ISHIKAWA, Eri
- 1PB-033 Crystal structures of the salts of decavanadate anions with transition metal cations and monovalent cations (Tokyo Institute of Technology) TARUI, Ryosuke; YAMAWAKI, Takuto; IIDA, Akihumi; OZEKI, Tomoji
- 1PB-034 Preparation of micoporous (NH4)3PW12O40 by reaction of NH4+ with in-situ generated PW12O403- (Hiroshima Univ.) SAHIRO, Koichi; ICHI, Yutaro; SADAKANE, Masahiro; IDE, Yusuke; SANO, Tsuneji

### Porous Material

- 1PB-035 Synthesis and characterization of novel layered silicate HUS-1 (Hiroshima Univ.) HONDA, Koutaro; IDE, Yusuke; SADAKANE, Masahiro; SANO, Tsuneji
- 1PB-036 Shape Control of Ag Nanoparticles Deposited in Mesoporous Silica-Titania Using Visible Light Irradiation (Toyohashi Univ. of Tech) KAWAMURA, Go; MURAKAMI, Mai; MUTO, Hiroyuki; MATSUDA, Atsunori
- 1PB-037 Shape Control of Au Nanoparticles Using Photocatalysis of Mesoporous Silica Containing Titania (Toyohashi Univ. of Tech) OKUNO, Teruhisa; KAWAMURA, Go; MUTO, Hiroyuki; MATSUDA, Atsunori
- **1PB-038** Controlling of Size and Morphology for Zeolite L with Low-Temperature Synthesis (Gunma National College of Technology) ONUMA, Kou; TAIRA, Nobuyuki
- 1PB-039 Synthesis and property of uniform-sized nanoporous titania spherical particles (Waseda Univ.; Graduate School of Creative Science and Engineering) SATO, So; SHIBA, Kota; OGAWA, Makoto
- 1PB-040 Synthesis and properties of MOF compounds containing rare earths and 3,5-DNBC (Niigata Univ.; Faculty of Engineering; Chemistry and Chemical Engineering) OUCHI, Takahumi

1PB-041 Synthesis and properties of new MOF compounds containing rare earths, transition metals and 2,5-pyridine-dicarboxylic acid (Graduate School of Science & Technology, Niigata Univ.) HIRAYAMA, Youhei

### Layered Compound

- 1PB-042 Morphology control and interlayer pillaring of swellable mica (NaMg<sub>2</sub>LiSi<sub>4</sub>O<sub>10</sub>F<sub>2</sub>) crystals (Shinshu Univ.) YAMAGUCHI, Tomohiro; IKUTA, Kazuya; TARUTA, Seiichi; KITAJIMA, Kunio
- 1PB-043 Intercalation of n-alkylammonium into layered H<sub>2</sub>W<sub>2</sub>O<sub>7</sub> in aqueous solutions containing Good's buffer (Shinshu Univ.; Waseda Univ.) OHUCHI, Masato; SUGAHARA, Yoshiyuki; FUKUDA, Katsutoshi; SUGIMOTO, Wataru
- 1PB-044 Preparation of Well-defined Nanometer-sized Layered Double Hydroxides by Novel pH Adjustment Method Using Ion-exchange Resin (Waseda Univ.; Graduate School of Creative Science and Engineering) NITOH, Konomi; AYRAL, Andre; NAITO, Shota; OGAWA, Makoto
- **1PB-045** Preparation and Ion Exchange of Layer Structured Crystal  $Cs_2Ti_5O_{11}(1+x)H_2O$  (Tokuyama College of Technology) OHASHI, Masao; KATAYAMA, Minori
- **1PB-046** Ion Exchange of Interlayer-Hydrogenphosphate in Zn/Fe Layered Double Hydroxide (Univ. of Tokushima; Univ. of Tokushima) AMATSU, Tomohiro; KURASHINA, Masashi; KANEZAKI, Eiji

### Structure and Property

- 1PB-047 Effect of carbon element for stabilizing of ThCr<sub>2</sub>Si<sub>2</sub>-type borides (Tohoku Univ.; IMR) SHISHIDO, Toetsu; MORI, Takao; OKADA, Shigeru; KUDOU, Kunio; YUBUTA, Kunio; NOMURA, Akiko; SUGAWARA, Takamasa; KOHIKI, Shigemi; TESHIMA, Katsuya; YOSHIKAWA, Akira; OISHI, Shuji; KAWAZOE, Yoshiyuki
- 1PB-048 Thermochemical stability of the perovskite-type borides (Tohoku Univ.; IMR) SHISHIDO, Toetsu; KUDOU, Kunio; MORI, Takao; OKADA, Shigeru; YUBUTA, Kunio; NOMURA, Akiko; SUGAWARA, Takamasa; TANAKA, Masahiko; SAWADA, Yutaka; SAHARA, Ryoji; KUMAR, Vijay; HAYASHI, Koichi; AMANO, Tadaaki; KOHIKI, Shigemi; TESHIMA, Katsuya; YOSHIKAWA, Akira; OISHI, Shuji; KAWAZOE, Yoshiyuki
- 1PB-049 Study of Akaganeite structure containing chlorinef or fluorine (Kanazawa Institute of Technology, department of biochemistry) OYABU, Matashige; SATO, Ryo
- 1PB-050 Angle-Resolved Raman Spectroscopic Study of Terminal Stretching Vibrational Bands in Molybdenum Blue Bronze (The Wakasa Wan Energy Research Center) NISHIO, Shigeru
- 1PB-051 Microfluidic synthesis of Ni(OH)2 paricles (Waseda Univ.; Graduate School of Creative Science and Engineering) HAGA, Masayuki; OGAWA, Makoto
- 1PB-052 Preparation and properties of clay containing poly(N-Isopropylacrylamide) gel spherical particle. (Waseda Univ.; Graduate School of Creation Science and Engineering) NAKAMURA, Takanori; OGAWA, Makoto
- 1PB-053 Synthesis of Ionic Conducting Metal Tungstate and Solid Solutions from Reactions in Aqueous Solutions (Kochi Univ.) SHIMANOUCHI, Rie; OMICHI, Tomomi; NISHIZAWA, Hitoshi
- 1PB-054 Structure and evaluation of Lithium ion conductor Li<sub>3(1-x)</sub>Na<sub>3x</sub>InBr<sub>6</sub> (Graduate College of Industrial Tech. Nihon Univ) MURAYAMA,
  Syun; YAMANE, Yohei; YAMADA, Koji

# Coordination Chemistry, Organometallic Chemistry

### **Coordination Chemistry**

- 1PB-057 Synthesis and Reaction of group 4 metal complexes bearing aryloxide/anilide tridentate ligands. (Tokyo Tech.) FUKUSHIMA, Ryosuke; ISHIDA, Yutaka; KAWAGUCHI, Hiroyuki
- 1PB-058 Synthesis of zirconium and hafnium-containing Keggin polyoxometalates and their catalytic epoxidation of cyclooctene with hydrogen peroxide. (Kanagawa Univ. Faculty of Science) NOMIYA, Kenji; AOTO, Hiroki; SAKAI, Yoshitaka; KUCHIJI, Teppei; SEKIYA, Hiromi
- 1PB-059 Heterogeneous acid catalysis for estification by the polymers containing solid protonic acids derived from Dawson polyoxometalates (Kanagawa Univ. Faculty of Science) NOMIYA, Kenj; TOGASHI, Yoshihiro: HASEGAWA. Takeshi
- 1PB-060 Catalytic oxidation reaction for benzyl alcohol with molecular oxygen by water-soluble arene ruthenium(II) complexes supported on Keggin polyoxometalates (Kanagawa Univ. Faculty of Science) NOMIYA, Kenji; GOTO, Manabu; SAKAI, Yoshitaka
- 1PB-061 Synthesis of membranophilic metal complexes using cholesterol derivatives (Kyushu Univ.) KAJITANI, Kazuki; YONEDA, Ko; KOSHIYAMA, Tomomi; OHBA, Masaaki
- 1PB-062 Structure and application of chiral MOF prepared from optically active 2,2'-dihydroxy-1,1'-binaphthalene-3,3'-dicarboxylic acid (Kansai Univ.) KIKUMOTO, Yuki; TANAKA, Koichi; SHIRO, Motoo
- 1PB-063 Magnetic propeties of the clay intercalated single-molecule magnet (Toho Univ.) NAKAMURA, Kenta; KACHI-TERAJIMA, Chihiro;

- YAMAGISHI, Akihiko; AKAHOSHI, Daisuke; SAITO, Toshiaki; KITAZAWA, Takafumi
- 1PB-064 Synthesis of Dawson-type rhenium-substituted polyoxometalate using the α<sub>1</sub> isomer (Shizuoka Univ., Faculty of Science) AMANO, Hidekuni; KATO, Chika
- 1PB-065 A study on synthesis of Keggin-type mono-aluminum-substituted polyoxometalate and its reactivity with organozirconium species (Shizuoka Univ., Faculty of Science) MAKINO, Yuki; MASUDA, Kiyoto; KATO, Chika
- **1PB-066** Synthesis and characterization of magnesium complex using Dawson-type monolacunary polyoxometalate (Shizuoka Univ., Faculty of Science) MORI, Toshiya; KATO, Chika
- 1PB-067 Mechanistic Studies on Photocatalysis of Biscarbonyl Bisphosphine Rhenium(I) Complexes for CO<sub>2</sub> Reduction (Tokyo Institute of Technology) NAKANISHI, Ryoichi; MORIMOTO, Tatsuki; ISHITANI, Osamu
- 1PB-068 Synthesis and characterizations of a noval porphycene compound bearing a ferrocenyl unit as a side chain (Kyushu Univ.) YAMADA, Hiroaki; OKAWARA, Toru; ABE, Masaaki; SHIMAKOSHI, Hisashi; HISAEDA, Yoshio
- 1PB-069 Selective Synthesis of Iron Clusters by Oxidation of Iron(II) Dicarboxylate Complexes (Graduate school of Engneering Science, Osaka Univ.) TAGAWA, Naoki; TANAKA, Shinji; TSURUGI, Hayato; MASHIMA, Kazushi
- 1PB-070 Fabrication of nanostructures with spin crossover coordination polymers (Graduate School of Science, Osaka Univ.) TANAKA, Daisuke; TANAKA, Hirohumi: OGAWA, Takuii
- 1PB-071 Synthesis of Coordinatively Unsaturated Mononuclear Metal Complexes with Bis(imidazolyl)borate Ligand and Their Oxygen Activation Ability (Kanagawa Univ) CHIBA, Yosuke; NAKAZAWA, Jun; HIKICHI, Shiro
- 1PB-072 Crystal Structure and Thermal Properties of [2]Pseudorotaxane Composed of Dibenzo[24]crown-8-ether and Ferrocene-containing Dialkylammonium Salt (Tokyo Inst. of Tech., Chem. Res. Lab.) TAKEI, Asami; SUZAKI, Yuji; OSAKADA, Kohtaro
- 1PB-073 Framework structures and guest-adsorption/desorption property of Fe-bpb-SCN complexes. (Faculty of Science and Technology, Kinki Univ., R. I. for Science and Technology, Kinki Univ.) MASUDA, Takayuki; SUZUKI, Shiori; OKUBO, Takashi; MAEKAWA, Masahiko; KURODA-SOWA, Takayoshi
- 1PB-074 Dioxygen activation and substrate oxygenation of diiron complex included by cyclodextrin dimmer (Doshisha Univ.) FUJISAWA, Jun; HITOMI, Yutaka; FUNABIKI, Takuzo; KODERA, Masahito
- 1PB-075 Hydrogen Production from Water Catalyzed by Iron-dithiolene Complexes (Kyushu Univ.; JST PRESTO) YAMAGUCHI, Toshiki; MASAOKA, Shigeyuki; SAKAI, Ken
- 1PB-076 Development of Magnetic Organic-Inorganic Hybrid Systems Intercalated with Diarylethene (Univ. of Tokyo) KOBAYASHI, Katsuhiko; OKAZAWA, Atsushi; KOJIMA, Norimichi
- 1PB-077<sup>†</sup> Syntheses and Structure of Cyanide-Bridged Hetero Metal Tetradecanuclear Complexes (Univ. of Tsukuba; Ibaraki Univ.) MITSUMOTO, Kiyotaka; NISHIKAWA, Hiroyuki; OSHIO, Hiroki
- 1PB-078 Syntheses and spin transition behavior of cyanide-bridged Fe-Co hexanuclear complexes (Univ. of Tsukuba) OKAMOTO, Yuki; SEKINE, Yoshihiro; NIHEI, Masayuki; OSHIO, Hiroki
- 1PB-079 Syntheses of Mixed Crystals of Assembled Iron Complexes and Their Spin State (N-BARD, Hiroshima Univ., Grad. School of Sci., HiroshimaUniv.) KANEKO, Masashi; DOTE, Haruka; NAKASHIMA, Satory
- 1PB-080 Magnetic Properties of Cluster-Based Polymer Materials Consisting of Grid-type Fe<sub>4</sub> Spin-Crossover Cluster. (Interdisciplinary Graduate School of Engineering Sciences, Kyushu Univ.) MIYAHARA, Kenta; KANEGAWA, Shinji; SATO, Osamu
- 1PB-081 Synthesis, Magnetic Properties and Conductivities of Hybrid Materials constructed of Grid Type Spin-Crossover Clusters and Conductive Compounds. (Interdisciplinary Graduate School of Engineering Sciences, Kyusyu Univ.) KAKIUCHI, Yasuhiro; KANEGAWA, Shinji; SATO, Osamu
- 1PB-082 Synthesis of Ruthenium(Terpyridine)(Bipyridine)-Type Peptide Complex Possessing 1-Pyrenyl Group (Grad. Sch. Sci., Kitasato Univ.) YASUDA, Mioto; OISHI, Shigero; ISHIDA, Hitoshi
- 1PB-083 Synthesis of Ruthenium Tris(Bipyridine)-Peptide Complexes in Which Three Histidine Residues Are Incorporated (Grad. Sch. Sci., Kitasato Univ.) MATSUDA, Tomohiro: OISHI, Shigero: ISHIDA, Hitoshi
- 1PB-084 Axial-ligand effects in ruthenium complexes bearing two 1,8-naphthyridyl moieties (Fukushima Univ.) YAMANAKA, Takashi; TAKASE, Tsugiko: OYAMA, Dai
- 1PB-085 Stereospecific Synthesis and Reactivity of Ruthenium Carbonyl Complexes Bearing a 1,8-Naphthyridine Unit (Fukushima Univ.) YUZURIYA, Kazumi; HAMADA, Takashi; TAKASE, Tsugiko; OYAMA, Dai
- 1PB-086 Synthesis and Substitution Reaction of Ru(II)-OH<sub>2</sub> Complex with a Symmetrical Ligand di-(6-chloro-3-pyridazinyl)methylamine (dcpdma) (Meiji Univ.; School of Sience and Technology) NAGANO, Kohdai; TOYAMA, Mari; NAGAO, Noriharu
- 1PB-087 Synthesis and Structure of Ru(II)-dmso Complex with a (6-chloro-3-pyridazinyl)(2-pyridyl)amine and a methylamine Ligand (Meiji Univ.; School

- of Sience and Technolgy) TOYAMA, Mari; ISHIDA, Tomokazu; KUSHIDA, Takashi: NOGAO, Noriharu
- 1PB-088 Synthesis and Substitution Reaction of Monomeric Ru(II) Complex with a 3,6-di-(2-aminopyridyl)pyridazine (H<sub>2</sub>dappd), cis (Cl), cis (S)-[RuCl<sub>2</sub> (H<sub>2</sub>dappd-k<sup>2</sup>)(dmso-S)<sub>2</sub>] (Meiji Univ.; School of Sience and Technolgy) HORI, Ryusuke; TOYAMA, Mari; NAGAO, Noriharu
- 1PB-089 Photosubstitution Reaction of Ruthenium(II) Complex with Coordinating Solventand Triheteroscorpionate Ligand having N Bridge (Meiji Univ.; School of Sience and Technology) SUDA, Naoya; TOYAMA, Mary; NAGAO, Noriharu
- 1PB-090 Electrochemical Behaviors of Ethylbis(2-pyridylmethyl)amineruthenium Complexes in Ionic Liquids (Faculty Sci. Technol., Sophia Univ.) KAJIHARA, Akari; MORIYA, Sigeki; FUJITA, Masahiro; RIKUKAWA, Masahiro; NAGAO, Hirotaka
- 1PB-091 Influence of supporting ligands toward reactions of nitrosylruthenium complexes having a nitrato ligand with alkoxide ions. (Faculty Sci. Technol., Sophia Univ.) NOMURA, Takahisa; NAGAO, Hirotaka
- 1PB-092 Electrochemical Reduction of Cardon Dioxide Using Ruthenium Complexes in Ionic Liquids (Faculty Sci. Technol., Sophia Univ) MORIYA, Shigeki; NAKAZAWA, Masanori; MURAKAMI, Hidefumi; KAJIHARA, Akari; FUJITA, Masahiro; RIKUKAWA, Masahiro; NAGAO, Hirotaka
- 1PB-093 Kinetics and Mechanism of Substitution of Pyridine Derivatives at Trans-to-oxido Sites in Oxido-carboxylato Bridging Diruthenium(III) Complexes (Dept. Chem., Saitama Univ.; CACS, Saitama Univ.) IDO, Yohei; NAGASAWA, Akira; FUJIHARA, Takashi
- 1PB-094 Electrolytic EPR Spectra of (beta-diketonato)Ruthenium binuclear complexes bridged with diacetylhydrazine (Faculty of Science and Technology, Sophia Univ.) FURUKAWA, Tomo; HASHIMOTO, Takeshi; ENDO, Akira; HAYASHITA, Takashi
- 1PB-095 Evaluation of Alkali Metal Ion Recognition Function by Ruthenium complexes Possessing Glucose Recognition Function (Faculty of Science and Technology, Sophia Univ.) HATAKEYAMA, Yasuyoshi; HASHIMOTO, Takeshi; ENDO, Akira; HAYASHITA, Takashi
- 1PB-096 Preparation and properties of arene ruthenium complexes with bis (methylthio)alkane ligands (Kobe Univ.) MORI, Shotaro; INAGAKI, Takashi; MOCHIDA, Tomoyuki
- 1PB-097 Layer-by-layer Fabrication and Electron Transfer Process of Rod-Shaped Multinuclear Ruthenium(II) and Iron(II) Complexes on Electrodes (Chuo Univ.) SUZUKI, Takashi; KANAIDUKA, Katuhiko; HAGA, Masaaki; TERADA. Kejiti
- 1PB-098 Electrochemical property of Ru aqua complex bearing NAD+/ NADH type ligand. (Institute for molecular science) MASUNO, Shinya; KOBAYASHI, Katsuaki; OHTSU, Hideki; HAGA, Masa-aki; TANAKA, Koji
- **1PB-099** Steric and Electronic Effects of the *meso*-Substituents on Axial-Ligand-Substitution of Osmium Porphyrins (Kitasato Univ.) YAMASHITA, Masaki; NOMURA, Takuya; YUGE, Hidetaka
- 1PB-100 Ligand Synthesis, Silica Attachment and Complexsation with Transision Metals of Trispyrazorylborate Type Ligands on Silica Surface for Development of Silica-Attached Metal Complex Catalysts (Kanagawa Univ) KASAI, Takeshi; NAKAZAWA, Jun; HIKICHI, Shiro
- 1PB-101 Development of an Immobilized Metal Complex Catalyst having Imidazolylborate Ligand via a Carboxyl Linker (Kanagawa Univ) TSURUTA, Tomohiro; NAKAZAWA, Jun; HIKICHI, Shiro
- 1PB-102 Synthesis of Silica-Loaded Metal Complexes having a N-(2-aminoethyl)salicylideneaminato tridentate ligand and their alkene oxidation reaction with various oxidants (Kanagawa Univ) AKASHI, Takahiro; NAKAZAWA, Jun; HIKICHI, Shiro
- 1PB-103 Synthesis of metal-3,3',5,5'-biphenyltetraphosphonates (Tokyo Univ. of agriculture and technology) YAMASHITA, Daisuke; KONDO, Atsushi; MAEDA, Kazuyuki
- 1PB-104 New Photoreaction with the Hybrid Compounds Consisting of Cobalt(II) and Porphyrins (Institute for Molecular Sciencee) KON, Hiroki; NAGATA, Toshi
- 1PB-105 Synthesis and Catalysis of Cobalt(II) Complexes with Multidentate Phosphine and Phosphine Oxide (Graduate School of Science and Engineering, Univ. of Toyama) FUKUMOTO, Kouichi; KAWAMOTO, Tatsuya; AIZAWA, Sen-ichi
- 1PB-106 Rotational behaviors of axial ligand in low-spin iron(III) and cobalt (III) porphyrinateshaving heptafuloropropyl groups at the meso positions. (School of Medicine, Toho Univ.) TOZUKA, Akira; IKEZAKI, Akira; NAKAMURA. Mikio
- 1PB-107 Development of magnetic organic-inorganic hybrid systems intercalated with diacetylenes (Univ.of Tokyo) ISHIDA, Takuya; OKAZAWA, Atsushi; KOJIMA, Norimichi
- 1PB-108 Photo-decomposition of Water using Coordination Polymer sensitized Porphyrin (Kanagawa-Univ.) SATO, Konomi; KATAOAKA, Yusuke; MORI. Wasuke
- 1PB-109 Syntheses of amphiphilic sugar-coated N-heterocyclic carbene complexes (Osaka City Univ., OCARINA, JST/CREST, NAIST) NISHIOKA, Takanori; MAEDA, Yuri; SAKAI, Naoki; SUGIMURA, Yoshinori; KATO, Manabu; SHIBATA, Teppei; HASHIMOTO, Hideki; KINOSHITA, Isamu; YANO, Shigenobu
- 1PB-110 Synthesis and structures of novel Ir(III) hydride complexes with bipyrimidine ligands (Department of Chemistry, Kinki Univ.; Research

- Institute for Science and Technology, Kinki Univ.) KUBO, Yukimi; MAEKAWA, Masahiko; OKUBO, Takashi; KURODA, Takayoshi; MUNAKATA, Megumu
- **1PB-111** Synthesis of Ir(III) Complexes Having 8-Quinolinol Derivatives as Ancillary Ligands (Kobe City College of Technology) OHFUCHI, Shinichi; IIZUKA, Tatsuya; MOTOYAMA, Takao
- 1PB-112 Synthesis and photochemical behavior of cationic iridium complexes having long-chain alkyl groups (The Univ. of Tokyo) ABOSHI, Ryo; TAKIZAWA, Shin-ya; MURATA, Shigeru
- 1PB-113 Synthesis of New Cationic Iridium Complexes with Ligands of Coumarin 6 and Application to Photosensitized Singlet Oxygen Generation (The Univ. of Tokyo) TAKIZAWA, Shin-ya; MURATA, Shigeru
- 1PB-114 Application of Novel Cyclometalated Iridium(III) Complexes for Nanocrystalline Dye-Sensitized Solar Cells (Kansai Univ.) INUI, Fumiaki; SHINPUKU, Yoshiki; NAKAI, Misaki; NAKABAYASHI, Yasuo
- 1PB-115 Synthesis and structure of helical oligopyrrole dinuclear nickel complexes (Department of Chemistry, Graduate School of Science, Kobe Univ.) Eerdun; SETSUNE, jun ichiro
- 1PB-116 Synthesis and properties of multinuclear complexes of binaphtol containing porphyrin analogues. (Department of Chemisty, Graduate School of Sience, Kobe Univ.) OMAE, Shintaro; SETSUNE, Jyun-ichiro
- 1PB-117 Conformational changes of the assembly of nickel(II) dithiocarbamate complexes (Osaka Institute of Technology) NOMURA, Ryoki; OGURA, Ryou; HOSHINA, Ryouta; ISHIHARA, Seiya; OHTAKA, Atsushi; SHIMOMURA, Osamu
- 1PB-118 Synthesis and Property of Novel Coordination Cage Compounds using Imidazole-Derived Ligands (Okayama Univ.) YOKOI, Azusa; SUNATSUKI, Yukinari; SUZUKI, Takayoshi; FUYUHIRO, Akira; KOJIMA, Masaaki
- 1PB-119 Creation of Hybrid DNA-Based Catalysts Containing Metal(II)-Diimine Complexes (Kansai Univ.) OTONO, Motohiro; TANAKA, Hiroyuki; NAKAI, Misaki; NAKABAYASHI, Yasuo
- 1PB-120 Structure and Physical Properties of Ni Dinuclear Complexes with Biscyclam Ligand (Tohoku Univ.) TACHIBANA, Tetsuya; IGUCHI, Hiroaki; TAKAISHI, Shinya; KATOH, Keiichi; MIYASAKA, Hitoshi; YAMASHITA, Masahiro
- 1PB-121 Synthesis of Palladium(II) monoalkyldithiocarbamate complex (Osaka Institute of Technology) NOMURA, Ryoki; TAKEMORI, Toshihide; KAWAHARA, Michio; OHTAKA, Atsushi; SHIMOMURA, Osamu
- 1PB-122 Observation of CDW phase boundary in [Pd(chxn)<sub>2</sub>Br]Br<sub>2</sub> by using STM (Tohoku Univ.) ENDO, Katsutoshi; TAKAISHI, Shinya; KATOH, Kejichi; MIYASAKA, Hitoshi; YAMASHITA, Masahiro
- **1PB-123** Luminescent Platinum and Palladium Complexes based on Charge-Transfer Interaction (Rikkyo Univ.) OKOUCHI, Akihiro; NOGUCHI, Ryo; MATSUSHITA, Nobuyuki
- 1PB-124 Synthesis and Structural Study of Platnum(II) complexes with N-substituted cyclam as the Ligand (Fukuoka Univ. of Education; Kyoto Univ.) NAGASAWA, Isoroku; TAKASHIO, Toshiya; KITAGAWA, Hiroshi
- 1PB-125 Structure of Transition-metal Complexes with Hydrazone Ligands Containing Sulfur Donor Atom, and the Dissociation Reactivity of the Alkyl Group Attached to the Coordinated Sulfur Atom (Aichi Univ. of Education; Hokkaido Univ.) TAGUCHI, Yukari; YAMASHITA, Yurika; KOBAYASHI, Atsushi; CHANG, Ho-chol; KATO, Masako; NAKAJIMA, Kiyohiko
- 1PB-126 Preparation and Structure of Pd(II) Complexes with Hydrazone Ligands -Steric Effects of the Substituent on the Ligand for Coordination Modes (Dept. Chem., Aichi Univ. of Edu.; Hokkaido Univ.) KITAMURA, Fumi; MORI, Asami; FUJISAWA, Sachie; KOBAYASHI, Atsushi; CHANG, Ho-chol; KATO, Masako; NAKAJIMA, Kiyohiko
- 1PB-127 Synthesis and electrochemical behavior of platinum(II) complexes having a semiquinonediimine ligand (Chemical Resources Laboratory, Tokyo Institute of Technology) KOIZUMI, Take-aki; FUKUJU, Kazunori
- 1PB-128 Oxygen-Evolving Activity of New Multinuclear Platinum Complexes in Dye-Sensitized Photoelectrochemical Cells (Kyushu Univ.) TSUTSUI, Yuko; KONNO, Yosuke; SAKAI, Ken
- 1PB-129 Dative bond formation and supramolecular structures of liquid crystalline benzenedithiolato Pt(II) complexes (Hokkaido Univ., Faculty of Science) HONDA, Hirotaka; MATSUMOTO, Takeshi; SAKAMOTO, Misaki; KOBAYASHI, Atsushi; CHANG, Ho-chol; KATO, Masako
- 1PB-130 Helix induction of an oligopeptide by inclusion in a self-assembled bowl-shaped cage (School of Engineering, The Univ. of Tokyo; CREST) HISADA, Hayato; IKEMI, Masatoshi; KIKUCHI, Takashi; SATO, Sota; FUJITA, Makoto
- **1PB-131** Synthesis and Metalation of Novel N-Confused Hexaphyrin (1.1.1.1.1.0) (Department of Chemistry and Biochemistry Graduate School of Engineering Kyushu Univ.) NISHIMURA, Keiichi; TOGANOH, Motoki; FURUTA, Hiroyuki
- 1PB-132 Synthesis and structures of novel Cu(I) ethylene complexes with a tetrazine anion radical ring (Department of Chemistry, Kinki Univ.; Research Institute for Science and Technology, Kinki Univ.) MIYAZAKI, Takeshi; MAEKAWA, Masahiko; OKUBO, Takashi; KURODA, Takayoshi; MUNAKATA, Megumu
- 1PB-133 Syntheses, structures and properties of novel Cu(I) coordination

- polymers constructed by bipyrimidine ligands (Department of Chemistry, Kinki Univ.; Research Institute for Science and Technology, Kinki Univ.) MINAMINO, Ai; MAEKAWA, Masahiko; OKUBO, Takashi; KURODA, Takayoshi; MUNAKATA, Megumu
- 1PB-134 Synthesis and emissive properties of halogeno copper(I) coordination polymers having triphenylphosphite and bridging N-heteroaromatic ligands (Univ. of Toyama) ISHIYAMA, Takanori; NOZAKI, Koichi; TSUGE, Kiyoshi
- 1PB-135 Synthesis of metal complexes using an optically-active bis(1,3-oxazolidinyl)methane (Nihon Univ.) KATO, Taiki; TSUNO, Takashi; BRUNNER, Henri
- 1PB-136 Synthesis and crystal structures of new copper 1,3,5-benzenetriphosphonates containing bridging ligands. (Tokyo Univ. of Agriculture and Technology) AZUMA, Kanami; TAKEDA, Rie; KONDO, Atsushi; MAEDA, Kazuyuki
- 1PB-137 Synthesis of Sulfur-Containing Schiff Base Copper Complexes with Imidazole Moieties (Kanagawa Univ., Faculty of Science) KOBAYASHI, Shinnya; HIROSE, Risa; KAWAMOTO, Tatsuya
- 1PB-138 Structures and Properties of Iron(II) and Copper(II) Complexes with N6-Hexadentate, 4,7,10,13-Tetraazahexadeca-3,13-Diene-2,15-Dionedioxime (Dept. Chem., Saitama Univ.; CACS, Saitama Univ.) TANAKA, Yuji; YONEYAMA, Kazuki; NAGASAWA, Akira; FUJIHARA, Takashi
- 1PB-139 Polymorphism and Clathration Structures of Linear Trinuclear Complexes with Aminophenolic Ligand. (Osaka Kyoiku Univ.) KUBONO, Koji; UENO, Takayuki; TANIGUCHI, Tomohiro; YOKOI, Kunihiko
- 1PB-140 Crystal Structures and Conductive Properties of new 1D Mixed-Valence Coordination Polymers with Dithiocarbamate Derivatives (Kinki Univ.; PRESTO.) ANMA, Haruho; KIM, Kyung Ho; OKUBO, Takashi; MAEKAWA, Masahiko; KURODA-SOWA, Takayoshi
- 1PB-141 Synthesis and Electronic States of a New Mixed Valence Cu(I)-Cu (III) 2D coordination polymer with a dithiocarbamate ligand (Kinki Univ., PRESTO) KUWAMOTO, Hiroyasu; KIM, Kyung Ho; OKUBO, Takashi; MAEKAWA, Masahiko; KURODA-SOWA, Takayoshi
- 1PB-142 Crystal Structures, Conductive Properties and Applications to Dye-Sensitized Solar Cells of Mixed-Valence Coordination Polymers with Dithiocarbamate Derivatives (Kinki Univ., PRESTO) TANAKA, Naoya; YAMADA, Takeshi; KIM, Kyung Ho; OKUBO, Takashi; MAEKAWA, Masahiko; KURODA-SOWA, Takayoshi
- 1PB-143 Crystal Structures and Physical Properties of New Copper clusters bridged by bromide ions (Kinki Univ., PRESTO) SHOUJI, Takumi; KIM, Kyung Ho; OKUBO, Takashi; MAEKAWA, Masahiko; KURODA-SOWA, Takayoshi
- 1PB-144 Temperature dependence of the emission of the mixed ligand copper (I) complexes containing a diphosphine ligand. (Seikei Univ.) SAWAMURA, Shota; KIMURA, Kaoru; TAKAO, Kouichiro; TSUBOMURA, Taro
- **1PB-145** Development of Reduced-fluorescein Derivatives Conjugated with Various Types of Ligands (Kyoto Univ.) ABE, Mizuki; TAKI, Masayasu; YAMAMOTO, Yukio
- 1PB-146 Separation of enantiomers by homochiral MOF built from camphoric acid as chiral ligand (Kansai Univ.) KUBO, Kaori; TANAKA, Koichi
- 1PB-147 Asymmetric oxidation catalysed by homochiral MOF (Kansai Univ.) MURASE, Takanori; IIDA, Kazuhiro; TANAKA, Koichi
- 1PB-148 Effects of Side Chains of Amino Acids on Preparation of Optically Active Amino Acids by Using Cu(II) Complexes (Kansai Univ.) YAJIMA, Tatsuo; KIMURA, Makiko; OGATA, Hidetoshi; UNO, Ayaka; SHIRAIWA, Tadashi
- 1PB-149 Discrete triplex formation of oligo-urea via cyclic metal complex formation of peripheral bis(hydroxypyrone) ligands (Nagoya Univ., Research Center for Materials Science; Nagoya Univ., Graduate School of Science, Department of Chemistry; CREST, JST) NISHINO, Toshio; YAMADA, Yasuyuki; TANAKA, Kentaro
- 1PB-150 Construction of Metal-mediated Rotary Motion Devices using Ligand-type Azatriptycenes (Grad. School of Science, The Univ. of Tokyo) ISHII, Satoshi
- 1PB-151 Synthesis and Molecular Structure of Light-Stable and Water-Soluble Silver 3-(Methylthio)propionate (Kanagawa Univ. Faculty of Science) NOMIYA, Kenji; YOSHIKAWA, Rie; CHIKARAISHI, Noriko
- 1PB-152 Syntheses and Interconversion of Hexa- and Dinuclear Silver(I) Clusters Formed by Silver(I) Pentafluorobenzenethiolate Coordination Polymer and Methyldiphenylhosphine (Kanagawa Univ. Faculty of Science) NOMIYA, Kenji; KURODA, Marie; KUWANA, Wataru; YOSHIKAWA, Rie; CHIKARAISHI, Noriko
- 1PB-153 Structures and Properties of Group 11 Metal Complexes with Zwitterionic Sulfur Donor Ligand, Bis(N,N-diisopropylamino)carbeniumdithiocarboxylate. (Dept. Chem., Saitama Univ.; CACS, Saitama Univ.) HORI, Takahiro; SUGAYA, Tomoaki; FUJIHARA, Takashi; NAGASAWA, Akira
- 1PB-154 Synthesis of Inter-Cluster Compound by Reaction of the Gold(I)/ Carboxylate/PPh<sub>3</sub> Complex with Keggin-type Polyoxometalate with Heteroatom Al (Kanagawa Univ. Faculty of Science) NOMIYA, Kenji; YOSHIDA, Takuya; SAKAI, Yoshitaka
- 1PB-155 Synthesis and Molecular Structure of Methyldiphenylphosphinegold(I) Complex Showing Aurophilic Interaction (Kanagawa Univ. Faculty of

- Science) NOMIYA, Kenji; IYOKU, Sayuri; YOSHIDA, Takuya; CHIKARAISHI, Noriko
- 1PB-156 Elongation of lifetimes of exciplexes of bis cyano aurate(I) complexes with co-existing ions in aqueous solution (Univ. of Toyama; Department of the chemistry) IWAMURA, Munetaka; KUBOTA, Yasushi; NOZAKI, Koichi
- 1PB-157 Emission Properties of Au(I) Complexes with Chiral 1,1'-Binaphthyl Ligands (Graduate School of Materials, Nara Institute of Scienceand Technology) ASAJIMA, Kanako; SAITOH, Masashi; YUASA, Junpei; KAWAI, Tsuvoshi
- 1PB-158 Synthesis and structure of metal complexes with glycine-based heteroaromatic ligands (Graduate School of Humanities and Sciences, Nara Women's Univ. and KYOUSEI Science Center, Nara Women's Univ.) KAWATA, Keiko; MIKATA, Yuji
- 1PB-159 Intermolecular hydrogen bondings of zinc(II) dithiocarbamates prepared from amino acids (Osaka Institute of technology) NOMURA, Ryoki; HASHIMOTO, Wataru; OGURA, Ryou; OHTAKA, Atsushi; SHIMOMURA, Osamu
- 1PB-160 Development of the catalytic hydrolysis reaction using a zinc(II)-included hemicryptophane (Department of Engineering, Osaka Prefecture Univ.; Osaka Dental Univ.) MAKITA, Yoshimasa; IKEDA, Keisuke; FUJIWARA, Shin-ichi; OGAWA, Akiya
- 1PB-161 Catalystic hydrolysis of phosphate monoester by 2:2:2 supramolecular complex formed by dinuclear Zinc(II)complex, barbital, and copper(II) ion. (Fac. Pharm. Sci., Tokuo Univ. Sci.) SUZUKI, Asami; ZULKEFELI, Mohd; SHIRO, Motoo; AOKI, Shin
- 1PB-162 Reactions of olefines within porous coordination network crystals (School of Engineering, The Univ. of Tokyo; CREST) NISHIGUCHI, Satoshi; INOKUMA, Yasuhide; FUJITA, Makoto
- 1PB-163 Molecular motions of ligands in self-assembled metal complexes MLX<sub>2</sub> (M = Zn, Co; L = bpy, bpe; X = Cl, NO<sub>3</sub>) and their crystal structures (Shinshu Univ.) NAKAYAMA, Tatsuya; TAKEHIRA, Satoshi; YAMAZAKI, Atsuko; OHKI, Hiroshi
- 1PB-164 Development of Time-resolved Fluorescence Probe for Zinc Based on CS124 Core (Kyoto Univ.) YAMAMOTO, Masanobu; IYOSHI, Shohei; TAKI, Masayasu; YAMAMOTO, Yukio
- 1PB-165 Programmable synthesis of alternative foldamers of metallo-porphyrin and benzoquinone (Nagoya Univ., Department of Chemistry; Nagoya Univ., Research Center for Materials Science; CREST, JST) HIRAGA, Kosuke; YAMADA, Yasuyuki; TANAKA, Kentaro
- 1PB-166 Clathration of Fluorinated Coordination Networks (Miyagi Univ. of Educ.) BENI, Tomohiro; KASAI, Kayoko
- 1PB-167 Formation of Soluble Np(IV) Hexanuclear Complexes through Carboxylate Bridging and Hydrolysis (Forschungszentrum Dresden-Rossendorf; Seikei Univ.) TAKAO, Koichiro; TAKAO, Shinobu; HENNIG, Christoph; SCHEINOST, Andreas; BERNHARD, Gert
- 1PB-168 Syntheses of Chiral Multidentate Ligands Derived from (S)-Alanine and their Lanthanide(III) Complexes (Graduate School of Science, Osaka City Univ.) MIYAKE, Hiroyuki; KITAO, Kazunori; TSUKUBE, Hiroshi
- 1PB-169 Photoluminescence properties of mononuclear europium(III) complexes with tetradentate Schiff base ligands in PMMA (Chiba Inst. of Tech.; Nucl. Sci and Eng., JAEA; Aichi Univ. of Edu.) SOTOGUCHI, Ryouhei; NAKASHIOYA, Takahiro; TSUCHIMOTO, Masanobu; TERAMOTO, Naozumi; SHIBATA, Mitsuhiro; WATANABE, Masayuki; NAKAJIMA, Kiyohiko
- 1PB-170 Structural and Unusual Red Luminescent Properties of Novel Europium Complexes (Graduate School of Engineering, Kyushu Institute of Technology) MORIGUCHI. Tetsuii: KOZAI, Yasuhiro: TSUGE, Akihiko
- 1PB-171 Syntheses of gyroidal lanthanide complexes bearing carboxylic acid groups (College of Science and Engineering, Aoyama Gakuin Univ.) SHIMIZU, Tomohito; TAKAHASHI, Isao; HASEGAWA, Miki
- 1PB-172 Syntheses of gyroidal lanthanide complexes bearing long alkyl chains (College of Science and Engineering, Aoyama Gakuin Univ.) WATANABE, Manabu; TAKAHASHI, Isao; HASEGAWA, Miki
- 1PB-173 Effects on SMM behaviors of Dy(III)Zn(II) complexes caused by changing axial ligand on Zn(II) site. (Nara Women's Univ.; Osaka Univ.; IMR, Tohoku Univ.) WATANABE, Akiko; YAMASHITA, Aika; KAJIWARA, Takashi; NAKANO, Motohiro; YAMAMURA, Tomoo
- 1PB-174 Structure and Magnetic Properties of Single Molecule Quantum Magnets composed of Triple-Decker Lanthanide phthalocyanine (Department of Chemistry, Graduate school of Science, Tohoku Univ.) YAMAMOTO, Keita; KATOH, Keiichi; TAKAISHI, Shinya; MIYASAKA, Hitoshi; YAMASHITA, Masahiro
- 1PB-175 Ln-dependent SMM behaviors of Ln(III)Zn(II)<sub>3</sub> tetranuclear complexes (Nara Women's Univ.; Univ. of Tsukuba; Osaka Univ.; IMR, Tohoku Univ.) YAMASHITA, Aika; WATANABE, Akiko; KAJIWARA, Takashi; AKINE, Shigehisa; NABESHIMA, Tatsuya; NAKANO, Motohiro; YAMAMURA, Tomoo
- 1PB-176 Relation between Crystal Field Profile and Magnetic Anisotropy in Rare-Earth Single-Molecule Magnets (Osaka Univ.) FUJIWARA, Takenori; NAKANO, Motihiro
- 1PB-177 Luminescence sensing of amino acids by lanthanide complexes with chelating hexadentate ligands (Graduate Schools of Science, Osaka City Univ. and JST, CREST) SHINODA, Satoshi; YANO, Keiko; TSUKUBE, Hiroshi
   1PB-178 Synthesis and Electrochemical Properties of a Green Form of

- Heteroleptic Double-decker Sandwich Lu(III) Complex Containing Phthalocyanine and Octamethylphthalocyanine (Kyushu Univ.) TAKAHASHI, Kazuhiro: TAKAKI. Ryosuke
- 1PB-179 Synthesis and electronic structures of oxidized forms of quadruple-decker phthalocyanine complexes (Osaka Univ.) HATA, Kentaro; FUKUDA. Takamitsu: FUYUHIRO. Akira: ISHIKAWA. Naoto
- 1PB-180 Dynamic magnetism of dinuclear lanthanide triple-decker complex consisting of phthalocyanine and porphyrin (Osaka Univ.) SAKAUE, Shohei: FUYUHIRO. Akira: FUKUDA. Takamitsu: ISHIKAWA. Naoto
- 1PB-181 Reaction of Dihydroxo (phthalocianinato)antimony(V) Complex.
  (National Institute for Materials Science) KAGAYA, Yutaka; ISAGO, Hiroaki
- 1PB-182# Preparation of Bio-inspired Molecular Catalyst for O<sub>2</sub> Reduction (Graduate School of Sciences and Inst. for Materials Chem. and Eng., Kyushu Univ.) NAGARAJU, Perumandla; LIU, Jin-gang; OHTA, Takehiro; NARUTA, Yoshinori
- 1PB-183<sup>#</sup> Self-assembly of [Fe<sub>6</sub>S<sub>3</sub>], [Fe<sub>8</sub>S<sub>7</sub>], [Fe<sub>8</sub>S<sub>8</sub>] Clusters by the Reactions of Fe{N(SiMe<sub>3</sub>)<sub>2</sub>}<sub>2</sub>, Elemental Sulfur, and Various Bulky Thiols (Graduate School of Science, and Research Center for Materials Science, Nagoya Univ.) XIE, Yiming; OHKI, Yasuhiro; TATSUMI, Kazuyuki
- 1PB-184 Synthesis of [8Fe-7S] and [7Fe-6S] clusters from the reactions of a 2,6-di(xylyl)benzenethiolate iron(II) complex with elemental sulfur (School of Science, Nagoya Univ.; Graduate School of Science, Nagoya Univ.; Research Center for Materials Science, Nagoya Univ.) SHIN, Kanyou; OHKI, Yasuhiro; TATSUMI, Kazuyuki
- 1PB-185# Dinuclear Ni(0)- Fe(II) and Ni(II)- Fe(0) Complexes Modeling the Active Site of Reduced Form of [NiFe] Hydrogenase (School of Science, Graduate School of Science and Research Center for Materials Science, Nagoya Univ.) LI, Zilong; OHKI, Yasuhiro; TATSUMI, Kazuyuki
- **1PB-186** [1:3] Site-differentiated [4Fe-4S]<sup>2+</sup> and [4Fe-4S]<sup>3+</sup> Clusters Carrying a Tridentate Thiolate and a Carboxylate (Sch. Sci. and Grad. Sch. Sci. and Res. Ctr. Mat. Sci, Nagoya Univ.) NAKAMURA, Tomohiko; TERADA, Tamaki; MATSUMOTO, Tsuyoshi; TATSUMI, Kazuyuki
- 1PB-187 Synthesis and characterization of tris(2,2'-bipyridine)ruthenium(II) complex appending enzyme-binding sites as a carbonic anhydrase inhibitor (Nara Women's Univ.,Faculty of Science) IMAMURA, Narumi; TAKASHIMA, Hiroshi; TSUKAHARA, Keiichi
- 1PB-188 Synthesis and characterization of a carbonic anhydrase inhibitor having a tris(2,2'-bipyridine)ruthenium(II)complex modified with a viologen moiety (Nara Women's Univ.,Faculty of Sciance) KOUNO, Saori; TAKASHIMA, Hiroshi; TSUKAHARA, Keiichi
- 1PB-189 Dinuclear Nickel Complexes Bridged by Diamido-dithiolate as Active Site Models of the Acetyl CoA Synthase. (Graduate School of Science and Research Center for Materials Science, Nagoya Univ.) OANA, Ayaka; ARAE, Sachie; MATSUMOTO, Tsuyoshi; TATSUMI, Kazuyuki
- 1PB-190 Interaction of Palladium(II)-Dithiocarbamato Complexes Containing1,10-Phenanthroline Derivatives with DNA (Kansai Univ.) FURUSAWA, Hideaki; NAKANO, Takashi; NAKAI, Misaki; NAKABAYASHI, Yasuo
- 1PB-191 Synthesis and DNA-Binding Properties of HeterodinuclearRuthenium(II)-Platinum(II) Complexes (Kansai Univ.) HISHIDA, Shota; MOTOKI, Shoiti; NAKAI, Misaki; NAKABAYASHI, Yasuo
- 1PB-192 Synthesis and DNA Recognition of Dinuclear Copper(II) Complexes Containing an Amino Acid (Kansai Univ.) IKEDA, Mitsuhiro; OTOBE, Kouhei; NAKAI, Misaki; NAKABAYASHI, Yasuo
- 1PB-193 Structure and Properties of a Novel Copper-Model of Multi Copper Oxidase and pMMO. (Kyushu Univ. Grad. School of Sciences, IMCE, I2CNER) ABE, Yoshirou; OHTA, Takehiro; NARUTA, Yoshinori
- 1PB-194 synthesis of sugar linked Zinc complexes and their interations with nuclear acid (Kansai Univ.; Kyoto Univ.) FUKUDA, Hironobu; NAKAI, Misaki; YANO, Shigenobu; NAKABAYASHI, Yasuo
- 1PB-195 Synthesis and photophysical property of zinc-porphyrin appending a tridentate ligand as an active site model of nitrite reductase (Nara Women's Univ., Faculty of Science) KAWANO, Ayaka; TAKASHIMA, Hiroshi; TSUKAHARA, Keiichi
- 1PB-196 Synthesis of borazine-diamine-silsesquioxane polymers and their pyrolysis to SiOCBN (AIST) UCHIMARU, Yuko; YAMASHITA, Hiroshi; DONG, Jianyu; HAN, Li-biao
- 1PB-197 Polarized spectroscopy of chiral diphenyl Schiff base Ni(II) and Cu (II) complexes and azobenzene in PMMA films (Tokyo Univ. of Science, Faculty of Science) AKITSU, Takashiro: YAMAZAKI, Atsuo
- 1PB-198<sup>#</sup> Preparation of a nanosized titanium dioxide in porous coordination polymer (Kyoto Univ.) KIM, Cho Rong; UEMURA, Takashi; KITAYAMA, Koji; KITAGAWA, Susumu

#### Organometallic Chemistry

- 1PB-199 Synthetic Studies on Aromatic Compounds Containing Silicon Atoms at the Juncture Positions (Institute for Chemical Research, Kyoto Univ.) EGAWA, Yasunobu; MIZUHATA, Yoshiyuki; TOKITOH, Norihiro
- 1PB-200 Synthesis of Polysilane Building Blocks with Various Functional Groups (Grad. Sch. Eng., Gunma Univ.) ARAI, Koichi; KANNO, Kenichiro; KYUSHIN, Soichiro
- 1PB-201 Synthesis and optical properties of nanosize starlike silicon molecules with the arms that extend to three directions. (Kurashiki Univ. of Science and

- The Arts) FUKUDA, Ryuichi; NAKA, Akinobu
- 1PB-202 Construction of molecular architecture using silanol hydrogenbonding (Kanagawa Univ.) OHASHI, Yu; FURUKAWA, Yuya; MURAMATSU, Tatsunori; KABE, Yoshio
- 1PB-203 Development of Intramolecular Germa-Friedel-Crafts Reaction and Its Application to the Synthesis of Dibenzogermoles (Gakushuin Univ.) IWANAMI, Yaeko; ARII, Hidekazu; MOCHIDA, Kunio; KAWASHIMA, Takayuki
- 1PB-204 Mechanism for cis/trans isomerization of five-memberedcycloalkyne complexes (Sophia Univ.) NISHIMURA, Kosuke; OHARA, Nozomu; SUZUKI, Noriyuki; MASUYAMA, Yoshiro
- 1PB-205<sup>†</sup> Effect of solvent and temperature on the regioselectivity in cyclotrimerization of alkynes catalyzed by dinuclear niobium(III) and tantalum(III) complexes with sulfido ligands. (Dept. Chem., Saitama Univ.; CACS, Saitama Univ.) MATSUURA, Masatoshi; FUJIHARA, Takashi; NAGASAWA, Akira
- 1PB-206 Synthesis and Reaction of a Tantalum Hydrido Complex with a Tripodal Triaryloxide Ligand (Department of Chemistry, Tokyo Institute of Technology) IWAUCHI, Hiroshi; ISHIDA, Yutaka; KAWAGUCHI, Hiroyuki
- 1PB-207 Catalytic reaction of slanes and water using Mo complex: an alternative approach to polysiloxanes (Yokohama National Univ.) TOYOKAWA, Daigo; MINATO, Makoto
- 1PB-208 Synthesis and Properties of (Cyclopentadienyl)iron(II) Complexes Bearing a η <sup>1</sup>-fluorenyl Ligand (Tokyo Inst. of Tech., Chem. Res. Lab.) TSUCHIDO, Yoshitaka; SUZAKI, Yuji; OSAKADA, Kohtaro
- 1PB-209 Reversible change of co-conformation of [2]pseudorotaxane in the solid state induced by chloroform vapor adsorption and desorption. (Tokyo Inst. of Tech., Chem. Res. Lab.) SUZAKI, Yuji; ABE, Tomoko; OSAKADA, Kohtaro
- 1PB-210 Synthesis of the new macrocyclic multinuclear ruthenium complexes with the pyradine-bridging unit. (Tokyo Metropolitan Univ., Faculty of Urban Environmental science, Department of Appied Chemistry) HAMAZAKI. Ava: HAN, Kison: SATO, Kiyoshi: YAMAGUCHI, Motowo
- 1PB-211 Synthesis and host-guest behavior of ruthenium cyclic multinuclear complexes. (Tokyo Metropolitan Univ., Faculty of Urban Environmental science, Department of Appied Chemistry) HIRAYAMA, Akiko; OBARA, Makoto; SATO, Kiyoshi; YAMAGUCHI, Motowo
- 1PB-212 Synthesis and Structural Analysis of Thioamide-based SNS Pincer Ruthenium Complexes (Univ. of Tsukuba TIMS) KOMIYAMA, Yoko; KUWABARA, Junpei; KANBARA, Takaki
- 1PB-213 Aerobic Oxidation of Alcohols Catalyzed by Cyclometalated Ru Complex (Univ. of Tsukuba: Tokyo Tech) BEH, Xin Ning; TAKETOSHI, Ayako; KUWABARA, Junpei; KOIZUMI, Take-aki; KANBARA, Takaki
- 1PB-214 Reactions of Nitrosyl Ruthenium Complex with Anilines (Nagasaki Univ.) YAMAGUCHI, Soseki; ARIKAWA, Yasuhiro; UMAKOSHI, Keisuke; ONISHI, Masayoshi
- 1PB-215 Syntheses and Reactions of Triazolato Bridged Dinuclear Ruthenium Complexes (Nagasaki Univ.) TSUCHII, Chika; ARIKAWA, Yasuhiro; UMAKOSHI, Keisuke
- 1PB-216 Synthesis and reactivity study of a novel palladium complex containing naphtyl-Ru(II) polypyridyl as a UV-visible light absorting bichromophore. (Chemical Resources Laboratory, Tokyo Institute of Technology) ARAKI, Mizuki; MURATA, Kei; INAGAKI, Akiko; AKITA, Munetaka
- **1PB-217** Synthesis of polynuclear metal-complexes with naphthalene (Nihon Univ.) IWABE, Haruka; TSUNO, Takashi; BRUNNER, Henri
- 1PB-218 Synthesis of Rh, Ir, Ru Dinuclear Complexes with New NPPN Tetradentate Ligands Derived from Diphosphines (Nara Women's Univ.) HAMADA, Naoko; TSUJI, Minori; KURE, Bunsho; NAKAJIMA, Takayuki; TANASE, Tomoaki
- 1PB-219 Steric effect of the ligand on the stereoselective preparation of the iridium(III) silyl alkenyl complexes having a metal-centered chirality (Department of Chemistry, Faculty of Science, Nara Women's Univ..) IKEDA, Kiyomi; TUBAKIMOTO, Aya; URA, Yasuyuki; KATAOKA, Yasutaka
- 1PB-220 Synthesis of heterobimetallic complexes using indenyl-functionalized NHCs as a bridging ligands (Yokohama National Univ.) MATSUMOTO, Sawako; SHUTOU, Hirosi; YAMAGUCHI, Yoshitaka
- 1PB-221 Preparation and characterization of Pd(II) complexes with unsymmetrical bidentate NHC ligands (Nagoya Institute of Technology) NISHIMURA, Yuki; YAGYU, Takeyoshi
- 1PB-222 Cross-Coupling Reactions Using Pd-Catalysts with 1,2-Bis(pyridylethynyl)benzene Ligand (Tokyo Inst. of Tech., Chem. Res. Lab.) SAITO, Takashi: SUZAKI, Yuii: OSAKADA, Kohtaro
- 1PB-223 Theoretical Study of Me/Br Exchange Reaction on Pt Complexes with Phosphine Ligand (Ochanomizu Univ.) TAKASHIMA, Mari; TSUCHIDA, Noriko; SHIGESATO, Yuka; ITAZAKI, Masumi; NAKAZAWA. Hiroshi: TAKANO. Keiko
- **1PB-224** Syntheses of Novel Bowl-Shaped Aryldimethylphosphine Ligands Bearing *m*-Phenylene Dendrimer Frameworks and Their Application (Tokyo Institute of Technology) UMEMOTO, Akinari; SASE, Shohei; GOTO, Kei
- 1PB-225 Asymmetric aldol reaction catalyzed by chiral amine macrocycle-Cu complex (Kansai Univ.) ASAKURA, Azusa; TANAKA, Koichi
- **1PB-226** PhCH<sub>2</sub>CH<sub>2</sub>CO<sub>2</sub>AgCu<sup>+</sup> is a precursor for the Gas-Phase Synthesis of

- $PhCH_2CH_2AgCu^+,\ PhAgCu^+,\ and\ HAgCu^+$  (Ochanomizu Univ.) TSUCHIDA, Noriko; MORI, Hirotoshi; KHAIRALLAH, George; OʻHAIR, Richard
- **1PB-227** AgCuH<sup>+</sup> and Cu<sub>2</sub>H<sup>+</sup> Activate the C-I and C-OH Bonds of 2-Iodoethanol but Ag<sub>2</sub>H<sup>+</sup> Does Not. (Ochanomizu Univ.; Univ. of Melbourne) MORI, Hirotoshi; TSUCHIDA, Noriko; KHAIRALLAH, George N.; O'HAIR, Richard A. J.

### Saturday, March 26, PM

 $(15:00\sim16:30)$ 

# Physical Organic Chemistry -Structures and Properties-

- 1PC-031 Synthesis of a cyclic tetramer with indole and benzofuran derivatives (Department of Applied Chemistry, Graduate School of Science, Nagoya Univ.) KONDO, Takeshi; NAKAMURA, Shoichi; HIROTO, Satoru; SHINOKUBO, Hiroshi
- 1PC-032 Electrochemical Properties of Chlorophyll Derivatives (Ryukoku Univ.) MIYATAKE, Tomohiro; HIEDA, Masato; KASUNO, Megumi
- 1PC-033 Functionalization and oxidation reactions of oligoacene derivatives (Department of Applied Chemistry, Graduate School of Engineering, Nagoya Univ.) KOYAMA, Yutaro; HIROTO, Satoru; SHINOKUBO, Hiroshi
- 1PC-034 Synthesis of a Quadruply-ring-fused Porphyrin (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) OHTAKE, Kazuhisa; ISHIZUKA, Tomoya; KOJIMA, Takahiko
- 1PC-035 Synthesis of b-alky substituted hexaphyrin(1.1.1.1.1.1) (Graduate School of Pharmaceutical Sciences, Chiba Univ.) SUZUKI, Masaaki; HOSHINO, Tyuji; NEYA, Saburo
- 1PC-036 Control of the Access of Axial Ligands to the Zinc Porphyrin Unit by the Metal-induced Conformational Change of Flexible Alkyl Chains (Graduate School Of Science, Osaka City Univ.) HASHIMOTO, Erika; KATO, Mutsumi; KOZAKI, Masatoshi; SUZUKI, Shuichi; OKADA, Keiji
- 1PC-037 Self-assembly of Bolaamphiphilic Porphyrin Dendrimers containing Rigid Backbones (Graduate School of Science, Osaka City Univ.) YAGI, Sadayuki; KOZAKI, Masatoshi; SUZUKI, Shuichi; OKADA, Keiji
- 1PC-038 Synthesis of Expanded Porphyrins Consisting of Carbazole and Thiophene (Faculty of Science and Technology, Keio Univ.) MASUDA, Motoki; MAEDA, Chihiro; YOSHIOKA, Naoki
- 1PC-039 Synthesis and properties of water-soluble hexaphyrinswith pyridinium substituents. (Graduate School of Engineering, Kyushu Univ.) KATSUMATA, Sho; IKAWA, Yoshiya; FURUTA, Hiroyuki
- 1PC-040 Synthesis and Property of a New Cyclic Porphyrin Dimers and Its Inclusion of Fullerenes (Institute for Materials Chemistry and Engineering, Kyushu Univ.) SAKAGUCHI, Kenichi; NOBUKUNI, Hirofumi; ISHIDA, Masatoshi; NARUTA, Yoshinori; TANI, Fumito
- 1PC-041 Inclusion Behavior of Fullerene C<sub>70</sub> by Cyclic Porphyrin Dimer (Institute for Materials Chemistry and Engineering, Kyushu Univ.) KAMIMURA, Takuya; NOBUKUNI, Hirofumi; UNO, Hidemitsu; SHIMAZAKI, Yuichi; NARUTA, Yoshinori; TANI, Fumito
- 1PC-042 Synthesis of New Cyclic Porphyrin Dimers Having Expanded .pai.conjugated Systems and Properties (Institute for Materials Chemistry and Engineering, Kyushu Univ.) INOUE, Yasuyuki; NOBUKUNI, Hirofumi; NARUTA, Yoshinori; TANI, Fumito
- 1PC-043 Synthesis of meso-aryl mono-benzoporphyrin (Fac. Sci. Ehime Univ.; INCS, Ehime Univ.) MIKI, Kuniyoshi; MORI, Shigeki; OKUJIMA, Tetsuo; YAMADA, Hiroko; UNO, Hidemitsu
- 1PC-044 Aggregate and Photophysical Properties of zinc-di(4-pyridyl) Porphyrins Possessing Characteristic Crystal Properties (Faculty of Science and Technology, Keio Univ.) HASOBE, Taku; SAKAI, Hayato; SANDANAYAKA, Atula S.D.; BULACH, Veronique; ARAKI, Yasuyuki; WADA, Takehiko; ASANO, Atsushi; SEKI, Shu
- 1PC-045 Synthesis and Properties of Buta-1,3-diyne-bridged Macrocyclic Oligothiophenes (Gunma Univ.) KUROSAWA, Katsuyuki; KATO, Shinichiro; NAKAMURA, Yosuke
- 1PC-046 Synthesis and Properties of Carbazolophanes and Phenanthrenophanes Bearing Silicon Atoms (Gunma Univ.) NOGUCHI, Taro; KATO, Shin-ichiro; NAKAMURA, Yosuke
- 1PC-047 Synthesis of Novel Electron-Accepting Macrocycles and Application into Synthesis of [2]Rotaxanes (Gunma Univ.) MUROYA, Naoki; KURAHASHI, Noriko; SAKAMOTO, Chika; KATO, Shin-ichiro; NAKAMURA, Yosuke
- 1PC-048 Mechanism of Racemization of Chiral Tolanophane and Examination ofits Synthetic Methods. (Okayama Univ. of Sci.) KAWAI, Katsutoshi; CHIKAMORI, Hidemi; IWANAGA, Tetsuo; TOYOTA, Shinji
- **1PC-049** Synthesis, structures and spectral properties of novel helical molecules based on areno[2.n]metacyclophanes (Saga Univ.) TAZOE, Kazuya; UCHIKAWA, Yuki; YAMATO, Takehiko
- 1PC-050 Synthesis and photophysical properties of 4,5,9,10-tetraarylpyrenes (Grad. Sch. Sci. Eng., Saga Univ.) FENG, Xing; MIYAMOTO, Shinpei; NAGANO, Kouki; YAMATO, Takehiko
- 1PC-051 Synthesis and Properties of 10,10-dicyanopentafulvenes (Univ. of Hyogo) KATSUMOTO, Kenta; KITAMURA, Chitoshi; KAWASE, Takeshi

- 1PC-052 Synthesis of various condensed azulene derivatives starting from 2-morpholinocyclopenta[cd]azulene (Univ. of Toyama) MIYAZAKI, Mina; MOURI, Masaru; MIYATAKE, Ryuta; HORINO, Yoshikazu; ODA, Mitsunori; KURODA, Shigeyasu
- 1PC-053 A property and synthesis of dimethyl-subsutituted thiophenomethano[11]annulenone (Univ. of Toyama) NOJI, Shuhei; SUGAHARA, Takashi; MIYATAKE, Ryuta; HORINO, Yoshikazu; ODA, Mitsunori; KURODA, Shigeyasu
- 1PC-054 Synthesis and property of tetraethyl 2,9-dimorpholino-1,10-methano [14]annulene-3,4,7,8-tetracarboxylate (Univ. of Toyama) IDE, Ayana; ABE, Takako; NAGAYA, Ryou; MIYATAKE, Ryuta; HORINO, Yoshikazu; ODA, Mitsunori; KURODA, Shigeyasu
- 1PC-055 Synthesis and properties of pyrrole condensed bridged[11]annulenone (Univ. of Toyama) SUGIURA, Yuji; UENO, Mikihiro; HASE, Sunao; HORINO, Yoshikazu; MIYATAKE, Ryuta; ODA, Mitsunori; KURODA, Shigeyasu
- 1PC-056 The Synthesis of Tropolone fused 1,6-Methano[10]annulene (Univ. of Toyama) SHINODA, Hinako; OHIRA, Masayuki; MATSUMOTO, Naoko; MIYATAKE, Ryuta; HORINO, Yoshikazu; ODA, Mitsunori; KURODA, Shigeyasu
- 1PC-057 Synthesis of donor-acceptor type compound based on azulene (Grad. Sch. Sci., Eng., Yamagata Univ.) SHIBUYA, Yusuke; YAMAGUCHI, Yuji; KATAGIRI, Hiroshi; OHBA, Yoshihiro
- 1PC-058 Synthesis and photophysical properties of N-azulene-2-yl-naphthalimides. (Gunma National College of Technology) NAKAJIMA, Satoshi; OBI. Masashi
- 1PC-059 Synthesis and properties of thieno-acenes inserted viologens having long alkyl chein (Sch. Sci., Kitasato Univ.) HOSOI, Aiko; HASEGAWA, Masashi; MAZAKI, Yasuhiro
- 1PC-060 Synthesis and the crystal structure analysis of p-sulfonatothiacalix[n] arenes (Akita Univ.) HIRANO, Tatsunori; YAMADA, Manabu; KONDO, Yoshihiko; HAMADA, Fumio
- 1PC-061 Supramolecular Self-Assemblies of Oligothiophenes possessing Multiple Hydrogen-Bonding units (Grad. Sch. Eng., Chiba Univ.; AIST) YAGAI, Shiki; GUSHIKEN, Marina; KARATSU, Takashi; KITAMURA, Akihide; KIKKAWA, Yoshihiro
- 1PC-062 Spontaneous formation of supramolecular nanocoils from barbituric acid-Functionalized thiophene (Grad. Sch. of Eng., Chiba. Univ., AIST) YAGAI, Shiki; NOGUCHI, Takuya; KARATSU, Takashi; KITAMURA, Akihide; KIKKAWA, Yoshihiro
- 1PC-063 Synthesis and Properties of Trioxotriangulene Neutral Radicals Having Thiophene Moieties (Osaka Univ.; Osaka City Univ.) MURAYAMA, Hirotaka; UEDA, Akira; MURATA, Tsuyoshi; SATO, Kazunobu: TAKUI, Takeii: MORITA, Yasushi
- 1PC-064 Preparation and properties of giant conjugated molecules containing a strong light-emitting core unit and the long oligothiophenes as molecular wires (Kyoto Univ.; institute for molecular science; Toyobo; ToyoUniv.) ISHIKAWA, Hiroshi; SAKAMAKI, Daisuke; FUENO, Hiroyuki; ITO, Akihiro; TANAKA, Kazuyoshi; TANAKA, Syoji; ABE, Yukihiro; SATO, Maki; KOMATSU, Yoko; WADA, Yasuo
- 1PC-065 Synthesis and Properties of Diarylethene Derivatives Bearing Thienylcarbazole Moieties (Gunma Univ.) SUZUKI, Takashi; KATO, Shin-ichiro; NAKAMURA, Yosuke
- **1PC-066** Synthesis and Properties of π-Extended Thiadiazoles Fused with Thienopyrrole Moieties (Gunma Univ.) FURUYA, Takayuki; KATO, Shinichiro; NAKAMURA, Yosuke
- 1PC-067 Synthesis and properties of norbornadiene-bridged bithiophenedimer (Department of Chemistry, Graduate School of Science, Nagoya Univ.) KUREISHI, Yuka; SAITO, Shohei; YAMAGUCHI, Shigehiro
- 1PC-068 Development of effective synthetic method for π-extended BODIPY dyes (Department of Applied Chemistry, Graduate School of Engineering, Nagoya Univ.) TAMARU, Masatomo; HAYASHI, Yosuke; YAMAGUCHI, Shigeru; SHINOKUBO, Hiroshi
- 1PC-069 Functionalization of hexabenzocoronene by direct borylation (Department of Chemistry, Graduate School of Engineering, Nagoya Univ.) ITO, Satoru; YAMAGUCHI, Ryuichi; HIROTO, Satoru; SHINOKUBO, Hiroshi
- 1PC-070 Synthesis and photophysical properties of B,O-Chelated Conjugation-expanded dipyrromethene-boron complexes (Grad. Sch. Sci., Eng., Ehime Univ.) OKUJIMA, Tetsuo; TOMIMORI, Yuya; YANO, Tomoko; MORI, Shigeki; ONO, Noboru; YAMADA, Hiroko; UNO, Hidemitsu
- 1PC-071 Formation of tribenzofulvalene framework from dehydrobenzo[12] annulene (Department of Chemistry, Graduate School of Science, Nagoya Univ.) MATSUO, Kyohei; SAITO, Shohei; YAMAGUCHI, Shigehiro
- 1PC-072 Synthesis of fused aromatic compounds via cyclic products in one-pot McMurry coupling (Tokushima Bunri Univ.) AZUMAYA, Isao; TOHAYA, Taichi; OBATA, Ryosuke; KATAGIRI, Kosuke; TOMINAGA, Masahide
- 1PC-073 Synthesis and Physical Properties of π-Extended Polycyclic Aromatic Ketones Having p-Methylenequione Unit. (Faculty of Chemistry, Materials and Bioengineering, Kansai Univ.) NAKATSUKASA, Masamichi; UMEDA, Rui; NISHIYAMA, Yutaka
- 1PC-074 Synthesis and Properties of Novel Carbazole-π-Donating Hetrocycle Dyad (Osaka Kyoiku Univ.) HORI, Kazushige; KAWAMOTO, Masaya; TANI, Keita

- 1PC-075 Synthesis and Properties of Novel Aryloxyl Radical Having a Benzodithiophene Ring (Grad. Sch. Sci., Osaka Univ.) ISOGAI, Kazuki; HIRAO, Yasukazu; MATSUMOTO, Kouzou; KURATA, Hiroyuki; KUBO, Takashi
- 1PC-076 Synthesis of the as-indacene-bridged bisphenalenyl: A delocalized singlet biradical molecule (Grad. Sch. Sci., Osaka Univ.) ISHIDA, Megumi; HIRAO, Yasukazu; MATSUMOTO, Kouzou; KURATA, Hiroyuki; KUBO, Takashi
- 1PC-077 Synthesis and Properties of Trioxotriangulene Neutral Radical Possessing Carbazole Groups (Grad. Sch. Sci., Osaka Univ.) KARIYAZONO, Kazuki; MURATA, Tsuyoshi; UEDA, Akira; NISHIDA, Shinsuke; SATO, Kazunobu; TAKUI, Takeji; MORITA, Yasushi
- 1PC-078 Synthesis of Novel Metal-Coordinated DT Donors Containing a Crown Ether Unit (Nagoya Institute of Technology) SAKO, Katsuya; KAHEHI, Toshiaki; OKU, Haruyuki; SHIOTSUKA, Michito; TATEMITSU, Hitoshi
- 1PC-079 Synthesis and Structure of Bis(anthroxyl) Inserted with Tetracene or Pentacene (Grad. Sch. Sci., Osaka Univ.) SAGAYAMA, Kensuke; KURATA, Hiroyuki; KONISHI, Akihito; HIRAO, Yasukazu; MATSUMOTO, Kouzou; KUBO, Takashi
- 1PC-080 Synthesis of a macrocyclic fluorene array linked with butadiyne (Univ. of Yamanashi; Graduate School of Yamanashi) AMANO, Tatsuya; OGAWA, Kazuya
- 1PC-081 Synthesis and Spectroscopic Properties of 5,12-Diethynyletracene Derivatives. (Okayama Univ. of Sci.) IWANAGA, Tetsuo; NISHIOKA, Keita: TOYOTA. Shinii
- 1PC-082 Influence on Fluorescence Properties by Salt Formation of Diimidazo[1,2-a:2',1'-c]quinoxalines (Graduate School of Engineering, Chiba Univ.) MATSUMOTO, Shoji; ABE, Hajime; BATMUNKH, Erdenebolor; AKAZOME, Motohiro
- 1PC-083 Synthesis and optical properties of novel chiral molecules containing pyrimidine ring (Graduate School of Science, Osaka Univ.Graduate School of Integrated Arts and Sciences, Hiroshima Univ.Department of Chemistry, Univ. of Pisa) TANAKA, Rina; MATSUMOTO, Kouzou; NEHIRA, Tatsuo; PESCITELLI, Gennaro; HIRAO, Yasukazu; KURATA, Hiroyuki; KUBO, Takashi
- 1PC-084 CD signal reversal of chiral molecules with long π-conjugated substituents (Graduate School of Engineering, the Univ. of Kyoto) INOUE, Yuki; HIROSE, Takashi; HASEGAWA, Jun-ya; MTTSUDA, Kenji
- 1PC-085 Preparation of Regioisomers of Optical Active Benzylaminohydroxybutanoic Acid (Kansai Univ.) ICHIMUIRA, Serina; YAJIMA, Tatsuo; SHIRAIWA, Tadashi
- 1PC-086 Racemic Structure and Optical Resolution for Racemic 2-Amino-3-methylpentanoic Acid Derivatives (Kansai Univ.) KIMURA, Makiko; YAJIMA, Tatsuo; SHIRAIWA, Tadashi
- 1PC-087 Chiral Supramolecular Aggregate Formation of Novel Optically Active Phosphoric Acid Diesters Based on Binaphthyl Units and Their Application to Asymmetric Organocatalyst (Kanazawa Univ.) MOCHIDA, Hirotsugu; MAEDA, Katsuhiro; IKAI, Tomoyuki; KANOH, Shigeyoshi
- 1PC-088 Multiple Ethynylation of 1,8-Dichloroanthraquinone and Structural Determination of Products (Okayama Univ. of Sci.) TSUYA, Takuya; TOYOTA, Shinji
- 1PC-089 Synthesis of amohioatic compounds having cholestrol moiety and PEG moiety (Kyutech Institute of Technology) EZOE, Sachiko; TOYOSE, Yasushi; TUGE, Akihiko; ARAKI, Koji
- 1PC-090 Aggregation and Emission Found in Donor-pi-donor Dyes in Water System (Kurume National College of Technology) KICHISE, Yuki; IKEDA. Kei: ISHI-I. Tsutomu
- 1PC-091 SNPs analysis of rice genome by using of photo-reactive molecular probes coupled with photocrosslinking (JAIST) TAKEMATSU, Yuki; YOSHIMURA, Yoshinaga; HIRATSUKA, Kaoru; SAKAMOTO, Takeshi; FUJIMOTO, Kenzo
- 1PC-092 Self-assembly of dendrimers with conjugated back-bones through multiple hydrogen bonding interactons (Graduate School of Science, Osaka City Univ.) TANAKA, Sachiko; KOZAKI, Masatoshi; SUZUKI, Shuichi; OKADA, Keiji
- 1PC-093 Coaggregation of perylene bisimides possessingcyanuric acid and melamine derivatives possessing long alkylchains (Grad. Sch. Eng., Chiba Univ.) YAGAI, Shiki; NOZAWA, Ryo; KARATSU, Takashi; KITAMURA, Akihide
- 1PC-094 Control of self-assembled structures of amphiphilic dipolar molecules (Grad. Sch. Eng., Chiba Univ.: Grad. Sch. Sci. and Eng., Ehime Univ.: JST-CREST) YAGAI, Shiki; NAKANO, Yujiro; KARATSU, Takashi; KITAMURA, Akihide; KUZUHARA, Daiki; YAMADA, Hiroko
- 1PC-095 Self-assembly of naphthalene derivatives possessing barbituric acid (Grad. Sch. Eng., Chiba Univ. Univ.; AIST) YAGAI, Shiki; GOTO, Yusaku; KARATSU, Takashi; KITAMURA, Akihide; KIKKAWA, Yoshihiro
- 1PC-096 Crystal Structure of TPT(H<sub>2</sub>CA)<sub>2</sub>(AcOH)<sub>3</sub> (Grad. Sch. Sys Eng., Wakayama Univ.) KASHIHATA, Daisuke; TOKOYAMA, Hiroaki; YAMAKADO, Hideo
- 1PC-097 Control of pi-stacked one-dimensional superstructures composed of octadehydrodibenzo[12]annulene core (Graduate School of Engineering, Osaka Univ.) MABNNABE, Noriko; HISAKI, Ichiro; TOHNAI, Norimitsu; MIYATA, Mikiji

- 1PC-098 Synthesis and Properties of Pincer-Type Platinum Complexes Directly Linked to Nitronyl Nitroxide (Osaka City Univ.) ZHANG, Xun; SUZUKI, Shuichi: KOZAKI, Masatoshi: OKADA, Kejij
- 1PC-099 Studies on the Synthesis of Metal Complexes of 4-Amino-3-pyridinol and the Corresponding Thiol (Grad. Sch. Sci., Osaka Univ.) KITAYAMA, Naoki; MATSUMOTO, Kouzou; HIRAO, Yasukazu; KURATA, Hiroyuki; KUBO, Takashi
- 1PC-100 Synthesis and properties of cruciform pi-systems directed toward multichannel connection of gold nanoparticles (Tokyo Metropolitan Univ.) AO, Deligen; NARITA, Tomoyuki; TAKASE, Masayoshi; NISHINAGA, Tohru; IYODA, Masahiko
- 1PC-101 The synthesis and electrochemical properties of new viologen derivatives (Tokyo Metropolitan Univ.;) SAITO, Yuna; YAMAGUCHI, Moto; SATO, Kiyoshi
- 1PC-102 Synthesis and properties of gold phthalocyanines (Graduate School of Science, Tohoku Univ.) MIURA, Akito; SHIMIZU, Soji; WONG, Edwin; LEZNOFF, Daniel; KOBAYASHI, Nagao
- 1PC-103 Synthesis of PCBM analogues in an aqueous two-phase system (Osaka Municipal Technical Research Ins.) IWAI, Toshiyuki; MATSUMOTO, Fukashi; MORIWAKI, Kazuyuki; TAKAO, Yuko; ITO, Takatoshi; OHNO, Toshinobu
- 1PC-104 Synthesis of Tetrakis(1-methyl-pyridinium-4-yl)methane and Its Reduced Species (Grad. Sch. Sci., Osaka Univ.) KOBAYASHI, Kenji; MATSUMOTO, Kouzou; HIRAO, Yasukazu; KURATA, Hiroyuki; KUBO, Takashi
- 1PC-105 Synthesis of organic conductor composed of polycyclic aromatic hydrocarbon radical (Grad. Sch. Sci., Osaka Univ.) UCHIDA, Kazuyuki; HIRAO, Yasukazu; MATSUMOTO, Kouzou; KURATA, Hiroyuki; KUBO, Takashi
- 1PC-106 Synthesis of 2,3,4,5-tetra(2-thienyl)cyclopentadienone intended for the application to Dye-sensitized Solar Cell (Grad. Sch. of Eng., Osaka Pref. Univ.; Res. Inst. Mol. Elect. Dev., Osaka Pref. Univ.) MATSUO, Kazuki; IKEDA, Hiroshi; MIZUNO, Kazuhiko
- 1PC-107 Synthesis and properties of diindenopyrazinedione derivatives introduced terminal substituents (Interdisciplinary Grad. School of Science and Engineering, Tokyo Institute of Technology) DENO, Hironori; NISHIDA, Jun-ichi; YAMASHITA, Yoshiro
- 1PC-108 Syntheses, properties and applications of 11,11,12,12-tetracyano-9,10-anthraquinodimethane derivatives as n-type materials (Interdisciplinary Grad. School of Science and Engineering, Tokyo Institute of Technology) CHIBA, Hiroshi; NISHIDA, Jun-ichi; YAMASHITA, Yoshiro
- 1PC-109 Substituent effects on the reductive alkylation of SWNTs (Dept. Chem., Tokyo Gakugei Univ.) CHIBA, Yuriko; OKUI, Yumi; AKAMATSU, Norihisa; YAMADA, Michio; MAEDA, Yutaka; HASEGAWA, Tadashi; AKASAKA, Takeshi
- 1PC-110 Synthesis and Intracellular Fluorescence Behavior of Ar,O-BODI-PYs Bearing Various Substituents (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) YAZAKI, Shinya; SAKAMOTO, Naoya; YAMAMURA, Masaki; SHIMAMURA, Michio; NABESHIMA, Tatsuya
- 1PC-111 Synthesis and Near Infrared Fluorescence Behavior of N<sub>2</sub>O Type BODIPY Dimer (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) FUJITA, Shinji; SAKAMOTO, Naoya; YAMAMURA, Masaki; NABESHIMA, Tatsuva
- 1PC-112 Trinuclear Triple-helicate Composed of Quaterimidazole and Zinc Ion (Grad. Sch. Sci., Osaka Univ.) NOBUKUNI, Hirofumi; YAKIYAMA, Yumi; MURATA, Tsuyoshi; MORITA, Yasushi
- 1PC-113 Synthesis and fluorescence properties of bis(arylsulfonyl)-aniline analogues with the formation of peptide-like hydrogen bonds (Grad. Sch. Sci., Eng., Yamagata Univ.) BEPPU, Teruo; MATSUDA, Shota; KATAGIRI, Hiroshi; OHBA, Yoshihiro
- 1PC-114 Synthesis and Complexation of Novel Multidentate Ligands Based on a Pybox Unit. (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) KAWAGOE, Shota; YAMAMURA, Masaki; NABESHIMA, Tatsuya
- **1PC-115** Preparation of chiral supramolecular organic fluorophore composed of chiral amine and  $\pi$ -conjugated carboxylic acid devivatives. (Kinki Univ.; NAIST; Univ. of Tokyo) SHIMOMAKI, Ryutaro; NISHIGUCHI, Noriaki; SATO, Tomohiro; NAKANO, Yoko; TOKUTOME, Hayato; FUJIKI, Michiya; KURODA, Reiko; MATSUBARA, Yoshio; IMAI, Yoshitane
- 1PC-116 Preparation of chiral supramolecular organic fluorophore composed of thiophenecarboxylic acid and chiral amine molecules. (Kinki Univ.; Univ. of Tokyo) KIMOTO, Takaya; SHIOTA, Naoki; KINUTA, Takafumi; SATO, Tomohiro; TOKUTOME, Hayato; KURODA, Reiko; MATSUBARA, Yoshio: IMAI, Yoshitane
- 1PC-117<sup>†</sup> Complexation behavior of multicomponent supramolecular complex using axially chiral component molecule. (Kinki Univ.; Univ. of Tokyo; NAIST) KINUTA, Takafumi; SHIOTA, Naoki; SATO, Tomohiro; TOKUTOME, Hayato; KURODA, Reiko; FUJIKI, Michiya; MATSUBARA, Yoshio; IMAI, Yoshitane
- 1PC-118 The synthesis and property of crystalline compounds having phenylboronate unit (Saitama Univ.) YASUTAKE, Mikio; YANO, Ryousuke; HIROSE, Takuji
- 1PC-119 Preparation and Properties of Porphyrin-Oligo(phenylene-ethynylene) dyads with Bipyridyl Terminals (Fac. Sci., Osaka City Univ.) NINOMIYA, Yoshikazu; KOZAKI, Masatoshi; SUZUKI, Shuichi; OKADA, Keiji

- 1PC-120 Efficient solid-state ESIPT luminescnece of phenylimidazopyridine derivatives: Substitution effect on the phenyl unit (IIS, The Univ. of Tokyo) SAWATANI, Hirotaka: SHONO, Hideaki: MUTAI, Toshiki: ARAKI, Koii
- 1PC-121 Visible-light photoisomerization and solid-state-luminescence of quadrupolar molecules comprising N-phenylcarbazole and dimethyl diethnyllfumarate (School of science. the Univ. of Tokyo) HAYASHI, Mikihiro; SAKAMOTO, Ryota; NISHIHARA, Hiroshi
- 1PC-122 Influence of local arrangement of dyes to aggregate-induced enhanced emission character (Grad. School of Eng. Kyoto Univ.) FUJIMORI, Yuya; HIROSE, Takashi; MATSUDA, Kenji
- 1PC-123 Optical Resolution of [3.3](3,9)Carbazolophane-Sulfonamide and its Properties (Osaka Kyoiku Univ.) IMAFUKU, Risa; TANI, Keita; HORI, Kazushige; KUBONO, Koji; NAKAI, Yoshito; MORI, Tadashi; INOUE, Yoshihisa
- 1PC-124 Preparation of supramolecular CT complex composed of 10-(2-hydroxynaphthyl)-9-phenanthrol and various eletron acceptor molecules (Kinki Univ.; The Univ. of Tokyo; Univ. of Tsukuba) UKEGAWA, Tatsuya; SATO, Tomohiro; TAJIMA, Nobuo; KURODA, Reiko; MATSUBARA, Yoshio; IMAI, Yoshitane
- 1PC-125 Synthesis and characterization of endohedral metallofullerene / organic-donor dyad (Univ. Tsukuba, TARA Center) NAKATA, Akira; TSUCHIYA, Takahiro; AKASAKA, Takeshi; NAGASE, Shigeru
- 1PC-126 Synthesis and characterization of phenylene-linked C<sub>60</sub> fullerene dimer (Univ. of Tsukuba; TARA Center) NISHIMOTO, Kazuaki; TSUCHIYA, Takahiro; AKASAKA, Takeshi
- 1PC-127 Orifice expansion of open-cage fullerenes promoted by Amines (Department of chemistry, Faculty of Science, Kanagawa Univ.) ISHIDA, Takuya; SHIMURA, Keita; KANEKO, Ryota; SASAKI, Soshi; TAKEUCHI, Hirotaka; MASAYA, Yuta; YOKOYAMA, Hiroshi; KABE, Yoshio
- 1PC-128 Preparation and chiral optical property of chiral supramolecular organic fluorophore composed of fluorescent sulfonic acid and chiral amine derivatives. (Kinki Univ.; NAIST; Univ. of Tokyo) OKUNO, Takahiro; TAMARU, Soichiro; SHIOTA, Naoki; KINUTA, Takafumi; SATO, Tomohiro; NAKANO, Yoko; TOKUTOME, Hayato; FUJIKI, Michiya; KURODA, Reiko; MATSUBARA, Yoshio; IMAI, Yoshitane
- 1PC-129 Synthesis of Benzothiophenones Conjugated by Rhodanine and their Applications to Dye-sensitized Solar Cell (Seikei Univ.) IWATA, Satoru; KOBAYASHI, Shintaro: TANAKA, Kiyoshi
- 1PC-130 Optical Properties of Dialkyl Alkoxybiphenylphosphonate-Silica-Composites and Their Use to Volatile Organic Compound Detection (Interdisciplinary Graduate School of Scienceand Engineering, Tokyo Institute of Technology; ChemicalResources Laboratory, Tokyo Institute of Technology) MICHIBAYASHI, Nobuhiro; MAKIOKA, Yoshikazu; TANIGUCHI, Yuki
- 1PC-131 Synthesis of a Triad Consisting of Tripod-shaped Trithiol, Benzocrown Ether, and Ferrocene and Preparation of Its Self-Assembled Monolayer on Au(111) (Graduate School of Engineering, Mie Univ.) UMEMURA, Tatsuhiko; OKAZAKI, Takao; KITAGAWA, Toshikazu
- 1PC-132 A Study on Click Reaction in Surface Confined Nanospace (Graduate School of Engineering Science, Osaka Univ.) ITANO, Shintaro; TAHARA, Kazukuni; TOBE, Yoshito
- 1PC-133 Preparation of self-assembled monolayers of dendrons containing photodegradable group (Kanagawa Univ. Faculty of Science) FUJITA, Satoru; WAKOU, Chiaki; CHIKARAISHI, Noriko; YAMAGUCHI, Kazuo
- 1PC-134 OFET characteristics of the bis(octylphenyl)chrysene based devices.
  (Tokai Univ.; Ushio Chemix Co.) SAITO, Makoto; OTSUKI, Hiroyuki;
  OKAMOTO, Kazuo; KUNUGI, Yoshihito
- 1PC-135 Magnetic properties of photochromic materials with indandione derivatives (The Univ. of Electro-Communications, Department of Engineering Science) ISHIDA, Takayuki; IDA, Yumi
- 1PC-136 Effect of substitient group at benzyl position on photodegradation of 2-nitrobenzyl esters (Kanagawa Univ. Faculty of Science) WATANABE, Kazuhiro; SATO, Hikaru; NAKAGIMA, Kazuki; MIHARA, Marino; CHIKARAISHI, Noriko; YAMAGUCHI, Kazuo
- 1PC-137 Synthesis and Properties of Diarylethene Derivatives Directly Linked with Oxadiazole Moiety (Osaka Kyoiku Univ.) TAKAYAMA, Yoshiyuki; ARIMA, Yu; HORI, Kazushige; SASA, Toshiyuki; TSUJIOKA, Tsuyoshi; TANI, Keita
- 1PC-138 Syntheses, structures and properties of the complexes of organic radicals containing carborane frameworks. (College of Sciences and Humanities, Nihon Univ.) SUZUKI, Rei; IWAHORI, Fumiyasu
- 1PC-139 Preparation of amphiphilic organic radical compound and properties of its emulsions (Kyoto Univ.) FUJISAWA, Yu; SUZUKI, Katsuaki; UCHIDA, Yoshiaki; SHIMONO, Satoshi; TAMURA, Rui; KATO, Tatsuhisa; YAMAUCHI, Jun
- 1PC-140 Synthesis of organic radical supramolecular gelator and properties of its hydrogel (Kyoto Univ.) YAMAMOTO, Takayuki; SUZUKI, Katsuaki; UCHIDA, Yoshiaki; SHIMONO, Satoshi; TAMURA, Rui; KATO, Tatsuhisa; YAMAUCHI, Jun
- 1PC-141 Photocontrol of Magnetic Properties of Azobenzene Derivatives Containing a Chiral Nitroxide Biradical Structure. (Kyoto Univ.) HINO, Kenjiro; SUZUKI, Katsuaki; UCHIDA, Yoshiaki; SHIMONO, Satoshi; TAMURA, Rui; KATO, Tatsuhisa; YAMAUCHI, Jun
- 1PC-142 Synthesis and properties of new TTP dimers (Grad. Sch. Sci., Eng.,

- Ehime Univ.) KIMURA, Haruka; SHIRAHATA, Takashi; MISAKI, Yohji **1PC-143** Synthesis and properties of anthraquinoid-type π-extended TTP system of donor (Grad. Sch. Sci., Eng., Ehime Univ.) KATO, Minami; FUJITA, Yusuke; SHIRAHATA, Takashi; MISAKI, Yohji
- 1PC-144 Synthetic and properties of anthraquinoid type higher homologes of extended TTP system of donor (Grad. Sch. Sci., Eng., Ehime Univ.) OGI, Daisuke; FUJITA, Yusuke; SHIRAHATA, Takashi; MISAKI, Yohji
- 1PC-145 Preparation and Properties of Photo-functional Naphthalenediimide Derivatives Carrying TEMPO Radical (Univ. of Hyogo; Osaka Univ.) NAKAGAWA, Miki; AKUTSU, Hiroki; YAMADA, Junichi; KARAKAWA, Makoto; ASO, Yoshio; NAKATSUJI, Shinichi
- 1PC-146 Preparation and Properties of Naphthalenediimide Derivatives Carrying Carboxy Group and TEMPO Radical (Univ. of Hyogo) KOJOH, Ayumi; NAKAGAWA, Miki; AKUTSU, Hiroki; YAMADA, Junichi; NAKATSUJI, Shinichi
- 1PC-147 Preparation and Properties of Some Ferrocene Derivatives Carrying Stable Radical (Univ. of Hyogo; Murata Manufacturing Co.) FUJIWARA, Kazuya; AKUTSU, Hiroki; YAMADA, Junichi; SATOH, Masaharu; NAKATSUJI, Shinichi
- 1PC-148 Syntheses and properties of Nitroxide-substituted Iminonitroxide Diradical and Its Magnetic Metal Complexes (Department of Chemistry, Graduate School of Science, Osaka City Univ.) FURUI, Takanori; SUZUKI, Shuichi; KOZAKI, Masatoshi; SHIOMI, Daisuke; SATO, Kazunobu; TAKUI, Takeji; OKADA, Keiji
- 1PC-149 Synthesis and Properties of Verdazyl Biradical via Organometallic Reaction (Department of Applied Chemistry, Keio Univ.) HIGUCHI, Hironori; MAEDA, Chihiro; YOSHIOKA, Naoki
- 1PC-150 Synthesis and Property of Benzindole Nitronyl Nitroxide (Faculty of Science and Technology, Keio Univ.) YAMAGUCHI, Yuta; MURAOKA, Takashi; MAEDA, Chihiro; YOSHIOKA, Naoki
- 1PC-151 Synthesis, Structure and Magnetic Property of 6-Pivaloyl Indole Nitronyl Nitroxide (Faculty of science and technology, Keio Univ.) SUGAWARA, Hiromasa; MURAOKA, Takashi; MAEDA, Chihiro; YOSHIOKA, Naoki
- 1PC-152 Effect of proximithive chlorine-substituents bounded to a biphenyl skeleton on the adsorption and desorption enthalpy. (Univ. of Shizuoka; Inst. for Envron.Sci.) MAKINO. Masakazu
- 1PC-153 Electroluminescence Properties of Ferulic acid derivatives (Industrial Technology Center of Wakayama Prefecture) MIYAKE, Yasuhito; MORI, Hajime; TANAKA, Yoshie; MORI, Megumi; SAOMOTO, Hitoshi; MORI, Takeshi; KOBATA, Toshitsugu; INOUE, Kaname; KOSHITANI, Takeshi; AOKI, Yasunori
- 1PC-154 Study on Photoabsorption Spectra of Ferulic Acid Derivatives by DFT Caluculations (Industrial Technology Center of Wakayama Prefecture) MORI, Hajime; HOSODA, Asao; MIYAKE, Yasuhito; TANAKA, Yoshie; OSAKI, Shusuke; KOBATA, Toshitsugu; TANIGUCHI, Hisaji
- 1PC-155 Prediction of Solubility of Drugs in water/ethanol solvents Using COSMO-RS and Group Contribution Methods (Dept. of Biotech. kinki Univ.; Dept. of chem. kinki Univ.) FUJISAWA, Masao; TSUTSUMI, Hirotaka; KIMURA, Takayoshi
- 1PC-156 Drastic CD Spectral Changes of the Hg<sup>2+</sup> Complexes with Chiral Podands Bearing Pyridine Units (Department of Chemistry, Faculty of Science, Toho Univ., Department of Chemistry, Gyeongsung National Univ. & Reserch Center for Materials with Integrated Properties, Toho Univ.) IKEDA, Mari; KUWAHARA, Shunsuke; LEE, Shim Sung; HABATA, Yoichi
- 1PC-157 Synthesis of quaterphenylcrown ethers for formation of pseudorotaxanes (Department of Chemistry, Faculty of Science & Research Center for Materials with Integrated properties, Toho University) CHAMURA, Rie; KUWAHARA, Shunsuke; HABATA, Yoichi
- 1PC-158 Synthesis of cyrindrical cryptands having silver-vorous molecules and the structure of a silver complex (Department of Chemistry, Faculty of Science & Research Center for Materials with Integrated properties, Toho University) NIHEI, Yutaro; KUWAHARA, Shunsuke; HABATA, Yoichi
- 1PC-159 Development of Chiral Cyclic Spiroorthocarbonates (Dept. of Chem. Konan Univ.) IWASO, Kazuhisa; DANJO, Hiroshi; KAWAHATA, Masatoshi; YAMAGUCHI, Kentaro; MIYAZAWA, Toshifumi
- 1PC-160 Molecular Recognition Behavior of Functionalized Cyclic Tris (spiroborate)s (Dept. of Chem. Konan Univ.) MASUDA, Yuki; KAWANISHI, Hiroko; DANJO, Hiroshi; KAWAHATA, Masatoshi; AZUMAYA, Isao; YAMAGUCHI, Kentaro; MIYAZAWA, Toshifumi
- 1PC-161 Synthesis of Dumbbell-type of Pyridyl- and Phenol-Cavitands Directed to Hydrogen-Bonded Supramolecular Capsule Polymers (Shizuoka Univ.) ICHIHARA, Keisuke: KOBAYASHI, Kenii
- 1PC-162 Synthesis of Calix[4]resorcinarene Bearing Azo-Dendron Side Chains Directed to a Photoresponsive Self-Assembled Cubic Capsule (Shizuoka Univ.) SAKANO, Tsubasa; TOGARI, Yuka; YAMANAKA, Masamichi: KOBAYASHI. Kenji
- 1PC-163 Solid-state fluorescence spectra of metal complexes with a silver-vorous molecules bearing 4-(anthracen-9-yl)benzyl groups (Department of Chemistry, Faculty of Science & Research Center for Materials with Integrated) KIKUKAWA, Kaoru; KUWAHARA, Shunsuke; HABATA, Yoichi
- 1PC-164 Synthesis of a silver-vorous molecule having pyrenylbenzyl groups

- and complexing properties for metal ions (Department of Chemistry, Fuculty of Science & Reserch Center for Materials with Integrated Properties, Toho Univ.) HABATA, Youichi; TANIGUCHI, Aya; KIKUKAWA, Kaoru; KUWAHARA, Shunsuke
- 1PC-165 Synthesis of a water-soluble tetra-armed cyclen and the structure of the silver complex (Department of Chemistry, Faculty of Science, Toho Univ.)
  & Research Center for Materials with Integrated Properties, Toho Univ.)
  OKEDA, Yoko; KUWAHARA, Shunsuke; HABATA, Yoichi
- 1PC-166 Research on isomer production of substitution cyanoguanidine by phase-transfer reaction (Univ. of Tokyo Denki; School of Engineering) ENOMOTO, Keiichiro; TAKAHASHI, Ryouhei; TANAKA, Satomi; SHIBA, Ryuichi
- 1PC-167 Optical resolution of 6,6'-dibromo-2,2'-binaphthol by complexation with N-benzylcinchonidinium chloride (Kansai Univ.) YAMAMOTO, Tatsunari; TANAKA, Koichi
- 1PC-168 Synthesis and Optical Properties of Azacalix[3]pyridine Copper(I) Complex (Univ. of Tsukuba TIMS) UCHIDA, Natsuko; TAKETOSHI, Ayako; KUWABARA, Junpei; KANBARA, Takaki
- 1PC-169 Syntesis and evaluation of the molecular motor conjugated peputides to bind double strand DNA (The Institute of Multidisciplinary Research for Advanced Materials, Tohoku Univ.) TAKAHASHI, Yusuke; KOBAYASHI, Maiko; NAGATSUGI, Fumi
- **1PC-170** Syntheses and Dynamic Behaviors of Rocking Rotaxanes with  $C_v$  Symmetry (Graduate School of Engineering Science, Osaka) HIROSE, Keiji; OKADA, Shizuka; TOBE, Yoshito
- 1PC-171 Development of Photoswitchable Molecular Rotor Having Crownether Structure (Faculty of Science, Toho Univ.; Research Center for Materials with Integrated Properties, Toho Univ.) NAKANO, Yuki; HABATA, Yoichi; KUWAHARA, Shunsuke
- 1PC-172 Synthesis of Novel Quaterphenyl Derivatives for Determination of the AbsoluteConfiguration of Chiral Primary Amines (Faculty of Science, Toho Univ.; Research Center for Materials with Integrated Properties, Toho Univ.) KUWAHARA, Shunsuke; NAKAMURA, Masaya; YAMAGUCHI, Akira: HABATA. Yoichi
- 1PC-173 Design and Utilization of Photoresponsive Nitrogen-Containing Aromatic Compounds [4] Synthesis and Molecular Structure of Schiff-Base Metal Complex Having Azobenzene Moiety (Faculty of Engineering, Tokyo Univ. of Science) SAWADA, Tsutomu; ARAI, Rie; GOTO, Hidetoshi; SUGIMOTO, Hiroshi
- 1PC-174 Design and Utilization of Photoresponsive Nitrogen-containing Aromatic Compounds [5]Reversible Photoisomerization of Oligo-o-phenyleneHaving Azo and Metal Binding Units in Solution (Faculty of Engineering, Tokyo Univ. of Science) ARAI, Rie; SAWADA, Tsutomu; GOTO, Hidetoshi: SUGIMOTO, Hiroshi
- 1PC-175 Synthesis and Complexation Behavior of Tripodal Ligands Bearing Recognition Sites (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) OKUHARA, Takashi; YAMAMURA, Masaki; NABESHIMA, Tatsuya
- 1PC-176 Synthesis and Luminescent Properties of Iridium(III) Complex Responsive to External Conditions (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) TOGAWA, Yui; YAMAMURA, Masaki; NABESHIMA, Tatsuya
- 1PC-177 Two step chirality transfer mediated by metal-cyclen complexes (Graduate Schools of Science, Osaka City Univ. and JST, CREST) ITO, Hiroshi; SHINODA, Satoshi; TSUKUBE, Hiroshi
- 1PC-178 Synthesis and Chiral Discrimination Ability of Tripod-type Chiral Host Molecule (Osaka Institute of Technology) KOJITANI , Yoshiaki; NAKAMURA, Misako; MURAOKA, Masahiro; NAKATSUJI, Yohji
- 1PC-179 Formation of Organic-Inorganic Composite Structures Consisting of Bowl-shaped Receptors and Polyoxometalates (Grad. School of Science, The Univ. of Tokyo) HASHIDA, Shizuka; TASHIRO, Shohei; SHIONOYA, Mitsuhiko
- 1PC-180 Bowl-shaped Structure and Inclusion Ability of Cyclic Peptides Consisted of Anthranilic Acid and Leucine (Graduate School of Engineering, Chiba Univ.) AKAZOME, Motohiro; TAKAGI, Koji; KEICHO, Kazuaki; MATSUMOTO, Shoji
- 1PC-181 Stabilization of Amidinium-Carboxylate Salt Bridges by using Cation-pi Interactions and its Fluorescence Properties (Kyoto Institute of Technology) KUSUKAWA, Takahiro; TANAKA, Syugo; FUJITA, Tomoki; HARADA, Toshiro
- 1PC-182 Synthesis of Diamidines Having Biphenylene Spacer Units and Its Multicomponent Assembly. (Kyoto Institute of Technology) KUSUKAWA, Takahiro: IIZUKA, Wataru: HARADA, Toshiro
- 1PC-183 Construction of Macrocyclic Boronic EstersUsing Substituted 1,4-Benzenediboronic Acids and Its Ability of Molecular Inclusion (Tokyo Institute of Technology) TAKATA, Hisatsugu; KIKUCHI, Yuji; TAKAHAGI, Hiroki; ONO, Kosuke; IWASAWA, Nobuharu
- 1PC-184 Synthesis of a 1,3,2-Diazaborole-derived Organogelator (Tokyo Metropolitan Univ.) TANAKA, Kyohei; NISHIYABU, Ryuhei; KUBO, Yuii
- 1PC-185 Design of dynamic molecular assembly using phenylboronic acid esters (Kyushu Institute of Technology, Faculty of Engineering) NAKAGAMI, Hidenori; TOYOSE, Yasushi; TSUGE, Akihiko; ARAKI, Koji
- 1PC-186 Crystal Structure and Fluorescence Behavior of N,N'-Bis(1-naphthylmethyl)-diazonia-18-crown-6 Diisothiocyanate (Health Sci. Univ. Hokkaido, Kanagawa Univ.) KUBO, Kanji; SAKURAI, Tadamitsu; TAKAHASHI, Hajime; TEKECHI, Haruko

- 1PC-187 Synthesis of Type of Constructing a Bridge Calix[4]arene Ionophore (Kyusyu Institute of Technology) RYU, Kazumichi; TOYOSE, Yasusi; TSUGE, Akihiko: ARAKI, Kouii
- 1PC-188 Synthesis of azacrown ether derivatives having pyrene or perylene moieties and detection of alkali metal ions (Dept. of Chem.; Tokyo Med Univ.) NISHIMURA, Yukihiro; ARAI, Sadao
- 1PC-189 Synthesis and Characterization of Lithium Ion Selective Calix[4] arenes (Kyushu Institute of Technology) INUZUKA, Shino; TOYOSE, Yasushi; TSUGE, Akihiko; ARAKI, Koji
- 1PC-190 Synthesis of thiacalix[4]arene derivative possessing a amidorea moiety and evaluation of ion recognition (Saga Univ.) TANAKA, Tetsuya; TOMIYASU, Hirotsugu; NI, Xing-long; YAMATO, Takehiko
- 1PC-191 Novel synthetic method of pyromellitic diimide-based macrocyclic compounds by using microreactor (IMCE, Kyushu Univ.Grad. School Sciences, Kyushu Univ.) TAO, Keisuke; GOTO, Kenta; SHINMYOZU, Teruo
- 1PC-192 Synthesis and photophysical properties of naphthalimide bearing poly ether chain. (Gunma National College of Technology) NAKAJIMA, Satoshi; SUDA, Kazuho
- 1PC-193 Association Phenomena of Anions and Acidic Functionalities in Aprotic Solvents (Kochi Univ. of Technology) KOBIRO, Kazuya; WADA, Taishi; YAMAMOTO, Tomoko; ISHIDA, Keiichiro; WANG, Pengyu
- 1PC-194 Indole Derivatives Bearing Schiff Base Moieties: Selective Receptors toward Dihydrogen Phosphate (Yamagata Univ.) KONDO, Masayuki; ITO, Kazuaki
- 1PC-195 Probes for Cyanide Ion: Porphyrin Derivatives (Yamagata Univ) YATO, Satoshi; ITO, Kazuaki
- 1PC-196 Enantioselective Fluorescence Quenching of the Bridged (S)-3-(1-Naphthyl)alanine-Derived Dipeptides by Chiral Amines (Kanagawa Univ.) ISHIKAWA, Tomoe; SONOBE, Miho; HAYAKAWA, Akinori; IGARASHI, Tetsutaro: SAKURAI. Tadamitsu
- 1PC-197 Synthesis and properties of an extended tetrathiafulvalene derivative containing fused crown ether rings (2) (Shinshu Univ.) ANDOU, Yousuke; OHTA, Akira
- 1PC-198 Synthesis of Macrocyclic Sulfoximine for the Recognition of Cyclic Amides (Dep. of Chemistry, Fac. of Science, Kanagawa Univ.) IIJIMA, Kohta; KIHARA, Nobuhiro
- 1PC-199 Fluorescent properties of fluorophore capturing magnesium cation (Seikei Univ.) TANAKA, Kiyoshi; TAKAHASHI, Masayoshi; HARA, Sanami; IWATA, Satoru
- 1PC-200 Synthesis and Complexation of New Ligand Having a Hexa-peri-hexabenzocoronene Skeleton (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ONUMA, Takahiro; AKINE, Shigehisa; NABESHIMA, Tatsuya

## Physical Organic Chemistry -Reaction Mechanism-

- **1PC-203** Gas Phase Unimolecular Dissociation for N,N'-[3-(4-Substituted-phenyl)propanoyl]imidazolidin(e)-2-(thi)one Analogues Using a Four Secter Tandem Mass Spectrometer (Osaka Prefecture Univ.; Univ. of Fukui; Jin'ai Univ.) IWAHASHI, Atsuhide; KAWAGUCHI, Miwa; NAKATA, Ryuji; ISA, Kimio; YAMAOKA, Hiroshi
- 1PC-204 Gas Phase Unimolecular Dissociation for N,(N')-(di)acylimidazoli-din(e)-2-(thi)one Derivatives Using a Four Sector Tandem Mass Spectrometer. (Osaka Prefecture Univ.; Univ. of Fukui; Jin'ai Univ.) FUJII, Kazuo; ISA, Kimio; NAKATA, Ryuji; YAMAOKA, Hiroshi
- 1PC-205 Gas Phase Unimolecular Dissociation for N-[3-(2,4,6-Trichlorophenyl)propanoyl](thio)lactams (Osaka Pref. Univ.; Univ. of Fukui; Jin-ai Univ.) ISHIKAWA, Chie; MATSUO, Yusuke; NAKATA, Ryuji; TANIGUCHI, Sohshi; ISA, Kimio; YAMAOKA, Hiroshi
- 1PC-206 Experimental study on the reaction pathway of Schmidt rearrangement and fragmentation (Dept. Chem.., Rikkyo Univ.) YAMAMOTO, Yutaro; AKIMOTO, Ryo; YAMATAKA, Hiroshi
- 1PC-207 Investigation of the path bifurcation on dediazoniation of vinyl diazonium ion by means of MO and MD calculation. (Rikkyo Univ.) WATANUKI, Ami: YAMATAKA, Hiroshi
- 1PC-208 Mechanistic insight into reductiverearrangement of oximes by using diisobutylaluminum hydride with the aid ofquantum chemicalcalculations (Coll. Sci., Ibaraki Univ.) YOSHIMURA, Takayoshi; MORI, Seiji; IWAMA, Yusuke; SUGIMOTO, Kenji; CHO, Hidetsura; TOKUYAMA, Hidetoshi
- 1PC-209 Photoinduced electron transport in vesicles sensitized by pyrenyl ketone derivatives (The Univ. of Tokyo) SATO, Youichi; TAKIZAWA, Shin-ya; MURATA, Shigeru
- 1PC-210 Photoreduction of carbon dioxide using p-terphenyl derivative as sensitizer in vesicles (The Univ. of Tokyo) IKUTA, Naoya; TAKIZAWA, Shin-ya; MURATA, Shigeru
- 1PC-211 Radical-Scavenging Mechanism of Melatonin (NIRS; BAEC; Osaka Univ.; Yokohama College of Pharmacy; Nihon Pharmaceutical Univ.) NAKANISHI, Ikuo; ZOARDAR, Kabir; KAWASHIMA, Tomonori; KAMIBAYASHI, Masato; MATSUMOTO, Ken-ichiro; OHKUBO, Kei; FUKUZUMI, Shunichi; OZAWA, Toshihiko; ANZAI, Kazunori
- 1PC-212 Inhibitory Activity of prenylated flavonoids isolated from Licorice against protein tyrosine phosphatase-1B (Toho-Univ.) NAKADA,

- Yoshimoto; OHSHIMA, Shigeru; LI, Wei; KOIKE, Kazuo
- 1PC-213 Chemiluminescence of firefly luciferin in deoxygenated DMSO added t-BuONa (Toyo Univ.) SHIBATA, Rikuo; HATANAKA, Kouki; WADA. Naohisa
- 1PC-214 Comparison of hydrophilic antioxidant's alkyl radical (ethyl, methyl radical) scavenging abilities to ORAC values (Okayama Univ.) ISHIKAWA, Misa; TATIKAWA, Yuki; SUEISHI, Yoshimi; KOTAKE, Yashige
- 1PC-215 Effects of solvent on inclusion complexation of various cyclodextrins and cucurbit[7]uril by using fluorescence method. (Okayama Univ.) NAKATANI. Shinichiro: SUEISHI. Yoshimi
- 1PC-216 Synthesis of 5-hydroxymethylfurfural from sugars using microwave irradiation (Wakayama National College of Technology) IWAKI, Azusa; TAKAGI, Koichi; NOMURA, Eisaku
- 1PC-217 Synthesis of Trisannulated Benzene Derivatives by an Aldol Cyclotrimerization Reaction in Ionic Liquids [BMIM][Tf<sub>2</sub>N] and [BMIM] [BF<sub>4</sub>] (Mie Univ.) NAKANISHI, Ryota; OKAZAKI, Takao; KITAGAWA, Toshikazu

## Natural Products Chemistry

## Fatty acids, polyphenols, and the related compounds

- 1PC-219 Investigation of Glandular Trichome Exudates: Hydroxy-fatty Acids and Their Glyceride Derivatives (Dept Chemistry & Materials Science, Tokyo Inst Tech) OHMORI, Miho; SAKAI, Takaomi; ASAI, Teigo; OHYAMA, Kiyoshi; FUJIMOTO, Yoshinori
- 1PC-220 Investigation of Glandular Trichome Exudates: Cyclic Esters of Glycosyloxy-fatty Acids from Caryophyllaceae Plants (Dept Chemistry & Materials Science, Tokyo Inst Tech) NAKAMURA, Yuki; ASAI, Teigo; HIRAYAMA, Yui; OHYAMA, Kiyoshi; FUJIMOTO, Yoshinori
- 1PC-221 Chemical Investigation of Glandular Trichome Exudates: n-Alkyl Disaccharide Derivatives of Geraniaceae Plants (Dept Chemistry & Materials Science, Tokyo Inst Tech) SAKAI, Takaomi; ASAI, Teigo; OHYAMA, Kiyoshi; FUJIMOTO, Yoshinori
- 1PC-222 Characterization of polyphenols extracted from Prunus mume fruit.
  (1) (Industrial Technology Center of Wakayama Prefecture) TANAKA,
  Yoshie; MORI, Megumi; HORINISHI, Asako; KAWABATA, Tomoaki;
  KIMURA, Yoshinobu; AKAGI, Tomohiro; YAMANISHI, Hisako;
  KOBATA, Toshitsugu; IKEMOTO, Shigeaki; MITANI, Takahiko
- 1PC-223 Characterization of polyphenols extracted from Prunus mume fruit (2) (Industrial Technology Center of Wakayama Prefecture) MORI, Megumi; TANAKA, Yoshie; HORINISHI, Asako; KAWABATA, Tomoaki; KIMURA, Yoshinobu; AKAGI, Tomohiro; YAMANISHI, Hisako; KOBATA, Toshitsugu; IKEMOTO, Shigeaki; MITANI, Takahiko
- 1PC-224 Regio- and stereoselectivity of intramolecular Markovnikov addition of some alkenyl acid derivatives encapsulated in H-Y zeolite (Yamagata Univ.) SHIBATA, Katsumasa; ITOH, Hiroki; KURIYAMA, Yasunao
- 1PC-225 Structure-activity relationship of membrane sterol for ion influx activity of amphotericin B (Osaka Univ.) NONOMURA, Kenichi; TAKANO, Tetsuro; MATSUMORI, Nobuaki; MURATA, Michio
- 1PC-226 Antidiabetic agonist from Wisteria floribunda seeds. (Nagahama Institute of Bio-Science and Technology) INOUE, Tomoyo; YAMADA, Yoshihiro; KAWACHI, Hiroyuki; OHTA, Shinji
- 1PC-227 High-Speed Counter-Current Chromatography Analyses and Chemical Modification Studies of Catechin Oligomers (Graduate School of Science and Technology, Tokyo Institute of Technology) TAKAHASHI, Haruko; OHMORI, Ken; KUSUMI, Takenori; SUZUKI, Keisuke

#### Steroids, Terpenoid

- 1PC-228 Total Synthesis of Cynaropicrin (Graduate School of Science and Engineering, Sophia Univ.) KONDO, Ryosuke; SATO, Makiko; USUKI, Toyonobu
- 1PC-229 Purification of Fucosterol 24,28-Epoxide Lyase from Midguts of Bombyx mori Larvae (Dept Chemistry & Materials Science, Tokyo Inst Tech) TSUKAGOSHI, Yuki; FUJIMOTO, Yoshinori
- 1PC-230 Chemical constituents and their diversity of Ligularia lankongensis (Asteraceae) in China (RIKEN ASI; Tokyo Denki Univ.; Rikkyo Univ.; Kunming Inst. Botany) HORIGUCHI, Yurie; KURODA, Chiaki; HANAI, Rvo; GONG, Xun; KAWAI, Satoru; HIROTA, Hiroshi
- 1PC-231 Reaction of furanoeremophilan-10-ol and its model compounds with pyridinecarbaldehyde (Rikkyo Univ.) TAYAMA, Tomoya; TORIHATA, Atsusi: KURODA. Chiaki
- 1PC-232 Production of tetradymol derivatives and ecology in *Ligularia kanaitzensis* (Rikkyo Univ.; Kunming Institute of Botany) SHIMIZU, Anna; TORIHATA, Atsushi; HANAI, Ryo; GONG, Xun; KURODA, Chiaki
- 1PC-233 Synthetic approach towards determination of the stereochemistry at C-8 of bisabolane-type sesquiterpenoid (Rikkyo Univ.; RIKEN) MIYAZAKI, Rurina; MITSUI, Kana; ISHIKAWA, Kaori; HIROTA, Hiroshi; ONUKI, Hiroyuki; KURODA, Chiaki

#### Alkaloids

1PC-234 Synthesis of Broussonetine D using Optically Active Cyclic Nitrone (Department of Science, Iwaki Meisei Univ.; Department of Pharmacy, Iwaki

- Meisei Univ.) HASHIMOTO, Megumi; SAKURAI, Rumiko; YAMAURA, Masanori
- 1PC-235 Searching for Bioactive Alkaloids from Marine Sponge in Ehime Prefecture (Ehime Univ.) YOKOO, Yoshitaka; KURAMOTO, Makoto; UNO, Hidemitsu

#### Sugar

- 1PC-236 Improvement protocol for direct conversion of thioglycosides into 1-fluoro sugars using N,N-diethylaminosulfur trifluoride (DAST) (ERATO JST; Mitsubishi Kagaku Inst. Life Sci.; RIKEN ASI) SUZUKI, Katsuhiko; KATO, Rumiko; ITO, Yikishige; KANIE, Osamu
- 1PC-237 Application of bulky silyl groups for protecting groups of alcohol (Saitama Univ.) TAKAHATA, Noriyoshi; TAKANAMI, Kentaro; KOYAMA, Tetsuo; MATSUOKA, Koji; HATANO, Ken
- 1PC-238 Preparation of 4,5-cis- and trans-disubstituted Oxazolidone Derivatives from D-Glucosamine (Biomedical Research Institute, AIST) MURAKAMI, Teiichi
- 1PC-239 Synthesis of glycosylated fluorous gold nanoparticles (GF-GNPs) (Tokai Univ.) FUJITA, Yoichi; NAGASAKI, Taichi; INAZU, Toshiyuki

#### Amino Acids

- 1PC-240 Synthesis of novel gramicidin S analogues having octanoyl-(Lys)<sub>n</sub>-sequence (Toho Univ.; Faculty of Science) TAMAKI, Makoto; FUJINUMA, Kenta; IMAZEKI, Yukie; TAKASHIMA, Akiko; SHINDO, Mitsuno; KIMURA, Masahiro; UCHIDA, Yoshiki
- 1PC-241 Synthese of novel cycloundecapeptides with both amino acid sequences of gratisin and gramicidin S. (Toho Univ.; Faculty of Science) TAMAKI, Makoto; TAKANASHI, Kazumasa; IMAZEKI, Yukie; WATANABE, Eizi; SHINDO, Mitsuno; KIMURA, Masahiro; UCHIDA, Yoshiki
- 1PC-242 Syntheses of novel gratisin analogues with both high antibiotic activity and low hemolytic activity (Toho Univ.; Faculty of Science) TAMAKI, Makoto; HARADA, Takuji; NASU, Michiko; IMAZEKI, Yukie; SHINDO, Mitsuno; KIMURA, Masahiro; UCHIDA, Yoshiki
- **1PC-243** Conformational structure-bioactivity relationships of kulokekahilide-2 analogues(5) (Aoyama Gakuin Univ.) UMEHARA, Masahiro; TAKADA, Yunki: NAKAO, Yoichi: KIMURA, Junii
- 1PC-244 Structure-activity relationships of ciliatamide analogues. (Aoyama Gakuin Univ.) OOMORI, Hiroshi; UMEHARA, Masahiro; NAKAO, Yoichi; MATSUMOTO, Yoshitugu; SANJOBA, Chizu; OSADA, Yasutaka; KIMURA, Junii
- 1PC-245 Synthetic Study of Crosslinking Amino Acid of Elastin by Negishi Cross Coupling (Faculty of Science and Technology, Sophia Univ.) HAYASHI, Takahiro; YANUMA, Hiroto; KOSEKI, Yohei; YAMADA, Haruka; USUKI, Toyonobu

#### **Others**

- 1PC-246 Synthetic Study of Peptide Moiety of Antitumor Jamaicamides (Graduate School of Science and Technology, Sophia Univ.) TANAKA, Ayano; USUKI, Toyonobu
- 1PC-247 Synthetic Study of Polyketide Moiety of Antitumor Jamaicamides (Faculty of Science and Technology, Sophia Univ.) WATANABE, Satoshi; WATANABE, Sho; AOKI, Naoto; USUKI, Toyonobu
- 1PC-248 Study on the structure of the luciferin of Noctiluca scintillans (Univ. of Electro-Communication) HATTORI, Shinji; YAGIUCHI, Satoru; HIRANO, Takashi; MAKI, Shojiro; NIWA, Haruki
- 1PC-249 Study on the bioluminescence mechanism of luminous mushroom, Mycena chlorophos (Univ. of Electro-Communications) MORI, Kenichi; NIITSU, Hisashi; MAKI, Shojiro; HIRANO, Takashi; NIWA, Haruki
- 1PC-250 Isolation of maleic anhydride polyketide from Streptomyces citoricolor NBRC 13005 and its biosynthesis (Graduate School of Science and EngineeringTokyo Institute of Technology) KAWAKAMI, Tomohiro; KUDO, Fumitaka; EGUCHI, Tadashi
- 1PC-251 Cloning of the biosynthetic gene cluster for a telomerase inhibitor telomestatin (Graduate School of Science and Engineering Tokyo Institute of Technology; Japan Biological Informatics Consortium; National Institute of Advanced Industrial Science and Technology) SYO, Kinmyou; KUDO, Fumitaka: EGUCHL Tadashi: TAKAGI, Motoki: SHINYA, Kazuo
- 1PC-252 Exploration of growth inducer produced by Escherichia coli during heat tolerant evolution (Faculty of Science, Toho Univ.;Research Center for Materials with Integrated Properties, Toho Univ.; Osaka Univ.) ONO, Kouhei; KISHIMOTO, Toshihiko; YOMO, Tetsuya; WATANABE, Soichiro 1PC-253 Withdrawn
- **1PC-254** Enzymatic polymerization and laccol dimer structure of Vietnam lacquer (Meiji Univ.) TAKEI, Ryo; LU, Rong; MIYAKOSI, Tetsuo

#### Sunday, March 27, AM

(10:00~11:30)

#### Material Chemistry

- 2PA-031 New Approach to Selective Synthesis of Cage Silsesquioxanes. (Grad. Sch. Eng., Gunma Univ.) ENDO, Hisayuki; TAKEDA, Nobuhiro; UNNO, Masafumi
- 2PA-032 Investigation of new synthetic methods of siloxanes from hydrosilanes. (Grad. Sch. Eng., Gunma Univ.) NAKAJIMA, Ryo; TAKEDA, Nobuhiro; UNNO, Masafumi
- 2PA-033 Preparation of liquid crystalline monolayer film aiming at in-plane-orientation of functional molecules (Hiroshima Univ.) TSUKIYAMA, Kazuki; IMAE, Ichiro; OOYAMA, Yousuke; KOMAGUCHI, Kenji; HARIMA, Yutaka
- 2PA-034 Effect of capillary flow co-precipitation method utilized for the preparation of the metal salt composite (Chubu Univ.) ITO, Hiroki; ISIKAWA, Norihisa; TACHI, Yuichi; KAWAZOE, Yukinori
- 2PA-035 Preparation of Poly (metyhl methacrylate)-Silica Composite Films Using Ethoxysilanes Possessing Acetoxy Group (Nagoya Municipal Ind. Res. Inst.) TSUGE, Hiroyasu; ONO, Satomi
- 2PA-036 Preparation and characterization of Myanmar lacquerhybridized with organic silicon compounds (Meiji Univ.) FUJITA, Daisuke; LU, Rong; MIYAKOSHI, Tetsuo
- 2PA-037 Synthesis and Physical Properties of MgAlB22 crystal (Kokushikan Univ.; NIMS; Kanagawa Univ.; Tohoku Univ.) OKADA, Shigeru; MORI, Takao; KUDOU, Kunio; YUBUTA, Kunio; SHISHIDO, Toetsu
- 2PA-038 Synthesis of high-purity type II silicon clathrate (Gifu Univ.; Gifu National College of Technolgy) OGURA, Takuya; SUZUKI, Takatoshi; BABA, Tatsuya; KOKETSU, Ryuzo; HIMENO, Roto; OHASHI, Fumitaka; BAN, Takayuki; OHYA, Yutaka; KUME, Tetsuji; NATSUHARA, Hironori; NONOMURA, Shuichi; IIDA, Tamio; HABUCHI, Hitoe
- 2PA-039 Evaluation of antibacterial property using natural zeolite doped with metal ions (Kanazawa Institute of Technology, Advanced Materials Science Research and Development Center, Environmental Research Institute) KAWAKAMI, Kenichi; WATANABE, Yujiro; OSHIMA, Syunichi; FUJINAGA, Kaoru; OMORI, Daijiro; KOMATSU, Yu
- 2PA-040 Preparation of Zr<sub>1-x</sub>M<sub>x</sub>W<sub>2</sub>O<sub>8</sub>(M=Y, In, Sc) using spark plasma sintering combined with sol-gel process. (Tokyo Univ. of Science, Yamaguchi) NAKAO, Shota; HORI, Hidetoshi; KINERI, Tohru; NISHIO, Keishi
- **2PA-041** Preparation of water-swellable LDH (layered double hydorxide) hybrids (NIMS) IYI, Nobuo; EBINA, Yasuo; SASAKI, Takayoshi
- 2PA-042<sup>#</sup> Preparation of cholesterol-modified gelatin for Drug Delivery System (RIKEN) KADENGODLU, Pallavi; LIU, Mingzhe; ITO, Mika; ABE, Hiroshi; TAKESHIMA, Shin-nosuke; HEBISHIMA, Takehisa; AIDA, Yoko; ITO, Yoshihiro
- 2PA-043 Donor-acceptor Benzothiadiazoles for Bulk Heterojunction Organic Solar Cells (Kurume National College of Technology) SHINOHARA, Yuki; YASUDA, Takeshi; ISHI-I, Tsutomu
- 2PA-044 Thermal characteristic of silsesquioxane thin films containing a naphthyl group (Kyoto Univ) NISHIKAWA, Takeshi; SAKAI, Kenichi; TAMURA, Rui
- 2PA-045 Morphology and electrical conductivity of silicone rubber filled with multi-walled carbon nanotubes (Faculty of Textile Science and Technology, Shinshu Univ.) KUROE, Masato; OKINO, Fujio
- 2PA-046 Evaluation of Luminescent Properties of Rare-Earth/Organic Photoantennas in Organic Nanogels. (Shimane Univ., Yamaguchi Univ.) WATANABE, Keiichi; NISHIYAMA, Ko-suke; SHIGEMATSU, Hirotake; NISHIYAMA, Katsura
- 2PA-047 Synthesis and function of pyrene-modified tetraphenylborate (Graduate school of Science, Kyushu Univ.) FURUKAWA, Yuki; SUGIKAWA, Kota; OHTA, Masahiko; KOKADO, Kenta; SADA, Kazuki
- **2PA-048** Target-oriented and Atom-economical Synthesis of Functional  $\pi$ -Conjugated Materials (RIKEN) LIU, Ching-yuan; YU, Hsiao-hua
- 2PA-049# Light Driven Control of Structures and Properties of Two-dimensional Polymers (PRESTO, JST; Institute for Molecular Science) GUO, Zhaoqi; JIANG, Donglin
- 2PA-050 Preparation of PPy/PVS-nanoparticle and investigation of the thin film by ink-jet printing. (Tokyo Univ. of Science) ODAGIRI, Yooko; KONDOU, Takeshi; YUASA, Makoto
- **2PA-051** Reactivity of carbon active sites of oxidized activated carbon. (Department of Science and Technology, Meiji Univ.) KAJIYAMA, Tomoyuki; OTAKE, Yoshinobu
- 2PA-052 Effects of Addition of Surface Active Agents in One-step Liquid-phase Synthesis of Carbon Nanomaterials. (Graduate School of Chem. Sci. and Tech., Tokyo Univ. of Sci.) KOIZUMI, Kouhei; YAMAGIWA, Kiyofumi; AYATO, Yusuke; KUWANO, Jun
- **2PA-053** Chemical Modification of Graphite and Graphene (NIMS) YANG, Min; MORIYAMA, Satoshi; HIGUCHI, Masayoshi
- 2PA-054 Structures of L-tyrosine films prepared by Knudsen effusion method and their modification by electron beam irradiation. (Tokyo Univ. of Technology Graduate School of Bionics) SATO, Jun; SUGIMOTO, Iwao

- 2PA-055 Relationships between organic gas-sorption characteristics and structures of the carbonaceous films (Tokyo Univ. of Technology Graduate School of Bionics) TAKAHASHI, Yuta: SUGIMOTO, Iwao
- 2PA-056 Foundamental Investigation of Organic Polymer Thin Film by Sputtering/Chemical Vaper Deposition Hybrid Process (Kanazawa Institute of Technology) KATO, Yuki; KIMURA, Yamato; TADIKA, Kenta; SAZANAMI, Noriko; SAKAMOTO, Mune-aki; KUSANO, Eiji
- 2PA-057 The preparation of a functional transparent film (Konan Univ.) TUJIMOTO, Akiko; MIYAKE, Junpei; WATANABE, Junji; IKEDA, Yoshiyuki; OHTA, Tatuya; ARIMOTO, Kunio
- 2PA-058 The laser patterning technique of organic-inorganic film containing latent pigment (Shibaura Institute of Technology, Department of Applied Chemistry.) NIEDA, Satoshi; OOISHI, Tomozi
- 2PA-059 Patterning characteristics of organic-inorganic hybridthin film containing latent pigments using photo acid generator (Shibaura Institute of Technology) SUGAWARA, Shinya; OISHI, Tomoji
- 2PA-060 Development of simple patterning process of thin film containing latent pigments by using laser-assisted ink-jet method (Shibaura Institute of Technology) OWADA, Takeshi; OHISHI, Tomoji
- 2PA-061 Preparation and properties of latent DPPP and thin film coating it. (Shibaura Institute of Technology, Faculty of Engineering, Department of Applied Chemistry) KASHIWAMATA, Gakuya; OISHI, Tomoji
- **2PA-062** Preparation of Diamond Thin Film and Alloying of Boron and Nitrogen by Hot Filament CVD Method (Osaka Electro-Communication Univ.; Kawaguchi Laboratory) ASHIDA, Yusuke; ISHIMARU, Yoshihisa; KAWAGUCHI, Masayuki; OHNO, Nobuhito
- **2PA-063** Control of the Crystallization of CaCO<sub>3</sub> Thin Films by Using Photoreactive Polymers (The Univ. of Tokyo) NOGUCHI, Hajime; ORIO, Saki; SAKAMOTO, Takeshi; NISHIMURA, Tatsuya; KATO, Takashi
- 2PA-064 Crystallization Control of Calcium Carbonate by Using Recombinant Peptides of a Crayfish (The Univ. of Tokyo) KUMAGAI, Hiromu; MATSUNAGA, Ryou; NISHIMURA, Tatsuya; TSUMOTO, Kouhei; NAGASAWA, Hiromichi; KATO, Takashi
- 2PA-065 Electronic Conductivity of the films spin-coated by calixarene derivatives under VOC atmosphere (Wakayama National College of Technology) NAKANISHI, Tatsuya; NOMURA, Eisaku
- 2PA-066 Structures of vacuum-vaporized L-glutamic acids and theirmodification by irradiation of electron beam and vacuum UV light (Tokyo Univ. of Technology Graduate School of Bionics) MAEDA, Shunsaku; SUGIMOTO, Iwao
- 2PA-067 Synthesis of Pt/WO<sub>3</sub> powder by sol- gel process and response characteristics for hydrogen gas of them (Tokyo Univ. of Science, Yamaguchi) EMOTO, Yukari; KINERI, Tohru; FUJIMOTO, Masakatsu; MAE, Hideo; YAMAGUTI, Yuki; NISHIO, Keishi
- 2PA-068 Preperation of nanosize encapsulated latent pigments by the sol-gel method and dispersion technique (Shibaura Institute of Technology, Faculty of Engineering, Dept. of Applied Chemistry) WATANABE, Hironori; OHISHI, Tomoji
- 2PA-069 Synthesis of Gold Nanoparticles by Sputter Deposition onto Low-molecular-weight Polyethylene glycol (Faculty of Science, Chiba Univ.) KATO, Jun-ichi; HATAKEYAMA, Yoshikiyo; ONISHI, Kei; MORITA, Takeshi; NISHIKAWA, Keiko
- **2PA-070** Novel Preparation Method of Polypropylene Fine particles and the Application (Toho Titanium Co.,Ltd.) UOZUMI, Toshiya; KOMORI,
- 2PA-071 Synthesis and structural analysis of bimetallic nanoparticles by microwave heating (Nara Women's Univ.) SOU, Sou; HARADA, Masafumi
- 2PA-072 A coating method of gas-suspended silver nanoparticles by photoreaction of vinyl cinnamate (RIKEN) KUDOH, Satoshi; ORII, Takaaki

### **Functions of Materials**

- 2PA-075 Novel molecular system of epitope-containing ELPs for cell culture (Doshisha Univ.) NAKAMOTO, Kazuhiro; KOGA, Tomoyuki; HIGASHI, Nobuyuki
- 2PA-076<sup>†</sup> Therapeutic efficacy of intraperitonial slow-release of anti-PCSK9 antisence BNA oligonucleotide on the hypercholesterolemia (Department of Biomedical Engineering, National Cerebrate and Cardiovascular Center Research Institute) YAMASHITA, Atsushi; TACHIBANA, Yoichi; TORIGOE, Hidetaka; SHIBA, Mariko; OBIKA, Satoshi; YAMAOKA, Tetsuii
- 2PA-077 Formulation of DMPC/DPPC pH-sensitive Liposomes loaded with Ironporphyrin and its Anticancer Effect (Tokyo Univ. of Science) AKABOSHI, Hikaru; KONDO, Takeshi; YUASA, Makoto
- 2PA-078 Anticancer Effect of loaded anionic ironporphyrin loaded liposome (Tokyo Univ. of Science) ARAI, Takayuki; KONDO, Takeshi; YUASA, Makoto
- 2PA-079 Correlation between Transdermal Transportation and Hydrophile Lipophile Balance Number of L-Menthol in Human Skin (Department of Interdisciplinary Science and Engineering, Faculty of Science and Engineering, Meisei Univ.) WATANABE, Yukio; SHIOYA, Kazune; ORIKASA, Michiko; SEKIGUCHI, Saya; KOGA, Shingo; AKASAKA, Yuuta; UEDA, Toyotoshi; SUZUKI, Harue
- 2PA-080 Withdrawn
- 2PA-081 Photomecanical Motion of Anthrylmethyleneindanone Derivatives

- (Ehime Univ.) KOSHIMA, Hideko; ISHIBASHI, Yoshihiro; UCHIMOTO, Hidetaka
- **2PA-082** Photomechanical Function of Ionic Spiropyran Crystals (Ehime Univ.) KOSHIMA, Hideko: TAKASE, Toshihiro: UCHIMOTO, Hidetaka
- 2PA-083 Synthesis and Photoinduced Surface Relief Formation on Inorganic-Organic Hybrid Films of Hexaarylbisimidazole Derivatives (Yokohama National Univ.) TAKAHASHI, Seiya; KOUZAI, Hiroaki; KIKUCHI, Azusa; YAGI, Mikio
- 2PA-084 The conduction behavior of diarylethene-gold nanoparticles complex systems (Grad. School of Eng., Kyoto Univ.) DOI, Masatomo; SAKANO, Takeshi; YAMAGUCHI, Hidehiro; MATUDA, Kenji
- 2PA-085 One-photon Ring-opening Reaction Dynamics of Diarylethene Derivatives: Relation between Intra-molecular Vibrations and Molecular Structures. (Osaka Univ. Graduate School of Engineering Science) SAITO, Hisayuki; ISHIBASHI, Yukihide; MIYASAKA, Hiroshi; YAMAGUCHI, Tadatsugu; KOBATAKE, Seiya; IRIE, Masahiro
- **2PA-086** Photochromism of [2.2]paracyclophane-bridged HABI derivatives having bulky groups (Aoyama Gakuin Univ.) YAMAGUCHI, Tetsuo; KATO, Tetsuya; KAWAI, Shigekazu; ABE, Jiro
- 2PA-087 Synthesis and Properties of Diarylethene Composed of Benzothiophene, Having a Carbazole Unit (Osaka Kyoiku Univ.) ARIMA, Yu; SASA, Toshiyuki; HORI, Kazushige; KUBONO, Koji; TSUJIOKA, Tsuyoshi; YAMAGUCHI, Tadatsugu; TANI, Keita
- 2PA-088 Photoisomerization behavior of azobenzene-palladium(II)complexes (Tokyo Institute of Technology) OKUI, Yumi; HIRADE, Tomohiro; HAN, Mina; HARA, Masahiko
- 2PA-089 A photoisomerizable azobenezene-palladium(II) complex (Tokyo Institute of Technology) HIRADE, Tomohiro; HAN, Mina; HARA, Masahiko
- **2PA-090** Photoresponsive azobenzene-containing monolayers (Tokyo Tech) KANETA, Mitsuyuki; HONDA, Takumu; ISHIKAWA, Daisuke; HAN, Mina; HARA, Masahiko
- 2PA-091 Electrochmical Properties of Photochromic Terarylenes (Nara Inst. Sci. Tech.) KAJIKI, Yoshiyuki; TOBA, Masaya; FUKUMOTO, Sayo; TAGUTI, Maki; NAKASHIMA, Takuya; KAWAI, Tsuyoshi
- 2PA-092 Photochromism of terarylene dimmer stabilized with intermolecular hydrogen bonding. (Graduate School of Materials Saience, Nara Institute of Science and Technology) TANIGUCHI, Toshihide; KAWAI, Shigekazu; NAKASHIMA, Takuya; KAWAI, Tuyoshi
- 2PA-093 Photochromism of Diarylethene Oxazole Derivatives in a Single-Crystalline Phase (Hyogo Univ. of Teacher Education) YAMAGUCHI, Tadatsugu; KAGAWA, Tomonori; KAMIHASHI, Yusuke; OZEKI, Toru
- **2PA-094** Non-destractive Erasable Chiral Memory Using Photoinduced Molecular Twisting Motions (RIKEN) KAWAMOTO, Masuki; SHIGA, Natsuki; TAKAISHI, Kazuto; YAMASHITA, Takashi
- 2PA-095 Photochromism of dithiazolylethene derivatives having anthracene groups (Rikkyo Univ.) OHARA, Hiroki; MORIMOTO, Masakazu; IRIE, Masakira
- 2PA-096 Fluorescence behavior of cyanine/hectorite complex films (Natl. Inst. Mater. Sci.) FUJII, Kazuko; IYI, Nobuo; HASHIZUME, Hideo; SHIMOMURA, Shuichi; ANDO, Toshihiro
- 2PA-097 Excited States of Organic UV absorbers: Cinnamic Acid Methylphenyl Esters (Yokohama National Univ.) KIKUCHI, Azusa; SAITO, Haruo; MORI, Masao; YAGI, Mikio
- 2PA-098 Study on Pressure-dependent Response of Pyrene-based Piezochromic Luminescent Materials (IIS, The Univ. of Tokyo) YAMAGUCHI, Shingo; SASE, Mitsutaka; MUTAI, Toshiki; ARAKI, Koji
- 2PA-099 Optical Chiralities Evaluation of Chiral Carbazole Dimer in Polymer Matrices with Circularly Polarized Luminescence Microscope (Graduate School of Materials Science, Nara Institute of Science and Technology) TAKAGI, Junichi; TSUMATORI, Hiroyuki; YUASA, Junpei; KAWAI, Tsuvoshi
- 2PA-100 Preparation and NOx adsorption characteristic of MgO-SiO<sub>2</sub> system compounds (Kokushikan Univ.) KAMAMOTO, Kiyomi; OKADA, Shigeru; SHISHIDO, Toetsu; KUDO, Kunio
- 2PA-101# Potential of TiO2/CnTAB Nanoskeleton as Adsorbent and Photocatalyst for Removal of Alkylphenols Dissolved in Water (Shinshu Univ.) WU, Qiong; ALBAR DA, Loves; OKADA, Tomohiko; MISHIMA, Shoji; SAKAI. Toshio
- 2PA-102 Preparation of grafted porous polyethylene films with chelateforming functional groups and metal ions adsorption and desorption properties (Nihon Univ., College of Industrial Technology, Department of Applied Molecular Chemistry) TOMIOKA, Yusuke; YAMADA, Kazunori
- 2PA-103 Adsorption of heavy metal ion by clay-organic polymer composite materials (Tokyo Denki Univ) SATO, Kana; ISHIMARU, Shin'ichi
- 2PA-104 Evaluation of Chiral Recognition Ability of Deformed Cyclodextrins (Miyakonojo National College of Technology) OKABE, Yuji; KAWAZOE, Akihiro

## Applications of Materials

2PA-107 A development of mechanical force sensor sheets employing pyrene excimer fluorescence (Tokyo Institute of Technology, Graduate School of Bioscience and Biotechnology) HARAGUCHI, Tsuyoshi; FUKUDA, Sumito: YUASA. Hideva

- 2PA-108<sup>#</sup> Fabrication of a Enzyme-modified Electrode using DNA/Graphene-Nanocomposite as a Conductive Platform and Its Electrochemical Behavior (Liaoning Univ.; Nara Inst. of Sci. and Technol.) ZHANG, Qian; QIAO, Yun; HAO, Fei; SONG, Xi-ming; YASUHARA, Kazuma; KIKUCHI, Junichi
- 2PA-109 Analyses of impurities of phthalocyanine titanyl pigment for the organic photo-conductor (Utsunomiya Univ.) SHINGAE, Ryuichi; ITOH, Satoshi; FURUSAWA, Takeshi; SATOH, Masahide; SUZUKI, Noboru
- 2PA-110 Influence on electro-optic properties of the STN liquid crystal doped with hydrophobic BaTiO<sub>3</sub> nanoparticles. (Tokyo Univ. of science, yamaguchi) NAKAZAWA, Ayaka; ISHII, Tomoki; KINERI, Tohru; NISHIO, Keishi
- 2PA-111 Development of the TAC film containing latent pigment and soluble Ni dithiol complex for PDP (Shibaura Institute of Technology, Faculty of Engineering, Department of Applied Chemistry) OINUMA, Yousuke; OHISHI, Tomoji
- 2PA-112 Organic Secondary Batteries Based on Cathode Active Materials of Substituted Triquinoxalinylenes (Osaka Pref. Univ.; Nard Inst. Ltd; Murata Manuf. Co. Ltd) SUGIMOTO, Toyonari; MATSUBARA, Hiroshi; MATSUNAGA, Takayuki; KUBOTA, Takayuki; SATOH, Masaharu
- 2PA-113 Preparation and characterization of dye-sensitized solar cellhybridized with inorganic nanotube (KCT) IKEDA, Kotomi; YAMAMOTO, Kazuya; FUKUDA, Ryo; OTSUKA, Hideyuki; TAKAHARA, Atsushi; YAMADA, Kenji
- 2PA-114 Properties of Carbon Solid Acids Bearing Sulfonic Acid Groups for Proton Conducting Electrolytes (Graduate School of Chem. Sci. and Tech., Tokyo Univ. of Sci.) FUKUSHIMA, Natsuko; TATEISHI, Hikaru; YAMAGIWA, Kiyofumi; AYATO, Yusuke; KUWANO, Jun
- 2PA-115 Behaver of Charge and Discharge of Electric Double Layer capacitor by <sup>19</sup>F NMR (Graduate College of Industrial Tech. Niho) DANSITA, Ryutarou; YAMANE, Yohei; YAMADA, Koji
- 2PA-116 Properties and functions of newly synthesized fluorescent dyes with pyrrolopyridine structure (Hayashibara Biochemical Laboratories, Inc.) HIRAMATSU, Hiroyuki; DAN-OH, Yasufumi; TSUJIMOTO, Kazuo
- 2PA-117 Solid-state Fluorescence Properties of Pyridomethene Complexes (Fac. Eng., Gifu Univ.) KUBOTA, Yasuhiro; TANAKA, Shunki; FUNABIKI, Kazumasa: MATSUI, Masaki
- 2PA-118 Development of Pyrazine Bisboron complexes (Fac. Eng., Gifu Univ.) KUBOTA, Yasuhiro; OZAKI, Yosuke; FUNABIKI, Kazumasa; MATSUI, Masaki
- **2PA-119** Synthesis and photophysical properties of novel heteropolycyclic azo-hydrazone-type boron complexes. (Kochi Univ.) SAKAMOTO, Takehiro; IKE, Maki; OOYAMA, Haruka; YOSHIDA, Katsuhira
- 2PA-120 Synthesis and Photophysical Properties of Heteropolycyclic Anthraquinoido-type Fluorescent Dyes (Kochi Univ.) KAMIMURA, Kazutoshi; ITAKURA, Akihiro; YOSHIDA, Katsuhira
- 2PA-121 Deprotonation of water-soluble phthalocyanine (National Institute for Materials Science) ISAGO, Hiroaki; FUJITA, Harumi
- 2PA-122 Stabilization of anthocyanin by hybridization with metal-containing mesoporous silica (Shizuoka Univ.; Tokyo Univ. Technol.) KATO, Yasushi; KOHNO, Yoshiumi; SHIBATA, Masashi; MAEDA, Yasuhisa
- 2PA-123 Stabilization of phycoerythrin dye from red algae by adsorption to clay (Tokyo Univ. of Technol.; Shizuoka Univ.) HORI, Yumiko; HOSHINO, Saki; KOHNO, Yoshiumi; SHIBATA, Masashi
- 2PA-124 Preparation of Ammonium Hexafluorosilicate/Silica Nanocomposites-Encapsulated A Variety of Low Molecular Weight Aromatic Compounds (Hirosaki Univ.; National Institute of Advanced Industrial Science and Technology; Nippon Chemical Industrial Co., Ltd.) KIKUCHI, Mieko; SUZUKI, Toshihiro; NISHIDA, Masakazu; KODAMA, Shun; SUGIYA, Masashi; SAWADA, Hideo
- 2PA-125 Preparation and Thermal Stability of Poly(vinylidene fluoride-ter-trifluoromethacrylic acid-ter-hexafluoropropylene) terpolymers/Silica Nano-composites (Hirosaki Univ.; Burgas Assen Zlatarov Univ.; CNRS) KIKUCHI, Mieko; TASHIMA, Tsukasa; GOTO, Yuki; KOSTOV, George; AMEDURI, Bruno; SAWADA, Hideo
- 2PA-126<sup>†</sup> Preparation of Modified Glasses Possessing Superhydrophobic and Superoleophobic Characteristics Treated with Fluorinated Nanocomposites Having Aromatic Siloxane Segments (Hirosaki Univ.) GOTO, Yuki; DEGEJIRO, Zhabu; SAWADA, Hideo
- 2PA-127 Preparation of Novel Fluorinated Oligomers/Polyaniline/Gold Nanocomposites (Hirosaki Univ.; Shimane Univ.) TSUZUKIISHI, Taiki; IIZUKA, Mari; YOSHIDA, Masato; SAWADA, Hideo
- 2PA-128 Interaction of Fluoroalkyl End-Capped 2-Acrylamide-2-methylpropanesulfonic Acid Cooligomers Containing Adamantyl Segments with Acetone (Hirosaki Univ.; Shimane Univ.) KIJIMA, Tetsushi; MUGISAWA, Masaki; YOSHIDA, Masato; SAWADA, Hideo
- 2PA-129 Photocatalytic Activity of Fluoroalkyl End-capped Vinyltrimethox-ysilane Oligomer/Anatase-type Titanium Oxide Nanocomposites after Calcination at 1000 °C (Faculty of Education, Hirosaki Univ.; Graduate School of Science and Technology, Hirosaki Univ.; Shimane Univ.; INAX) SAWADA, Eri; YOSHIOKA, Hiroaki; ISE, Shougo; IIZUKA, Mari; YOSHIDA, Masato; KAKEHI, Hiroshi; KATO, Yoshihiro; MIURA, Masashi; ISU, Norifumi; CYOUNAN, Yukiyasu; SAWADA, Hideo
- 2PA-130 Releasing Behavior of Encapsulated 1,1'-bi-2-naphthol into Fluoroalkyl End-Capped Vinyltrimethoxy Oligomer/Silica Nanocomposites under

- UV-irradiation (Hirosaki Univ.; Nippon Chemical Industrial Co., Ltd/) MATSUKI, Yusuke; GOTO, Yuki; KODAMA, Shun; SUGIYA, Masashi; SAWADA, Hideo
- 2PA-131 Preparation and Photochromic Behavior of Novel Fluoroalkyl Endcapped Cooligomer/Silica Nanocomposites-Encapsulated Organic Photochromic Dye (Hirosaki Univ.) IZUMI, Shunsuke; GOTO, Yuki; SAWADA, Hideo
- 2PA-132 Preparation and Light Absorption Behavior of Fluoroalkyl End-capped Cooligomer/ Fluorescein Nanocomposites (Hirosaki Univ.; Taiyou Yuden Co., Ltd.) IZUMI, Shunsuke; GOTO, Yuki; OKADA, Yoshitaka; SASAZAWA, Kazuo; SAWADA, Hideo
- 2PA-133 Preparation and Thermal Stability of Ionic Liquids/Silica Nano-composites-Encapsulated A Variety of Low Molecular Weight Aromatic Compounds (Hirosaki Univ.; Nippon Chemical Industrial Co., Ltd.; National Institute of Advanced Industrial Science and Technology) SASAKI, Takahiro; KODAMA, Shun; SUGIYA, Masashi; NISHIDA, Masakazu; SAWADA, Hideo
- 2PA-134 Preparation and Applications of Novel Fluoroalkyl End-Capped Vinyltrimethoxysilane Oligomer/Cyclodextrin Nanocomposites (Hirosaki Univ.; Ishihara Chemical Co. Ltd.) ISE, Shougo; DEGEJIRO, Zhabu; TAKASHIMA, Hiroki; TAKISHITA, Katsuhisa; SAWADA, Hideo
- 2PA-135 Preparation of perfluoro-1,3-propanedisulfonic acid/silica nanocomposites-encapsulated optical active low molecular weight aromatic compounds (Hirosaki Univ.) LIU, Xinlai; GOTO, Yuki; KIKUCHI, Mieko; SAWADA, Hideo
- 2PA-136 Preparation and Thermal Stability of Fluoroalkyl End-capped Vinyltrimethoxysilane Oligomer/ and Perfluoro-1, 3-Propanedisulfonic Acid/ Calcium Carbonate Nanocomposites (Hirosaki Univ.; INAX) SAITO, Tomoya; KAKEHI, Hiroshi; KATO, Yoshihiro; MIURA, Masashi; ISU, Norifumi; SAWADA, Hideo
- 2PA-137 Preparation of Perfluoro-1,3-propanedisulfonic Acid/Calcium Fluoride Nanocomposites Encapsulation of Low Molecular Weight Aromatic Compounds into These Composites (Hirosaki Univ.; INAX) SAITO, Tomoya; KAKEHI, Hiroshi; KATO, Yoshihiro; MIURA, Masashi; ISU, Norifumi; SAWADA, Hideo
- 2PA-138<sup>†</sup> Preparation and Thermal Stability of Fluoroalkyl End-capped Oligomers/Silica Nanocomposites-Encapsulated Biphenylene Segments (Hirosaki Univ.) GOTO, Yuki: HIRAYAMA, Yutarou: SAWADA, Hideo
- 2PA-139 Thermal Stability of Fluoroalkyl End-capped Vinyltrimethoxysilane Oligomer/Titanium Oxide Nanocomposites (Faculty of Education, Hirosaki Univ.; Graduate School of Science and Technology, Hirosaki Univ.; INAX) SAWADA, Eri; YOSHIOKA, Hiroaki; ISE, Shougo; KAKEHI, Hiroshi; KATO, Yoshihiro; MIURA, Masashi; ISU, Norifumi; CYOUNAN, Yukiyasu; SAWADA, Hideo
- 2PA-140 Quantum Chemical Study on the Origin of Adhesion Interaction between Aluminum Oxide Surface and Epoxy Resin (IMCE, Kyushu Univ.) SEMOTO, Takayuki; TSUJI, Yuta; YOSHIZAWA, Kazunari
- 2PA-141 Adhesive characteristics between nitrogen plasma-treated polymer films and epoxy resin (Tokyo City Univ.) KANAZAWA, Shoichi; KOBAYASHI, Koichi; IIZUKA, Hirokazu; TAKEI, Kunihiro; TAKAHASHI, Masashi
- 2PA-142 Effect of photografting on adhesion of polypropylene plates with enzymatically modified chitosan solutions and XPS analysis of failed surfaces (Nihon Univ., College of Industrial Technology, Department of Applied Molecular Chemistry) NAOHARA, Yuki; YAMADA, Kazunori
- 2PA-143 Sequence specific recognition of nucleic acid by mutagenically separated PCR (MS-PCR) (TOPPAN PRINTING CO., LTD) OGINO, Masayuki; MAKINO, Yoichi; NAKAYAMA, Masato; YAMANE, Akio; AMANO, Masahiko; USHIDA, Hiroshi
- 2PA-144 Synthesis and biological activity of new peptidomimetics for elucidation of amyloid beta protein aggregation (Iwate Medical Univ.; Iwate Univ.) KAWANO, Tomikazu; IKEUCHI, Kousuke; OGAWA, Satoshi
- 2PA-145 Synthesis and Biological Activity of 3,5-Substituted-2-Cyclopentenone Derivatives for Elucidation of Amyloid-beta Formation (Iwate Medical Univ.; Iwate Univ.) KAWANO, Tomikazu; KAWAMORITA, Yutaka; OGAWA, Satoshi
- 2PA-146 Development of the film with high heat resistance, high gas barrier and anti-reflection (Shibaura Institute of Technology, Faculty of Engineering) SONE, Shinnpei; OHISHI, Tomoji; WATANABE, Hidetoshi; YUIOKA. Eisuke

#### **Organic Crystals**

- 2PA-149 Synthesis and structural analysis of aromatic sulfonamide having conjugated aromatic skelton (Tokushima Bunri Univ.) KATOH, Junya; KATAGIRI, Kosuke; TOMINAGA, Masahide; AZUMAYA, Isao
- 2PA-150 Network structure of aromatic urea compounds in the crystal (Tokushima Bunri Univ.) GOJO, Motokazu; KATAGIRI, Kosuke; TOMINAGA, Masahide; AZUMAYA, Isao
- 2PA-151 Fluorescent Modulations Depending on Guest Molecules in Inclusion Crystals of 9,10-Bisaminophenylethynylanthracene Derivatives (Graduate School of Engineering, Osaka Univ.) ARAKI, Yusuke; TOHNAI, Norimitsu; HISAKI, Ichiro; MIYATA, Mikiji
- 2PA-152 Polymorphism and optical study of glycine (TWIns) ISHIKAWA, Kazuhiko; SUZUKI, Toshiya; TANAKA, Masahito; KAWASAKI,

- Tsuneomi; SOAI, Kenso; SHIRO, Motoo; ASAHI, Toru
- 2PA-153 Polymorph dependent solid-state ESIPT luminescence: halogen-substitutedphenylimidazopyridine derivatives (IIS, The Univ. of Tokyo) SHIDA, Toshihide; SHONO, Hideaki; MUTAI, Toshiki; ARAKI, Koji
- 2PA-154 Structural Transitions of Pseudopolymorphs in Uridine Nucleotide Hydrates (Kitasato Univ.) ANAI, Yuya; YAMAMURA, Shigefumi; SUGAWARA. Yoko
- 2PA-155 Double and Two-fold Helical Supramolecular Assemblies of Cinchona Alkaloid Derivatives with Binaphthol and Their Supramolecular Chirality (Graduate School of Engineering, Osaka Univ.) HIRAISHI, Eri; HISAKI, Ichiro; TOHNAI, Norimitsu; MIYATA, Mikiji
- 2PA-156 Hierarchical construction of porous structure with organic salt of 9-(4-sulfophenyl)anthracene and triphenylmethylamine (Graduate School of Engineering, Osaka Univ.) SAKAI, Kenichi; TOHNAI, Norimitsu; HISAKI, Ichiro; MIYATA, Mikiji
- 2PA-157 Crystal Structures and Inclusion Ability of Salts between Amino Acids Having a Modified Trityl Group and Amines (Graduate School of Engineering, Chiba Univ.) AKAZOME, Motohiro; SHIBA, Yuichiro; MEGUMI, Ken; MATSUMOTO, Shoji
- 2PA-158 Crystal Structure and Alcohols Inclusion Ability of Salts between N-Trityl Aromatic Amino Acids and Amines (Graduate School of Engineering, Chiba Univ.) AKAZOME, Motohiro; TSUJI, Tomoko; MEGUMI, Ken; MATSUMOTO, Shoji
- 2PA-159<sup>†</sup> Crystal structure and inclusion ability of N-carbamoyl amino acid derivatives (Graduate School of Engineering, Chiba Univ.) MEGUMI, Ken; MATSUMOTO, Shoji; AKAZOME, Motohiro
- 2PA-160 Orientation control in the solid-state Z-E photoisomerization of (Z)-alkenylpyridines through cation-pi interactions (Ochanomizu Univ.) NOJIRI, Yuka; YAMADA, Shinji
- 2PA-161 Low-temperature-induced reversible single-crystal-to-single-crystal phase transition (2) N-(4-tert-Butylbenzyl)phthalimide (Grad. School of Human & Env. Studies, Kyoto Univ.) TAKAHASHI, Hiroki
- 2PA-162 Tandem Asymmetric Reaction Using Chiral Crystal of Quinolonecarboxamide (Graduate School of Eng., Chiba Univ.) SAKAMOTO, Masami; YAGISHITA, Fumitoshi; MINO, Takashi; FUJITA, Tsutomu
- 2PA-163 Application of preferential enrichment to a cocrystal of DL-Cysteine and oxalic acid (Kyoto Univ) MORI, Yuko; IWAMA, Sekai; GONNADE, Rajesh: TAKAHASHI, Hiroki: TSUE, Hirohito: TAMURA, Rui

#### Sunday, March 27, AM

(12:30~14:00)

#### Polymer

- **2PB-031** new onium catalysts for PLA synthesis (KIT:Bio-molucular Engineering) ISAGAI, Tomomi; ISHIJIMA, Yuuki; ABIKO, Atsushi
- 2PB-032 Synthesis of lactide using onium catalysts (KIT:Graduate School of Science and Technology) ISHIJIMA, Yuuki; ABIKO, Atsushi
- 2PB-033 Synthesis and Character of Novel Biquinolinium Polymers (Kanagawa Univ.) KOJIMA, Shohei; MIYASAKA, Makoto; KAMEYAMA, Atsushi
- 2PB-034 Synthesis of the Novel Polymers Based on 3,3'-Bithianaphthene (Kanagawa Univ.) TSUKAMOTO, Takeshi; MIYASAKA, Makoto; KAMEYAMA, Atsushi
- 2PB-035 Unique Fluorescent Property of Skipped .pai.-Polymers Tethered by Malonic Ester Units (Kanagawa Univ.) KUDO, Masaru; HOSHINO, Tohru; NOMURA, Ryosuke; OKAMOTO, Sentaro
- **2PB-036** Folded H-Stacking Polymers with Trimethylene-Tethering (Kanagawa Univ.) NOMURA, Ryosuke; KUDO, Masaru; HOSHINO, Tohru; OKAMOTO, Sentaro
- **2PB-037** Synthesis and Optical Property of Calixarene Derivatives Bearing Active Ester Groups (Kanagawa Univ.) SHIKO, Keisuke; MIYASAKA, Makoto; KAMEYAMA, Atsushi
- 2PB-038 Synthesis and Optical Properties of Polymers Bearing Pendant Active Ester Groups (Kanagawa Univ.) HIGURASHI, Ayano; MIYASAKA, Makoto; KAMEYAMA, Atsushi
- 2PB-039 Specific Radical Polymerization of Acrylic Esters Initiated with 1-Hexyl-3-methylimidazolium Bis(trifluoromethylsulfony)imide (Tohoku Seikatsu Bunka Junior College) KANNO, Shuichi
- 2PB-040 Properties of N-Hexylpyridinium Hexafluorophosphate as an Initiator of Radical Polymerization (Tohoku Seikatsu Bunka Junior College) KANNO, Shuichi: SUDA, Atsushi
- 2PB-041 Synthesis of Novel Poly[2]catenanes by 1,3-Dipolar Cycloaddition on Nitrile Oxides (Nihon Univ.) IKAI, Tsuyoshi; HAGIWARA, Toshiki; HOSHI, Toru; SAWAGUCHI, Takashi
- 2PB-042 Synthesis of Novel Poly[2]catenanes by Hay Coupling (Nihon Univ.) KAWANAKA, Kengo; HGIWARA, Toshiki; HOSHI, Toru; SAWAGUCHI, Takashi
- **2PB-043** Synthesis of Polypropylene-Ionic Polymer Triblock Copolymer by RAFT Polymerization and Its Application (Nihon Univ.) NAKANO, Takahiro; SASAKI, Daisuke; HOSHI, Toru; HAGIWARA, Toshiki; SAWAGUCHI, Takashi
- 2PB-044 Synthesis and Application to Compatibilizing Agent of Block Copolymer of Polycarbonate-Poly(methyl methacrylate) (Nihon Univ.)

- KURODA, Kazuhiro; SASAKI, Tatunobu; SASAKI, Daisuke; HARADA, Masahiro; NUMAGUCHI, Motohiro; HIGUCHI, Tomoyuki; HOSHI, Toru; HAGIWARA, Toshiki; SAWAGUCHI, Takashi
- **2PB-045** Synthesis of polystyrene bearing FRET pair at the chain ends (Univ. of Yamanashi) OBATA, Makoto
- 2PB-046 Addition Copolymerization of Norbornene and Vinylnorbornene Catalyzed by Pd(0) Complex (Nihon Univ.) SAITO, Tatsuya; NIWAYAMA, Kazuki: SAKAI, Yusuke: WAKATSUKI, Yasuo
- 2PB-047 Simulation analysis of ring-opening polymerization mechanism of cyclic oligosiloxanes (Graduate School of Engineering, Hiroshima Univ.) SHIN, Ki; HASHIMOTO, Hiroshi; OHSHITA, Joji; NAKAMURA, Keiji
- 2PB-048\* Design of Conjugated Mircoporous Polymers and Unique Functions in Amine Adsorption (PRESTO, JST; Institute for Molecular Science) LIU, Xiaoming; JIANG, Donglin
- 2PB-049 Synthesis of Poly(alpha,beta-malic acid)s and Copolymer with Lactic Acid by Polycondensation (KIT: Graduate school of science and technology) IGUCHI, Makoto; ABIKO, Atsushi
- 2PB-050 Chain-Growth Cycloaddition Polymerization via Catalytic Alkyne [2 + 2 + 2] Cyclotrimerization and Its Application (Kanagawa Univ.) SAKURADA, Tetsuya; SUGIYAMA, Yu-ki; KATO, Rei; OKAMOTO, Sentaro
- 2PB-051<sup>#</sup> Synthesis of polydioxylthiophenes via Pd(OAc)<sub>2</sub> catalyzed C-H arylation (Yu Initiative Research Unit, Riken Advanced Science Institute) ZHAO, Haichao; YU, Hsiaohua
- 2PB-052 Structural control of side chain crystalline polymer by ATRP (Graduate School of Science and Engineering, Kagoshima Univ.) YAMASHITA, Kazuya; NAGATA, Minori; YAMAMOTO, Kazuya; NANCHI, Minoru; KAWAHARA, Shinichiro
- 2PB-053 Synthesis of Hyperbranched-Star Block Copolymers with has linear hydrophilic polymers and their Self-assembly (Kanagawa Univ.) WADA, Katsuhiko; MIYASAKA, Makoto; KAMEYAMA, Atsushi
- 2PB-054 Synthesis and micelle formation of amphiphilic block copolymer that has imidazolyl part in hydrophobic part (Kanagawa Univ.) BABA, Koutarou: MIYASAKA, Makoto: KAMEYAMA, Atsushi
- 2PB-055 Effects of Reaction Solvent and Temperature on Regioregularity ofPoly(3-hexylthiophene-2,5-diyl) Prepared by Chemical Oxidation Polymerization (Tokyo Institute of Technology) FUKUMOTO, Hiroki; OMORI, Yoshinori: YAMAMOTO, Takakazu
- 2PB-056 Inclusion complex formation of C<sub>60</sub>-end-capped polydimethylsiloxne and syndiotactic PMMA (Toyohashi Tech.) KAWAUCHI, Takehiro; KAWAUCHI, Mariko; ONISHI, Keita; TAKEICHI, Tsutomu
- 2PB-057 Functionalization of polyvinylalcohol using acetal reaction (Grad. Sch. Sci., Eng., Yamagata Univ.) SATO, Rikiya; ISHIKAWA, Sachio; OOBU, Takanori
- 2PB-058 Synthesis of Thermoresponsive Polysilsesquioxane Containing Carboxylic acid (Dept. Appl. Chem., Nat. Def. Acad.) MORIYA, Osamu; MINAMI, Fukutaro; YAMAMOTO, Shin-ichi; KASHIO, Mikihiro; SUGIZAKI, Toshio
- 2PB-059 Photoinduced formation of supramolecular polymers based on complexation ofbeta-cyclodextrin and viologen cation radicals (Kanagawa Univ.) SUZUKI, Takashi; MIYASAKA, Makoto; KAMEYAMA, Atsushi
- 2PB-060 Unusual acid-base Dissociation Behavior of Poly(maleic acid-alt-N-isopropyl acrylamide):Potentiometric Titrations, Colloid Titrations and Electrophoreses (Grad. Sch. Life and Environmental Sci., Univ. of Tsukuba) SAKAMOTO, Hiromi; KOKUFUTA, Etsuo; HIRATA, Mitsuo; KOHNO, Hideki; FUJII, Takayoshi; YAMADA, Kazunori
- 2PB-061 Preparation of the electrical conductive polyurethane elastomer (Toyo Univ.;Organic Material Laboratory Office) NAITO, Masahiro; TAJIMA, Masahiro; MATSUNAGA, Katsuji
- 2PB-062 Reduction of Tetrachloride Gold(III) Ions and Formation of Gold Nanoparticles by Poly(ethylene oxide)-containing Block Copolymers in Aqueous Solutions (Shinshu Univ.) HORIUCHI, Yuya; OKADA, Tomohiko; MISHIMA, Shouji; SAKAI, Toshio
- 2PB-063 Synthesis and Evaluation of the Sulfonated COPNA Resins as Strong Protonic Acids (The Nippon Dental Univ.; Niigata Univ.)
  TANEMURA, Kiyoshi; NISHIDA, Yoko; SUZUKI, Tsuneo; HORAGUCHI. Takaaki
- 2PB-064 Synthesis of Novel Thieno[3,4-b]Thiophene-type Low-Bandgap Polymers Bearing Various Aryl Ester Groups (Graduate School of Natural Science and Technology, Kanazawa Univ.) YAMAMOTO, Tomoyuki; SASAKI, Ryo; IKAI, Tomoyuki; MAEDA, Katsuhiro; KANOH, Shigeyoshi; KUWABARA, Takayuki; TAKAHASHI, Kohshin
- 2PB-065<sup>#</sup> Thermoelectric Properties of PEDOT-PSS Thin Films (Tokyo Univ. of Science Yamaguchi) JIRAVANICHANUN, Nattha; TOSHIMA, Naoki
- 2PB-066 Electropolymerization of boron-substituted thiophenes (Nat. Def. Acad.) HAYASHI, Shotaro: KOIZUMI, Toshio
- 2PB-067 Synthesis of Light-Emitting Polyimides Based on Terpyridine Metal Complexes (Kanagawa Institute of Technology) SAEGUSA, Yasuo; YAMAZAKI, Hideaki; KUBOTA, Manabu
- 2PB-068 Synthesis of carboxymethylchitin derivatives having polymerizable groups (Tottori Univ.) TERADA, Atsushi; YAMAMOTO, Chicako; ISHIBASHI, Naoya; IFUKU, Shinsuke; MORIMOTO, Minoru; SAIMOTO, Hiroyuki
- **2PB-069** Synthesis of ruthenium-bearing star polymers and examination of their X-ray sensitizing abilities. (Nara Institute of Science and Technology)

- MASUOKA, Shizuka; ANDO, Tsuyoshi; TERADA, Kayo; HIROHARA, Shiho; TANIHARA, Masao
- 2PB-070 Synthesis and evaluation of intracellular phosphorylation signal-responsive drug carrier (Kitakyusyu National College of Technology) NAOYAMA, Kenshiro; SONODA, Tatsuhiko; YAMAMOTO, Kazuya; KATAYAMA, Yoshiki; YAMADA, Kenzi
- 2PB-071 Capture of Metal Ions by Cross-Linked Poly(vinylcatechol) in water (Osaka Institute of Technology) SHIMOMURA, Osamu; KURAMOTO, Kohei: SAWADA. Toshihiro: OHTAKA, Atsushi: NOMURA. Ryoki
- 2PB-072 Preparation of the thin film using sulfonated isotactic polystyrene (Osaka Univ.; MEI center) AJIRO, Hiroharu; AKASHI, Mitsuru
- 2PB-073 Dissolved-oxygen permeability of surface-modified polydimethylsi-loxane membranes (Tokyo Univ. of Technol.) YUCHI, Kiyoshi; OKADA, Tomoko; MINOURA, Norihiko
- **2PB-074** Liquid-Crystalline Physical Gels Exhibiting Electrooptical Effects: Tuning of the Microstructures (The Univ. of Tokyo) EIMURA, Hiroki; YOSHIO, Masahumi; KATO, Takashi
- 2PB-075 Preparation and estimation as a polymer reaction field of optically active thermoresponsive polymers bearing base functionalities (Kinki Univ.) MATSUSHIMA, Ayaka; ISHIFUNE, Manabu
- 2PB-076 Relation between catalytic activity and thermoresponsivity of thermoresponsive polymers having imidazolyl groups as their side chains. (Kinki Univ.) TSUJI, Junya; HAMANAKA, Takahiro; ISHIFUNE, Manabu
- 2PB-077 Preparation of chitin nanowhisker films using ionic liquid and their composites with poly(lactide)s (Kagoshima Univ.) LI, Qing; MINE, Shozaburo; YAMAMOTO, Kazuya; KADOKAWA, Jun-ichi
- 2PB-078 Determination of Monomer Ratio of Aromatic Polyimide by Chemical Degradation Followed by <sup>1</sup>H-NMR Spectroscopy (UBE Scientific Analysis Laboratory, Inc.) SHIOMI, Kimie; MARU, Yasumitsu; MIYAUCHI, Koji
- 2PB-079 Polyolefin/Ordered Poly(silsesquioxane) Nanocomposites Prepared via Binary Silica Water-Crosslinking Reactions. (Graduate School of Science and Engineering, Yamaguchi Univ.) ADACHI, Kenta; HONDA, Kensuke; YAMAZAKI, Susuko; HIRANO, Tomoyuki; KUROKAWA, Hiroshi; WAKABAYASHI, Akinobu; KASAI, Paul H.; NAKAMAE, Katsuhiko; IWABUKI, Hitoshi; MURAKAMI, Koji

## Resources Utilization Chemistry

- 2PB-081 Investigation of adsorbed carbon monoxide over supported Ru catalysts (AIST) TAKAHARA, Isao; MURATA, Kazuhisa; OKABE, Kiyomi; INABA, Megumu
- 2PB-082 Normal alcohol synthesis on modified cobalt catalysts under FT condition. (Dept. of Chemistry, Kyushu Univ.; Catalysis Organic Chemistry Lab.) YANAGIHARA, Tatsuya; LIU, Xiao hao; HAMASAKI, Akiyuki; OHASHI, Hironori; TOKUNAGA, Makoto
- 2PB-083 Selective adsorptive separation of butanol from water/butanol/acetone system by using zeolite adsorbent (Fac. Eng., Gifu Univ.; Life Sci. Res. Ctr., Gifu Univ.) NAKAMURA, Tatsuya; NEGISHI, Hideyuki; IKEGAMI, Toru; SAKAKI, Keiji; HIMENO, Yoshiyuki; OOYACHI, Ken; OUMI, Yasunori
- 2PB-084 Synthesis of zeolite membrane with resistance to organic acids (Fac. Eng., Gifu Univ.; Life Sci. Res. Ctr., Gifu Univ.) MATSUNO, Taiji; NEGISHI, Hideyuki; IKEGAMI, Toru; SAKAKI, Keiji; HIMENO, Yoshiyuki; OOYACHI, Ken; OUMI, Yasunori
- 2PB-085 Hydrolysis of cellulose under hydrothermal conditions: effects of additives and amounts of solvents (Research Center for Solar Energy Chemistry, Osaka Univ.) TOKAI, Yuji; HARADA, Takashi; IKEDA, Shigeru; MATSUMURA, Michio
- 2PB-086 Ethanol production from waste paper: saccharification with sulfuric acid (2) (Toho-Univ.) OHNO, Takeru; ASANO, Hironobu; SHIMADA, Tatsuya; KAMOGAWA, Kejji; NISHIGAKI, Atsuko; OHSHIMA, Shigeru
- **2PB-087** Study on Synthesis of Biodisel Fuel using Various Charcoal as Solid Base Catalyst. (College of Industrial Technology, Nihon Univ.) KOBAYASHI, Yuki; FURUKAWA, Shigeki; YAMASAKI, Hiroshi
- 2PB-088 Metal-ion-capturing function of Amidinourea resins using a spectro-scopic analysis (Univ. of Tokyo Denki; School of Engineering) KANDOH, Tomoki; NAGAI, Jyunya; TANAKA, Satomi; SHIBA, Ryuichi
- 2PB-089 Synthesis and Metal-ion-capturing function of Amidinothiourea resins (Univ. of Tokyo Denki; School of Engineering) YAMASHITA, Motoki; NAGAI, Jyunya; TANAKA, Satomi; SHIBA, Ryuichi
- 2PB-090 Plasticity recovery of cross-linked polyethylene by oxidation with molecular oxygen in supercritical carbon dioxide (Grad. Sch. Eng., Utsunomiya Univ.) ARAYA, Toshiaki; YOSHIDA, Masaaki; KOBAYASHI, Ryosuke; GOTO, Toshiharu
- 2PB-091 Chemical recycling of PBT (polybutylene terephthalate) using high temperature water (AIST; Research Center for Compact Chemical System) SATO, Osamu; MASUDA, Yoshio; MURAKAMI, Yuka; HIYOSHI, Norihito; YAMAGUCH, Aritomo; SHIRAI, Masavuki
- **2PB-092** Low temperature dehydrochlorination of poly(vinyl chloride)*co*-poly (vinylidene chloride) by using zinc(II) oxide (Shinshu Univ.) OKADA, Tomohiko; SUTOH, Satoru; YAMAZAKI, Kenji; MATSUZAWA, Yukitaka; KOSUDA, Takashi; MISHIMA, Shozi

## **Energy and Related Chemistry**

- 2PB-095 Autocatalytic Preparation of Nano-Semiconductors for Solar Energy Conversion(3): Ti-H<sub>2</sub>O<sub>2</sub> system (Dept.of Chem., Fukushima-NCT) YOKOTA, Eri; SHIKE, Ikuro; FUJISAWA, Hirofumi; SAGAWA, Yuka; SAKAMAKI, Kenji
- **2PB-096** Autocatalytic Preparation of Nano-Semiconductors for Solar Energy Conversion (4): TiC,WTiC<sub>2</sub>-H<sub>2</sub>O<sub>2</sub> system (Dept. of Chem., Fukushima-NCT) SHIKE, Ikuro; YOKOTA, Eri; FUZISAWA, Hirofumi; SAGAWA, Yuka; SAKAMAKI, Kenji
- 2PB-097 Visible-light Responsive Fe<sub>3</sub>O<sub>4</sub> Semiconductor Utilizing Non-linear Current Oscillation Reaction (Dept. of Chem., Fukushima-NCT) UNAYAMA, Shun; OYAKE, Kanako; USUBA, Manami; ITO, Minako; SAKAMAKI, Kenji
- 2PB-098 Study on cathode catalyst for polymer electrolyte fuel cell using cupstacked carbon nanotubes as catalyst support. (Tokyo City Univ.) INADA, Masahiko; KOBAYASHI, Koichi; TAKAHASHI, Masashi
- 2PB-099<sup>†#</sup>Synthesis of Dithienogermole-containing pai-conjugated Polymers and Applications to Organic Thin Film Solar Cells (Graduate School of Engineering, Hiroshima Univ.) HWANG, Yong Mook; OHSHITA, Joji; KUSHIMOTO, Kohei; HARIMA, Yutaka
- 2PB-100 Dye-Sensitized Solar Cells Based on D-pi-A Fluorescent Dyes with Pyridine Ring not only as an Acceptor Group but also as an Anchoring Group (Hiroshima Univ.) NAGANO, Tomoya; INOUE, Shogo; OOYAMA, Yousuke; OHSHITA, Joji; KOMAGUCHI, Kenji; IMAE, Ichiro; HARIMA. Yutaka
- 2PB-101 Fabrication of dye-sensitized solar cells using electrostatic ink-jet printing (Tokai Univ.) ISHII, Asuka; TOKUNAGA, Sachiko; YANO, Yuya; FUKASAWA, Arata; UMEZU, Shinjiro; KUNUGI, Yoshihito
- 2PB-102<sup>†</sup> Enhanced photocurrent of dye-sensitized solar cell with improved counter electrode (Tokyo City Univ.; Dept. of functional material chemistry Lab.) SAKURAI, Sho; TAKAHASHI, Masashi; KOBAYASHI, Koichi
- 2PB-103 Effect of Backcontact Materials for Spray-Deposited CuInS<sub>2</sub> Solar Cell (Univ. of Hyogo) TAKEHARA, Kenji; ITO, Seigo; RYOU, Tosihiro
- 2PB-104 Research and Development of sulfide based solar cell by spray deposition method (Univ. of Hyogo) HIRAOKA, Hisashi; ITO, Seigo
- 2PB-105 Synthesis of CuInS<sub>2</sub> loaded on TiO<sub>2</sub> and application to quantum dotsensitized solar cell (School of science and engineering, Kinki Univ.) SAKAMI, Naoki; JIN-NOUCHI, Yasuaki; FUJISHIMA, Musashi; TADA, Hisraki
- 2PB-106 Self-Assembled TiO<sub>2</sub> Nanoarchitecture Fabricated by Anodization in Halogen-Free Electrolytes (Fukushima-NCT Advanced Course; Dept. of Chem.) KAMO, Yoichi; SAKAMAKI, Kenji
- 2PB-107 Development of fluoride cathode materials for Li ion secondary batteries and their electrode property (Univ. of Shizuoka) TOMITA, Yasumasa; KATO, Jinta; KAMIYA, Naoki; KOBAYASHI, Kenkichiro
- 2PB-108 The effect of the shape and size of carbon nanospaces on hydrogen adsorption energy (Tokai Univ.) ISHIKAWA, Shigeru
- 2PB-109 Effects of loaded compounds on product selectivity of photocatalyses using a powdered TiO<sub>2</sub> photocatalyst (Meisei Univ.) MURASATO, Hiroshige
- **2PB-110** Femtosecond Laser Fabrication on Glass Substrates with Gold Nanostructures Induced by Fragmentation of Gold Nanoparticles (Fukushima National College of Technology; Univ. of Tokushima; Hokkaido Univ.) HAGIRI, Masahide; MANABE, Genki; HASHIMOTO, Shuichi; TAKASE, Mai; MURAKOSHI, Kei
- 2PB-111 Photoisomerization of t-stilbene in microchannel photoreactor (Shinshu Univ.) MIYAUCHI. Minato: USAMI. Hisanao
- 2PB-112 Connections between the morphology of naked gold nanoparticles prepared using sonochemical reduction method and the change of water property with sonication (Shinshu Univ.) MIWA, Shoichi; OKADA, Tomohiko; MISHIMA, Shoji; SAKAI, Toshio

## Environmental and Green Chemistry, Geo and Space Chemistry

- 2PB-115 Effects of coexisting ions on crystal growth of calcium carbonate (Nat. Def. Acad.) KAMIYA, Natsumi; NISHI, Koji; YOKOMORI, Yoshinobu
- 2PB-116 Air pollutant deposition in Mt. Oyama (Kanagawa Univ.) MIYASHITA, Yuki; NANZAI, Ben; IGAWA, Manabu
- 2PB-117 Study on cloud water chemistry and its controlling factors using Mt. Fuji (Waseda Univ.) TAHARA, Daisuke; OKOCHI, Hiroshi; MARUYAMA, Shohei; TAKEMURA, Naoki; MINAMI, Yukiya
- 2PB-118 Behavior and precipitation scavenging of air toxics (8) (Waseda Univ) KOBAYASHI, Yusuke; OKOCHI, Hiroshi; TAMETIKA, Kazuya; MINAMI, Yukiya; NAGOYA, Toshio
- 2PB-119 Continuous measuring method of dusts and PM<sub>2.5</sub> in flue gas (Local Independent Administrative Agency Hokkaido Research Organization, Institute of Environmental Sciences) AKUTAGAWA, Tomoko; SAKAI, Shigekatsu; NIWA, Shinobu; AKIYAMA, Masayuki; KOGURE, Nobuyuki; TANAKA, Tosibumi; SEGA, Hatirou
- **2PB-120** Removal of naphthols by combined use of a polymer containing amino groups and oxidoreductase (Nihon Univ., College of Industrial

- Technology, Department of Applied Molecular Chemistry) KIMURA, Yuji; KASHIWADA, Ayumi; MATSUDA, Kiyomi; YAMADA, Kazunori
- 2PB-121 Quinone oxidation of bisphenol derivatives by tyrosinase and their removal by reaction with chitosan. (Nihon Univ., College of Industrial Technology, Department of Applied Molecular Chemistry) TAGAI, Suguru; KASHIWADA, Ayumi; MATSUDA, Kiyomi; YAMADA, Kazunori; HATA, Yoii: SHIOTA. Kazunori
- 2PB-122 A Simple and Easy Method of Detecting harmful Substances in ambient Air and Water by Using Inhibition Effect on Enzyme Activity. (Home) AMAYA, Kazuo
- 2PB-123 Observation of Altitude Distributions of Atmospheric Components with an Open-Path FTIR Spectrophotometer and a Tower (Tokyo Univ. Agricult. and Technol.) NITTA, Momoko; YOSHIMURA, Norio; TAKAYANAGI, Masao
- 2PB-124 Effect of acid fog on metal corrosion (Kanagawa Univ.) YAMAGISHI, Kosuke; NANZAI, Ben; IGAWA, Manabu
- 2PB-125 Effect of acid deposition on runoff of trace metals in stream water in eastern Tanzawa mountains (3) (Waseda Univ.) YONEYAMA, Naoki; OKOCHI, Hiroshi; ARAI, Saori; IGAWA, Manabu
- 2PB-126 A rapid toxicity test using Daphnia magna (Kogakuin Univ.; Applied Analytical Chemical Laboratory) SONAMOTO, Motomi; NAGASHIMA, Kunio; KAMAYA, Minori
- 2PB-127 Evaluation of mutagenic activities of river water of the Sagami area (Liberal Science & Academy and Arts High School of Kanagawa; Kanagawa Institute of technol.) TAKAMURA, Takeji; SATAKE, Aya; KANEKO, Chiaki
- 2PB-128 The modification of natural zeolite for enhancing polycondensation reaction of amino acids, sugars and phenols. (Hokkaido Univ.) FUKUCHI, Shigeki; FUKUSHIMA, Masami; SATO, Tsutomu; SASAKI, Masahide
- 2PB-129 Influence of ratio of initial carbon/nitrogen on degree of humification of heat-treatment product of organic waste (Hokkaido Univ.) TACHIBANA, Naoya; YONAIYAMA, Jyunki; KANNNO, Hikari; FUKUSHIMA, Masami
- 2PB-130 Influence of humic acid on the pattern of oxidation products of halogenated bisphenol A derived from catalytic oxidation using an iron porphyrin catalyst (Hokkaido Univ.) MIZUTANI, Yusuke; FUKUSHIMA, Masami
- 2PB-131 Elution behavior of Cr(VI) and Cr(III) contained in combustion ash of woody pellets. (College of Engineering, Nihon Univ.) KATO, Masaki; HIRAYAMA, Kazuo
- 2PB-132 Synthesis of Biodiesel Fuel Using an Organic Onium Salt Catalyst (KIT) OBATA, Yusuke; ABIKO, Atsushi
- 2PB-133 The continuous generation of active oxygen species and upgrading of the device using polyaniline VII (Faculty of Biomedical Engineering, Toin Univ. of Yokohama; Graduate School of Engineering, Toin Univ. of Yokohama) ODA, Takuma; HORIKAWA, Keijiro; SAITO, Kiyoshi
- 2PB-134 Oxidation reactions of phenanthrene derivatives with TiO<sub>2</sub> photocatalyst (Osaka Pref. College of Tech; Research Center for Solar Energy Chemistry, Osaka Univ.) JIN-NAI, Seihou; HASHIMOTO, Yuichiro; EBISUI, Naoto; HIGASHIDA, Suguru; MATSUMURA, Michio
- 2PB-135 Large scale solar photocatalytic ozonation of organic pollutants (Meisei Univ., GESC) HIDANO, Yasuyuki; OOTSU, Tomohiko; KOIKE, Takayoshi; OYAMA, Toshiyuki; HODAKA, Hisao
- 2PB-136 Development of TiO<sub>2</sub> nanotubes using carbon nanotubes as a template and its application (Mie Univ.) KATSUMATA, Hideyuki; SUGIYAMA, Tomoki; KANECO, Satoshi; SUZUKI, Tohru; OHTA, Kiyohisa
- 2PB-137 Anti-Dirt on the Riverside of the Horikawa River Using a Photocatalyst (Nagoya Municipal Ind. Res. Inst.) ONO, Satomi; KISHIKAWA, Nobuyuki; TSUGE, Hiroyasu; KAWASE, Satoru
- 2PB-138 Improvement and photocatalysis of layered double hydroxide intercalated with TiO2 (Nagoya Municipal Ind. Res. Inst.) KISHIKAWA, Nobuyuki; OOKA, Chihiro
- 2PB-139 Depelopment of photocatalytic activity estimation methodfor environmental by means of Photocatalytic Oxygen Demand (National Institute of Advanced Industrial Sceince and Technology) HIRAKAWA, Tsutomu; OHKO, Yoshihisa; SANO, Taizo; NEGISHI, Nobuaki; TAKEUCHI, Koji
- 2PB-140 The diagnosis of the growing condition by the assay of glucose and abscisic acid production quantity in Sedum (Faculty of Biomedical Engineering, Toin Univ. of Yokohama; Graduate School of Engineering, Toin Univ. of Yokohama) AOYAMA, Miyuki; IIJIMA, Kentaro; SAITO, Kiyoshi
- 2PB-141 The influence of nitrous acid in dew water on the photosynthetic activities of red pine needles (Hiroshima Univ.) KONDO, Hiroaki; MORIYAMA, Tomoe; SAKUGAWA, Hiroshi

#### Sunday, March 27, PM

(15:00~16:30)

## Catalysts and Catalysis

2PC-031 NOx reduction on Ag/Al<sub>2</sub>O<sub>3</sub>/NiAl(100) model surface (Utsunomiya Univ.) ITO, Satoshi; EGAWA, Chikashi

- **2PC-032** NO+CO reaction on the CeOx / Pd(111) surface (Catalyst Chemistry Laboratory, Utsunomiya Univ.) SATO, Akihisa
- 2PC-033 Adsorption and reactivity of methyl acetate over alumina and silver supported alumina investigated by infrared spectroscopy (Graduate School of Science and Engineering, Yamaguchi Univ.) SAKATA, Yoshihisa; YAMASHITA. Tatsuvoshi: SATAKUNI. Atsuko: IMAMURA. Hayao
- 2PC-034 Combustion activities of noble metal catalysts supported on hexagonal rare earth-iron mixed oxide synthesized by various methods (Kyoto Univ.) MASUDA, Yuichi; NISHIMURA, Tatsuya; HOSOKAWA, Saburo; INOUE, Masashi
- 2PC-035 Preparation of supported Co-B catalysts for fuel cell (Tohoku Univ.:Institute of Multidisciplinary Research for Advanced Materials) OHNUMA, Ami; AN, Changgyu; NAKAYA, Masahumi; MURAMATSU, Atsushi
- 2PC-036 Nitrile hydrogenation performances on supported Ru trinuclear cluster catalyst (IMS) WANG, Fei; ISHIGURO, Nozomu; MURATSUGU, Satoshi; TADA, Mizuki
- 2PC-037 Palladium Supported Ionic Liquid Catalyst (Pd-SILC) as Reusable and Heterogeneous Catalyst for Catalytic Hydrogenations (Grad. School of Sci. and Tech., Niigata Univ., Faculty of Eng.) HAGIWARA, Hisahiro; NAKAMURA, Tomomi; HOSHI, Takashi; SUZUKI, Toshio
- 2PC-038 Enantio-differentiating hydrogenation of methyl acetoacetate over a tartaric acid-NaBr-modified Raney nickel catalyst—Hydrogenation under a low hydrogen pressure (Univ. of Toyama) OSAWA, Tsutomu; ONOGI, Mari; LEE, I-Yin Sandy
- 2PC-039 Advantage of the Admix Catalyst at Lower Chiral Modifier Concentration (Univ. of Hyogo Graduate school of Material science) KIM, Taeyeon; SUGIMURA, Takashi
- 2PC-040 Effect of preparation method of spherical-silica-supported Ni catalysts upon the decomposition of methane (Kyoto Univ.) SUGIURA, Motohiko; HASHIGAMI, Satoshi; HOSOKAWA, Saburo; WADA, Kenji; INOUE, Masashi
- 2PC-041 Application to fuel reforming reaction of cobalt supported cupshaped thin-layer organosilica -The effect of preparation condition of catalyst-(Shinshu Univ.) SETTA, Masahiro; SUZUKI, Tatuya; AKAMA, Hiroshi; SAKAI, Toshio; OKADA, Tomohiko; MISHIMA, Shozi
- 2PC-042 Synthesis of polyaniline on Au nanoparticle-loaded TiO2 using H2O2 (School of science and engineering, Kinki Univ.) KITAMURA, Yukihide: HUJISHIMA. Musasi: TADA. Hiroaki
- 2PC-043 Comparison of water oxidation activity of several ruthenium substituted polyoxometalates with different ligands (Hiroshima Univ.) KITATOMI, Hiroaki; SADAKANE, Masahiro; IDE, Yusuke; SANO, Tsuneji
- 2PC-044 Inhibition of NH<sub>3</sub> poisoning by addition of Pt to Ru/alpha-Al<sub>2</sub>O<sub>3</sub> for preferential CO oxidation reaction. (Oita Univ. Faculty of engineering) YAGI, Shou; SATO, Katsutoshi; NISIGUTI, Hiroyasu; TAKITA, Yusaku; NAGAOKA, Katsutoshi
- 2PC-045 Partial oxidation of benzene by electron beam assistance type catalyst reaction (Shimane Institute for Industrial Technology) TAJIMA, Masahiro; ASAHINA, Shuuichi
- 2PC-046 Transesterification of biphasic liquid systems using narrow tubes as a reactor. (Kinki Univ.) MIMASU, Tadasuke; HASHIMOTO, Keiji; KOMINAMI, Hiroshi
- 2PC-047 Withdrawn
- 2PC-048 The study of the structure and acid properties of SiO<sub>2</sub>-TiO<sub>2</sub> catalyst (Tokyo Gakugei Univ.) MIYAKAWA, Naoki; OGAWA, Haruo; YOSHINAGA, Yusuke
- 2PC-049 Acid properties and catalytic activities of WO<sub>3</sub>/Al<sub>2</sub>O<sub>3</sub>-ZrO<sub>2</sub> catalyst (Tokyo Gakugei Univ.) NOZAWA, Shuntaro; OGAWA, Haruo; YOSINAGA, Yusuke
- 2PC-050 Production of Propylene from Butanol and Ethylene over ZSM-5 Catalysts Ion-exchanged with various metal cation (Ibaraki National College of Technology) KAWAKAMI, Yutaka; YAMAGATA, Nobutsugu
- 2PC-051 Conversion of ethanol over TON type zeolite. (Hiroshima Univ.) TSUNOJI, Nao; FURUMOTO, Yoshiyasu; HARADA, Yasumitsu; IDE, Yusuke; SADAKANE, Masahiro; SANO, Tsuneji
- 2PC-052 Sustainable synthesis of heterocycles by zeolite-catalyzed reactions of alkenyl nitrile and alkenyl amide. (Yamagata Univ.) HIRATA, Chiaki; ITOH, Hiroki; KURIYAMA, Yasunao
- 2PC-053 Density Measurement of all silica CIT-5 type zeolite with Various Solvents (Toyama National College of Technology) YAMASHIMA, Kazuki; KAWAI, Takae
- 2PC-054 Preparation of alumina supported Y-type zeotlite catalyst for water decomposition (Univ. of Hyogo) MIGITA, Tsubasa; MATSUO, Yoshiaki; SUGIE, Yosohiro
- 2PC-055 Transformation of ethanol over Zn-Si mixed oxide catalysts modified with metal oxide (Tokyo Gakugei Univ.) TAGUCHI, Jungo; OGAWA, Haruo; YOSHINAGA, Yuusuke
- 2PC-056 Desorption process of N<sub>2</sub>, O<sub>2</sub> and H<sub>2</sub>O from K-Co<sub>3</sub>O<sub>4</sub> catalyst during N<sub>2</sub>O decomposition (Kyoto Univ.) NISHIYAMA, Tomoki; YOSHINO, Hiroaki; HOSOKAWA, Saburo; WADA, Kenji; INOUE, Masashi
- 2PC-057 Synthesis and Characterization of Water Soluble Catalysts using heteropoly acid including iron for Generating Hydroxyl radical (TRI-Osaka) HAYASHI, Hirokazu; NAKASHIMA, Yoichi
- 2PC-058 Support Effects of Alumina on Ag/Al<sub>2</sub>O<sub>3</sub> Catalysts for Highly Active

- NOx-SCR in Diesel Exhausts (Tokyo Gakugei Univ.; Saitama Institute of Technology) AIZAWA, Yoshiyuki; YOSHINAGA, Yusuke; ARITANI, Hirofumi
- 2PC-059 Preparation and catalytic performance of stable Ru coordination polymer complex with high catalytic activity (Kanagawa Univ.) MATUDA, Hirosi; MIYAZAKI, Yuhei; SATOU, Konomi; KATAOKA, Yusuke; MORI, Wasuke
- 2PC-060 water photo-reduction reactton with Rh coordination polymers applied interaction between sheet (Kanagawa Univ.) AOSHIMA, Fuminori; SHIKAMA, Hyoubu; MIYAZAKI, Yuhei; SATO, Konomi; KATAOKA, Yusuke; MORI, Wasuke
- 2PC-061 Effect of water addition for the glycothermal synthesis of Si-doped TiO<sub>2</sub> (Kyoto Univ.) OKUBO, Shun; KOMORI, Takashi; KIM, Sung-wook; HOSOKAWA, Saburo; IWAMOTO, Shinji; KOBAYASHI, Keita; WADA, Kenji; INOUE, Masashi
- 2PC-062 Correlation between physical properties and photocatalytic activity of metal-loaded titanium oxide in hydrogen formation from biomass (Kinki Univ.) MAKINO, Yui; HASHIMOTO, Keiji; KOMINAMI, Hiroshi
- 2PC-063 Recovery of benzene by photocatalytic dechlorination of chlorobenzene: continuous reaction in pseudo-fixed bed slurry-type reactor (Kinki Univ.) HAMADA, Yuya; FUKU, Koujirou; HASHIMOTO, Keiji; KOMINAMI, Hiroshi
- 2PC-064 Low-temperature synthesis of nanocrystalline bismuth vanadateand its application to visible light photocatalyst (School of science and engineering, Kinki Univ.) EDA, Shouichi; KANDA, Shigeki; TANAKA, Masanori; FUJISIMA, Musashi; TADA, Hiroaki
- 2PC-065 Localized surface plasmon resonance of Au nanoparticles controlled by the catalyst support and efficiency improvement of the visible light photocatalytic reaction. (School of science and engineering, Kinki Univ.) KIMURA, Keisuke; FUJISIMA, Musashi; TADA, Hiroaki
- 2PC-066 Surface modification effect of cobalt oxide on photocatalytic activity of titanium dioxide (Graduate School of Science and Engineering Research, Kinki Univ.) YAMAMOTO, Hironori; FUJISHIMA, Musashi; TADA, Hiroaki
- 2PC-067 Surface morphology controlling of brookite TiO2 by chemical etching and measurement of photocatalytic activity (Kyushu institute of technology) ZHANG, Linjie; MURAKAMI, Naoya; OHNO, Teruhisa
- 2PC-068 Development of anatase particles of titanium(IV) dioxide with octahedral morphology (Kyushu Institute of Technology) KIM, Zhengyuan; MURAKAMI, Naoya; OHNO, Teruhisa
- 2PC-069 Photocatalytic Properties of Ruthenium Complex in Zeolite Y under Visible Light Irradiation (Gunma National College of Technology) KAKINUMA, Toru: TAIRA, Nobuvuki
- 2PC-070 Effect of nitrification condition of Fe-modified N- and Si-codoped titania on the photocatalytic activity under visible-light irradiation (Gunma Univ.) HONDA, Noriyuki; UEDA, Kazuhiro; KIM, Sung-wook; IWAMOTO, Shinji; KOBAYASHI, Keita; HOSOKAWA, Saburo; INOUE, Masashi
- 2PC-071 Photocatalytic decomposition of acetaldehyde using N-and Si-co-doped titania modified with vanadium (Gunma Univ.) TOKUTOME, Toru; KIM, Sung-wook; IWAMOTO, Shinji; KOBAYASHI, Keita; HOSOKAWA, Saburo; INOUE, Masashi
- 2PC-072 Photocatalytic activity of gold nanoparticles-immobilized titanias under sunlight irradiation in the presence of carbon dioxide gas. (Hiroshima Univ.) NAKAMURA, Naoya; IDE, Yusuke; SADAKANE, Masahiro; SANO, Tsuneii
- 2PC-073 Visible Light-Induced Partial Oxidation of Cyclohexane on Cr,Ti-containing Silica (Osaka Univ.) SHIRO, Akimitsu; TSUKAMOTO, Daijiro; SHIRAISHI, Yasuhiro; HIRAI, Takayuki
- 2PC-074 Preparation of highly active platinum-doped TiO<sub>2</sub> photocatalyst (Yamaguchi Univ.) FUJIWARA, Yuhei; YABUNO, Shinya; ADACHI, Kenta; YMAZAKI, Suzuko
- 2PC-075 Influence of preparation conditions on photocatalyticoxidation of hexane over WO<sub>3</sub> obtained byhydrothermal synthesis method (Tokyo Gakugei Univ.) AMANO, Daisuke; IKUO, Akira; OGAWA, Haruo; YOSHINAGA, Yusuke
- 2PC-076# Influences of Co-existing Species on Photocatalytic H2 Evolution using Dye-sensitized Metal Oxide Nanoparticles under Visible Light (Tokyo institute of technology) ZHAN, Conghong; HUANG, Ching-chun; HU, Chichang; MOCHIZUKI, Dai; MAITANI, Masato; WADA, Yuji
- 2PC-077 Direction control of photochemical electron transfer in combined systems of a Ru(II) complex on semiconductor membranes (Tokyo Tech.) SAHARA, Go; MORIKAWA, Takeshi; SEKIZAWA, Keita; YUI, Tatsuto; SEKITO, Takeshi; KAJINO, Tsutomu; ISHITANI, Osamu
- 2PC-078 Catalytic hydrogenation and dehydrogenation of hydrocarbons over hexanuclear molybdenum sulfide clusters (RIKEN; Saitama Univ.) KAMIGUCHI, Satoshi; ARAI, Kanako; NAGASHIMA, Sayoko; CHIHARA, Teiji
- 2PC-079 Catalytic intramolecular cyclization of R(CH<sub>2</sub>)<sub>n</sub>R' (R, R'=OH, SH, NH<sub>2</sub>; n=4, 5) over hexanuclear halide clusters (Saitama Univ.; RIKEN) NAGASHIMA, Sayoko; SASAKI, Tomoaki; KUDO, Kentaro; KAMIGUCHI, Satoshi; CHIHARA, Teiji
- 2PC-080 Development of Organic Reactions Using Metal-Graphene Composites (Okayama Univ.) NISHINA, Yuta; MIYATA, Junya; GOTO, Kazuma
   2PC-081 Selective Synthesis of 1,4-Diaryl-1-butenes via Dimerization of

- Styrenes by Supported Ruthenium Catalysts (Grad. School of Eng., Kyoto Univ.) SHIMURA, Shun; MIURA, Hiroki; WADA, Kenji; HOSOKAWA, Saburo: INOUE, Masashi
- 2PC-082 Regioselective Addition of Carboxylic Acids to Alkynes by Oxide-supported Ruthenium Catalysts (Grad. School of Eng., Kyoto Univ.) NISHIUMI, Masami; MIURA, Hiroki; WADA, Kenji; HOSOKAWA, Saburo: INOUE. Masashi
- 2PC-083 Platinum nanoparticles stabilized on linear polystyrene as effective catalysts for aerobic alcohol oxidation in water (Osaka Institute of Technology) OHTAKA, Atsushi; KONO, Yuki; USHIYAMA, Tomoki; YAMAMOTO, Syusei; SHIMOMURA, Osamu; NOMURA, Ryoki
- 2PC-084 Sonogashira cross-coupling assisted with PdO nanoparticles stabilized on a linear polystyrene in water (Osaka Institute of Technology) OHTAKA, Atsushi; YAMAGUCHI, Tomohiro; TERATANI, Takuto; KAWASHIMA, Takahiro; TATSUMI, Koichi; SHIMOMURA, Osamu; NOMURA, Ryoki
- 2PC-085 Polymer encapsulated Pd-SILC for environmentary benign Suzuki-Miyaura reaction (Grad. School of Sci. and Tech., Niigata Univ., Faculty of Eng.) HAGIWARA, Hisahiro; SATOU, Kouta; HOSHI, Takashi; SUZUKI, Toshio
- 2PC-086# Stereoselective hydrogenation of cyclohexanone derivatives by chiral Rh(I) pillar complexes immobilized on taeniolite (Department of Applied Chemistry and Biotechnology, Graduate School of Engineering, Chiba Univ.) SEMBIRING, Kiky Corneliasari; HARA, TAKAYOSHI; ICHIKUNI, Nobuvuki; SHIMAZU, Shogo
- 2PC-087# The selective hydrogenolysis of sugars to low molecular alcohols over Ni nanoparticles with SnO additive supported on aluminium hydroxide (Chiba Univ.) RODIANSONO, Rodiansono; HARA, Takayoshi; ICHIKUNI, Nobuyuki; SHIMAZU, Shogo

## Colloid and Interface Chemistry

#### Nanoparticles and Dispersion

- 2PC-089 Synthesis of Cu and Ag-Cu Bimetallic Nanoparticlesd for Wiring Formation (Osaka Municipal Technical Research Institute; Daiken Chemical Co.Ltd) NAKAMOTO, Masami; YAMAMOTO, Mari; KASHIWAGI, Yukiyasu; OHNO, Toshinobu; KAKIUCHI, Hiroshi; YOSHIDA, Yukio
- 2PC-090 Syntheses of Copper Sulfide Nanoparticles and Nickel Sulfide Nanoparticles by Controlled Thermolysis (Osaka Municipal Technical Research Institute) KASHIWAGI, Yukiyasu; YAMAMOTO, Mari; OHNO, Toshinobu; NAKAMOTO, Masami
- 2PC-091 The Bandle Formation of Au Nanorod by Ligand Substitution Reaction (Coll. Sci., Ibaraki Univ.) SAWAGUCHI, Naka; OTOMO, Syouhei; MAKUUCHI, Etsuyo; IZUOKA, Akira
- 2PC-092 Structures and optical properties of complexes of organic dye aggregate/metal nanoparticles (Utsunomiya Univ.) YAMAMOTO, Aika; SENBA, Haruyuki; KATO, Noritaka; FURUSAWA, Takeshi; IIMURA, Ken-ichi
- 2PC-093 Preparation of ATO and Tin Oxide Nanopaticles by Controlled Thermolysis and Application to Transparent Conductive Film (Tomoe Works Co.,Ltd.) FURUTA, Shinya; TAKAI, Katsuhiro; TAKEMURA, Yasutaka; KASHIWAGI, Yukiyasu; YAMAMOTO, Mari; OHNO, Toshinobu; NAKAMOTO, Masami
- 2PC-094 Construction of the optical Kerr-gate spectroscopic system and its application to semiconductor quantum dots (school of science and technology, Kwansei Gakuin Univ.) MORINISHI, Yuta; KOBAYASHI, Yoichi: TAMAI. Naoto
- 2PC-095 Single-particle Spectroscopy and Time-resolved Depolarization Spectroscopyof CdTe Quantum Dots Bound to DNA (Kwansei Gakuin Univ.) KUDO, Shinya; TAMAI, Naoto
- 2PC-096 Synthesis of metal-doped CdSe quantum dots and their optical properties (Kwansei Gakuin Univ.; School of Science and Technology) OZAKI, Masakazu; TUBOI, Motohiro; TAMAI, Naoto
- 2PC-097 Synthesis of CdTe/CdS core/shell nanocrystals and their exciton dynamics (Kwansei Gakuin Univ.; School of Science and Technology) MATSUMOTO, Yusuke; KOBAYASHI, Yoichi; TAMAI, Naoto
- 2PC-098 Effect of Surfactants on the Formation of Nanoparticles of Bis (phenylethynyl)anthracene (Kanto Gakuin Univ.) YAGITA, Yoshimi; HASHIMOTO, Akira; MATSUI, Kazunori
- 2PC-099 Nanocomposite Polymeric Microspheres Containing Magnetic Metal and Alloy Nanoparticles (FIRST, Konan Univ.) FUJII, Maki; TSURUOKA, Takaaki; NAWAFUNE, Hidemi; AKAMATSU, Kensuke
- 2PC-100 Preparation of ID-array Au nanoparticles/polymer nanocomposite wires (FIRST, Konan Univ.) FUKUMOTO, Yurina; TSURUOKA, Takaaki; YANAGISHITA, Takashi; MASUDA, Hideki; NAWAFUNE, Hidemi; AKAMATSU, Kensuke
- 2PC-101 Synthesis of hybrid material consisting of inorganic nanoparticles and Metal-Organic Frameworks (FIRST, Konan Univ.) KAWASAKI, Hiroko; TSURUOKA, Takaaki; NAWAFUNE, Hidemi; AKAMATSU, Kensuke
- 2PC-102 Synthesis and Spectroscopic Studies of Ag-Core Au-Shell Nanoparticles Coated with Cyanine Dye J-aggregate (Osaka City Univ.) MATSUDA, Kazuaki; KOMETANI, Noritsugu
- 2PC-103 Sonochemical synthesis of Pd colloids with near infrared absorption

- property (Graduate School of Engineering, Osaka Prefecture Univ.) DOI, Satoko; OKITSU, Kenji; NISHIMURA, Rokuro
- 2PC-104 Closely adjacent gold nanoparticles formed by electrostatic and chemical interaction towards enormous SERS activation (Graduate School of Science and Engineering, Saitama Univ.) YAJIMA, Toru; YU, Yeiyei; FUTAMATA, Masayuki
- 2PC-105 Closely adjacent silver nanoparticles formed by electrostatic interaction towards enormous SERS activation (Graduate School of Science and Engineering) YU, Yeiyei; YAJIMA, Toru; FUTAMATA, Masayuki
- 2PC-106 Withdrawn
- 2PC-107 Syntheses and Function of cucurbituril-protected Pt nanowires (Tokyo Univ. of Science, Yamaguchi) SHIRAISHI, Yukihide; YOSHIOKA, Seiji; OKAMOTO, Yasuaki; TOSHIMA, Naoki
- 2PC-108<sup>†</sup> Fluorescent Sensing of Saccharides using Composite Material of Gold Nanoparticles and Pyrene Boronic Acid (Univ. of Yamanashi) FUJIMAKI, Yoshihiro; SHINMORI, Hideyuki
- 2PC-109 Synthesis of gold-nanoparticles capped by a terthiophenederivative and their two-dimensional ordered arrays. (Tokyo Metropolitan Univ.) SAITOU, Ken-ichi; NISHIYABU, Ryuhei; KUBO, Yuji
- 2PC-110 Gold Nanoparticles' 1D arrangement at Porous Alumina membrane as Templates (Univ. of Tsukuba; KAST; Tokyo Metropolitan Univ.) EGUCHI, Miharu; KONDO, Toshiaki; KOBORI, Hiromu; MASUDA, Hideki; TERANISHI, Toshiharu
- 2PC-111 In situ microscopy observation of photo-induced growth of a single gold nanorod in solution (Institute of Science and Technology, The Univ. of Tokushima) TAKAGI, Daisuke; HASHIMOTO, Syuichi; SHIRAISHI, Ryowya
- 2PC-112 In-situ time-resolved SAXS studies of metal nanoparticle formation (Nara Women's Univ.; Kyoto Univ.) TAMURA, Noriko; HARADA, Masafumi; TAKENAKA, Mikihito
- 2PC-113 Preparation and Catalytic Activities of Au and Pt Nanoparticles Protected by Tadpole Type Amphiphilic Dendrimers (Graduated School of Nara Women's Univ.) EBIHARA, Aya; YOSHIMURA, Tomokazu
- 2PC-114 Light-induced Arrangement of Thymine Functionalized Gold Nanoparticles (JAIST) HIRAI, Shinnosuke; MIYABAYASHI, Keiko; MIYAKE, Mikio
- 2PC-115 Random Number Generation by a Binary Colloidal Particles Array (Flucto-Order Functions (RIKEN ASI); Hanyang Univ.; Tokyo Institute of Technology) IKEZOE, Yasuhiro; KIM, Song-ju; KIM, Donghyun; LEE, Seung-beck; HARA, Masahiko
- 2PC-116 Gelation of CdS Nanoparticles Synthesized in Hydrophilic Ionic Liquids (Wakayama National College of Technology) TRAN, Duy Thach; MORI, Midori; HAYASHI, Junjiro
- 2PC-117 Pattern formation of methane hydrates in oceanic sediments (Meiji Univ.) MURAOKA, Michihiro; NAGASHIMA, Kazushige

#### Molecular Assemblies

- 2PC-118 Formose Reaction in Water Pools of Reverse Micelles (Osaka Univ.) MASAOKA, Makoto; HASHIDZUME, Akihito; SATO, Takahiro
- 2PC-119 Synthesis and Aggregation behavior of Sodium 3-Decylazulene-1-Carboxylate (Tokai Univ.) SUEMORI, Tomohiro; FUJIO, Katsuhiko
- 2PC-120 Nano-Structural Analysis of Tadpole Type Amphiphilic Dendrimer Aggregates by Small-Angle Neutron Scattering (Graduated School of Nara Women's Univ.) EBIHARA, Aya; IWASE, Hiroki; SHIBAYAMA, Mitsuhiro; OGAWA, Tetsuya; KURATA, Hiroki; YOSHIMURA, Tomokazu
- 2PC-121 Control of self-assembling behavior of amphiphilic porphyrin utilizing O/W emulsion as a template. (Graduate School of Life and Environmental Science, Kyoto Prefectural Univ.) TAKIGAMI, Yusuke; NUMATA, Munenori
- 2PC-122 Preparation of Peapod-type Polymers by the Use of Cyclic tris (spiroborate) Molecular Connecting Modules (Dept. of Chem. Konan Univ.) MORII, Akio; DANJO, Hiroshi; MIYAZAWA, Toshifumi
- 2PC-123 Formation of supramolecular structure and isomerization behavior of stilbene modified cyclodextrins. (Grad. Sch. Sci., Osaka Univ.) YASUTAKE, Eri; TAKASHIMA, Yoshinori; YAMAGUCHI, Hiroyasu; HARADA, Akira
- 2PC-124 A Novel Metal-Complexed Organic Nanotube Formed from an N-Acyl-L-amino Acid (AIST) MUKAI, Masaru; KOGISO, Masaki; AOYAGI, Masaru; ASAKAWA, Masumi; SHIMIZU, Toshimi
- 2PC-125 Phase behavior and protein denaturation of branch-chained anionic surfactants (NTRC-AIST, Waseda Univ., Univ. Tokyo, Osaka Univ.) MINAMIKAWA, Hiroyuki; SUMITOMO, Keiko; MAYUMI, Koichi; MASUDA, Mitsutoshi; SHIMIZU, Toshimi; ITO, Kohzo; YAMAGUCHI, Yoshinori
- 2PC-126 Self-organization of sucrose alkyl ethers (Kagoshima Univ.) KUWAHARA, Shin-ya; KANEMARU, Manami; YAMAMOTO, Kazuya; KADOKAWA, Jun-ichi
- 2PC-127 Study of development for highly-ordered 2D polymer film by using of interfacial condensation. (Sojo Univ.) MIHARA, Sho; MASAKI, Yoshitaka; TAMARU, Shun-ichi; SHINKAI, Seiji
- 2PC-128 Development of supramolecular nano-hybrids containing ionic liquid (Sojo Univ.) SAKAZAKI, Masaki; TAMARU, Shun-ichi; SHINKAI, Seiji
- 2PC-129 Chemical Modification of Amphiphilic Macrocyclic Metal Com-

- plexes directed toward the Structural Control of Submicron-sized Aggregates (Grad. School of Science, The Univ. of Tokyo) KAWAGOE, Minori; KUBOTA, Ryou; TASHIRO, Shohei; SHIONOYA, Mitsuhiko
- 2PC-130 Hydrogen-bond-directed supramolecular unilamellar vesicles analysis of dispersibility based on zeta-potentials (IIS, The Univ. of Tokyo) SAKAINO, Hirotoshi; SAWAYAMA, Jun; YOSHIKAWA, Isao; ARAKI, Koji
- 2PC-131 Elasticity Change of Peptide Lipid Self-Assemblies Induced by the Difference in Coordination Metals and Their Assembly Forms Estimated by Atomic Force Microscope (Tokyo Univ. of Science) SAITO, Daisuke; IKEDA, Ryo; KONO, Daisuke; KOGISO, Masaki; SHIMIZU, Toshimi; YUI. Hiroharu
- 2PC-132 Elucidation of the Factor of Elastic Behavior Differences of Amyloid Fibrils by Atomic Force Microscopy (Tokyo Univ. of Science) IKEDA, Ryo; UMEDA, Atsuko; YUI, Hiroharu
- 2PC-133 Measurements of the temporal transformation of metal-complexed lipid self-assemblies by two-dimensional infrared spectroscopy (Tokyo Univ. of Science) WATANABE, Azusa; KONO, Daisuke; YUI, Hiroharu; KOGISO, Masaki; SHIMIZU, Toshimi
- 2PC-134 Supramolecular Gels Prepared with Amphiphilic Zinc Chlorins (Ryukoku Univ.; Ritsumeikan Univ.) MIYATAKE, Tomohiro; TAKEDA, Masayuki; TANIGAWA, Shuntaro; HIRAI, Ryoji; KATO, Syuusaku; TAMIAKI, Hitoshi
- 2PC-135 Gelation of the Eu(III) complex prepared from the diketone ligand (Department of Applied Chemistry, Kyushu Institute of Technology) YAKEYA, Daisuke; MORIGUCHI, Tetsuji; ARAKI, Koji; TSUGE, Akihiko
- 2PC-136 Gelation and Photochromic Properties of Spiropyran-Cholesterol Conjugate (Osaka Univ.) YOSHIDA, Yasunori; INOUE, Takuya; SHIRAISHI, Yasuhiro; HIRAI, Takayuki
- 2PC-137 Synthesis and Self-Assemblies of Acyl Semicarbohydrazide Derivatives Bearing Aliphatic Moieties (Yamagata Univ) TAJIMA, Akira; ITO, Kazuaki
- 2PC-138 Synthesis and gelation properties of organic gelators having a coumarin skelton at the terminal position of the molecule (Yamaguchi Univ) KUROSE, Keisuke; MORITA, Yuki; OKAMOTO, Hiroaki
- 2PC-139 Function of Liquid Crystal Doped with Pd Nanoparticles Stabilized by 5CB Analogous Molecules and Polymers (Tokyo Univ. of Science, Yamaguchi) OKI, Koji; ZENMYO, Akari; KONDOU, Tomohiko; KOBAYASHI, Takaya; YABUUCHI, Kazuhiro; INOKUCHI, Makoto
- 2PC-140 Development of Hydrogen-Bonding Lophine Derivatives: Relation-ships between Molecular Structures and Gelation Properties (Chubu Univ.; Tokyo Univ. of Sci., Yamaguchi) SUZUKI, Junpei; YABUUCHI, Kazuhiro; INOK UCHI, Makoto
- 2PC-141 Self-Assembly of Hydrogen-Bonding Glyoximato Complexes with Mechano- and Solvatochromic Properties (Chubu Univ., Tokyo Univ. of Sci., Yamaguchi, Inst. for Molecular Sci.) YABUUCHI, Kazuhiro; HONDA, Natsumi; SAITO, Yohei; INOKUCHI, Makoto; YAKUSHI, Kyuya
- 2PC-142 Synthesis of Discotic Macrocycle Consisted of Periodically-arrayed Salphenes (Graduate School of Science, Nagoya Univ.) KASHIMA, Teruomi; KAWANO, Shin-ichiro; TANAKA, Kentaro
- 2PC-143 Synthesis of Discotic Macrocycle Consisted of Salphene-Bridged Carbazole Directed Metallo-Nanochannel (Graduate School of Science, Nagoya Univ.) ISHIDA, Yukari; KAWANO, Shin-ichiro; TANAKA,
- 2PC-144 Distinctive Study on the W/O and O/W Emulsion Formed by the Three-Phase Emulsification (Project of the Three-phase Emulsion, Kanagawa Univ.) IMAI, Yoko; TOYOTA, Kaori; KOSHINUMA, Masakatsu; TAJIMA, Kazuo
- 2PC-145 Application of Mesoporous Silica as Surface-active Powder (Tokyo Univ. of Technol.; Yamagata Univ.) SHIBATA, Masashi; ARIHARA, Yuu; SUZUKI, Hisato; NONOMURA, Yoshimune
- 2PC-146 Ring-shaped accumulation of molecules at water-solid interface by use of a micronano bubble generated by laser local heating (Chuo Univ.) FUKUE, Asuka; AKIBA, Naoki; FUKANO, Ryuta; FUJII, Sho; KANAIZUKA, Katsuhiko; HAGA, Masa-aki

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- 2PC-147 Miscibility of 1H,1H,2H,2H-henicosafluoro-1-dodecanol and 1-hexadecanol at hexane/water Interface (Saitama Univ.) FUJITA, Yasuka; VILLENEUVE, Masumi
- 2PC-148 Ultra-Thin Film of Clay Nanotube Prepared by Adsorption onto a Floating Monomolecular Film of Stearic Acid (Nat. Def. Acad.) UMEMURA, Yasushi; ASHIDA, Yuji; INUKAI, Kei-ichi
- 2PC-149 Preparation and Structure of a Langmuir-Blodgett Film of Claynanosheet with an Optical-Active and Water-Soluble R(II) complex cation (Nat. Def. Acad.) UMEMURA, Yasusi; IKEJI, Youhei
- 2PC-150 Three-dimensional growth of silica precursors on two-dimensional templates of micro-phase separated monolayers (Utsunomiya Univ.) MIURA, Takahiro; KATO, Norihiro; IIMURA, Ken-ichi
- 2PC-151 Preparation of gold electrode modified with self-assembled monolayer (SAM) of mercaptpyridyl(ironporphyrin)complex and its application to active oxygen sensor. (Tokyo Univ. of Science) KANEI, Naomichi; KONDO, Takeshi; YUASA, Makoto
- 2PC-152 The Electrochemical behavior of Dopamine at SAM-modified Gold

- Electrodes (Nat. Def. Acad.) OZAWA, Shinichiro; ARUGA, Atsushi
- 2PC-153 Adsorption and Photosensitization of Water-soluble Antimony Porphyrin Complex in Phospholipid Liposome (Univ. of Miyazaki) BEPPU, Toshinori; MATSUMOTO, Jin; SHIRAGAMI, Tsutomu; YASUDA, Masahide
- 2PC-154 Building of the hybrid system of the Eu(III) complex and the bilayer membrane and its properties (Department of Applied Chemistry, Kyushu Institute of Technology) KISHI, Ryuraro; MORIGUCHI, Tetsuji; ARAKI, Koji; TSUGE, Akihiko
- 2PC-155 Formation of Oligovesicular Giant Vesicles and Substance Encapsulation (Shinshu Univ.) NAKAYA, Takayuki; OKUMURA, Yukihisa
- 2PC-156 Fusion dynamics of self-reproducing giant vesicles (The Univ. of Tokyo) KURIHARA, Kensuke; SUZUKI, Kentaro; TOYOTA, Taro; SUGAWARA, Tadashi
- 2PC-157 Formation of Nanodisc Structure by Cationic Amphiphiles with Alkoxysilyl Group in Water (Grad. Sch. Mater. Sci., Nara Inst. Sci. Technol.) HAYASHI, Hiroki; MIKI, Syo-hei; YASUHARA, Kazuma; KIKUCHI, Jun-ichi

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- 2PC-158 Construction and evaluation of EPS model films toward elucidation of mechanisms of microbial-influenced metal-surface corrosion (Utsunomiya Univ.) OHYOSHI, Akane; IIMURA, Ken-ichi; KURODA, Daisuke; IKEGAI, Hajime; KANEMATSU, Hideyuki
- 2PC-159 Change in Structure of Carbonized Adamantane in Nanospaces (Chiba Univ.; Shinshu Univ.) IZUMI, Ryutaro; OHBA, Tomonori; KANEKO, Katsumi; KANOH, Hirofumi
- 2PC-160 Heat of CO2 absorption on an MOF having a flexible structure (Chiba Univ.; Tokyo Univ. Agricul. Technol..; Nippon Steel Corp.) SUGIURA, Hikaru; KAJIRO, Hiroshi; OHBA, Tomonori; KANOH, Hirofumi
- 2PC-161 Measurement of Heat Capacity of Water Confined in Ordered Mesoporous Silica (Okayama Univ. of Sci.) WADA, Yasuki; TAKAHARA, Shuichi; KITTAKA, Shigeharu
- 2PC-162 Evaluation of PVA and PAA on the Alumina surface by Colloid probe method of AFM (Tokyo Institute of Technology) NAKANOME, Mari: ISOBE, Toshihiro: MATSUSHITA, Sachiko: NAKAJIMA, Akira
- 2PC-163 Evaluation of Interaction between Al<sub>2</sub>O<sub>3</sub> Surface in Electrolyte Solutions (Tokyo Tech) ISOBE, Toshihiro; NAKAGAWA, Yosuke; MATSUSHITA, Sachiko; NAKAJIMA, Akira
- 2PC-164 The Size and Co-culture effect on the Differentiated Function of Primary Rat Hepatocyte Spheroids (Tokyo Univ. of Science) OKIMURA, Saya; SASAKI, Kohei; NAKASONE, Yuichi; HIRANO, Akihiro; KATAOKA, Kazunori; OTSUKA, Hidenori

# Theoretical Chemistry, Informatics Chemistry and Computational Chemistry

- 2PC-167 A theoretical research of luminescent mechanism of ladder-type π-conjugated compounds including heteroatoms (Kyoto Univ.) YOSHIMOTO, Aya; ISHIKAWA, Atsushi; SATO, Hirofumi; NAKAO, Yoshihide
- 2PC-168 Theoritical study iridium complex of organic electro-luminescence (Dep. of chem., Osaka Pref. Univ.) KAMATA, Naoya; ASADA, Toshio; KOSEKI Shiro
- 2PC-169 Theoretical analysis on ligand effects and substituent effects in Pt complexes (Dep. of chem., Osaka Pref. Univ) KAGITA, Yuhki; ASADA, Toshio; KOSEKI, Shiro
- 2PC-170 GdF electronic spectra revisited: 4-component relativistic CI calculations of the all-electron system and of the point charge model (Chukyo Univ.; Nagoya City Univ.) YAMAMOTO, Shigeyoshi; TATEWAKI, Hiroshi
- **2PC-171** Theoretical study of oxidation of cyclohexanediol to adipic anhydride by Ru(IV)O complex (Kyushu Univ.) ABE, Takafumi; SHIOTA, Yosihito; KOJIMA, Takahiko; YOSHIZAWA, Kazunari
- 2PC-172 Theoretical study of the mechanisms of N2 conversion on the Mo complexes bearing phosphine ligands (IMCE, Kyushu Univ.) SASADA, Akira; TANAKA, Hiromasa; KONO, Tomohisa; YUKI, Masahiro; MIYAKE, Yoshihiro; NISHIBAYASHI, Yoshiaki; YOSHIZAWA, Kazunari 2PC-173 Withdrawn
- 2PC-174 Theoretical study for oxygen evolving reaction catalyzed by manganese complex (Mitsubishi Chemical Corporation, Yokohama Research Center) HATAKEYAMA, Makoto; NAKATA, Hiroya; YOKOJIMA, Satoshi; NAKAMURA, Shinichirou
- 2PC-175 Theoretical analysis of the dehalogenation reaction of L-2-chloro-propionic acid by haloacid dehalogenase L-DEX YL (Univ. of Kobe) KONDO, Hirotaka; NAKAMURA, Takashi; TANAKA, Shigenori
- 2PC-176 ONIOM study of the substituent effects of phosphine ligands on olefin hydrogenation by the Wilkinson catalyst (Kanagawa Univ.) MATSUBARA, Toshiaki; TAKAHASHI, Ryohei
- 2PC-177 Theoretical Study of Water Oxidation Catalyzed by a Dinuclear Mn (tokyo institute of technology) NAKATA, Hiroya; HATAKEYAMA, Makoto; YOKOJIMA, Satosh; NAKAMURA, Shinichiro
- 2PC-178 Calculation of rovibrational excitation processes of CsI in laser fields

- (Japan Atomic Energy Agency) ICHIHARA, Akira; KUROSAKI, Yuzuru; YOKOYAMA, Kejichi
- 2PC-179 The Role of Metal Ion in the Active Site of Diol Dehydratase (IMCE) DOITOMI, Kazuki; KAMACHI, Takashi; TAKAHATA, Masanori; TORAYA, Tetsuo; YOSHIZAWA, Kazunari
- 2PC-180 A Density Functional Study on Molecular and ElectronicStructures of Active Site in Mn/Fe Binuclear RNR (Mie Univ.) YOSHIOKA, Yasunori; MITANI, Masaki
- 2PC-181 Theoretical study on molecular and electronic structures of the active site of OEC for transition from S0 to S1 (Mie Univ.) ICHINO, Tomoya; MITANI, Masaki; YOSHIOKA, Yasunori
- 2PC-182 A Density Functional Study on Hydration Structure of Metal Ion in the Cavity of the KcsA Potassium Channel (Mie Univ.) MITANI, Masaki; SUGIMOTO, Tomomi; YOSHIOKA, Yasunori
- **2PC-183** Comprehensive Search of Target Receptors for Phenothiazines as Anti-psychotic Potency and Carcinogenic Activity using Molecular Operating Environment (MOE) (Josai Univ.) MIYAMAE, Tomoki; KURIHARA,
- 2PC-184 QSAR analysis and Docking study on ADAMs as Anti-HIV agents using Molecular Operating Environment(MOE) (Josai Univ.) KOBUNA, Yousuke; SAKAMOTO, Takeshi; KURIHARA, Teruo
- 2PC-185 Theoretical Study of Stepwise Mechanism for Peptide Bond Formation in the Ribosome Using ONIOM Method (Wakayama Med. Univ.; Nagoya Women's Univ.) FUKUSHIMA, Kazuaki; IWAHASHI, Hideo; NISHIKIMI, Morimitsu
- 2PC-186 Analysis of adsorption and desorption property of surfactants on a CNT surface (National Institute of Advanced Industrial Science and Technology) OBATA, Shigeaki; HONDA, Kazumasa; NAKANISHI, Junko
- 2PC-187 Hydrolysis of anticancer platinum complexes:a relativistic FMO-MD simulation study (Ochanomizu Univ.; AIST; Rikkyo Univ.) HIRAYAMA, Natsumi; MORI, Hirotoshi; KOMEIJI, Yuto; MOCHIZUKI, Yuii
- 2PC-188 A Theoretical Study on the Acylation Mechanism of Class C beta-lactamase used QM/MM methods (Dep of chem., Osaka Pref. Univ.) OKAJIMA, Toshiyuki; ASADA, Toshio; KOSEKI, Shiro
- 2PC-189 Development of the SAAP force field and the application to molecular simulation of peptides (Tokai Univ.) IWAOKA, Michio; DEDACHI, Kenichi; SHIMOSATO, Taku; MINEZAKI, Toshiya
- 2PC-190 Molecular Dynamics Simulation of the Collision-Induced Absorption Spectra of Neon-Argon Mixtures (Tohoku Univ.) YAMAZAKI, Tatsuto; MORITA, Akihiro; KANNO, Manabu; KONO, Hirohiko
- 2PC-191 Topological Interpretation of Aromaticity in Polycyclic Conjugated Systems (Shizuoka Univ.) NAKAGAMI, Yuto; SEKINE, Rika; AIHARA, Jun-ichi
- 2PC-192 Development of GlycoNAVI: A Chemical Reaction Information Management System (The Noguchi Institute) YAMADA, Issaku; MIZUNO, Mamoru
- 2PC-193 Evaluation of the Mechanism for Forming of Insoluble Complex between Tea Catechin and Risperidone in Aqueous Solution using Molecular Modeling Calculation (Faculty of Pharmaceutical Sciences, Fukuoka Univ.; College of Pharmaceutical Sciences, Daiichi Univ.) IKEDA, Hirohito; NAGAO, Yuka; MATSUBARA, Tomonori; MORIWAKI, Hanae; YUKAWA, Miho; YUKAWA, Ejji; AKI, Hatsumi

#### Monday, March 28, AM

(10:00~11:30)

## Physical Chemistry -Structure-

- **3PA-031** Possibility of double minimum potential of FHO(linear structure singlet) molecule. (Waseda junior&Senior Highschool) SAITOH, Toshikazu
- 3PA-032 Vibrational Spactra of Methyl Isocyanate-Formic Acid Complex in a Low-temperature Ar Matrix (Iwate Univ.) SUZUKI, Eiichi; SHIMIZU, Tsuyuki; YASHIRO, Hitoshi
- 3PA-033 Investigation of the interaction between ethanol and noble gases in low-temperature matrices (Univ. of Agriculture and Technology) SEKINE, Masahiko; NAKATA, Munetaka
- 3PA-034 Femtosecond Stimulated Raman Study of S205G Green Fluorescent Protein Mutant (Univ. of California, Berkeley) FUJISAWA, Tomotsumi; REMINGTON, S. James: MATHIES, Richard A.
- 3PA-035 Measurements of Vibrational Circlar Dichroism Spectroscopy on the Hydration Films of Collagen (Tokyo univ. of science) SOHARA, Yuusuke; NUMATA, Moemi; YUI, Hiroharu
- **3PA-036** Spectroscopic Study on the Mechanism of Gold Luster Nature of Azobenzene Derivative Gold-Colored Organic Crystals (Tokyo Univ. of Science) YASUFUKU, Eriko; MATSUMOTO, Akiko; FUKUYASU, Kengo; KONDO, Yukishige; YUI, Hiroharu
- 3PA-037 Property of Graphite Intercalation Compound Including Fluoride Molecules Studied by <sup>19</sup>F NMR (Okayama Univ.; Kyoto Univ.; Oregon State Univ.; NIMS) GOTOH, Kazuma; TAKEDA, Kazuyuki; MICHAEL M., Lerner; GOTO, Atsushi; TANSHO, Masataka; HASHI, Kenjiro; OHKI, Shinobu; SHIMIZU, Tadashi; MARUYAMA, Shinpei; ISHIDA, Hiroyuki
- 3PA-038 Structure of the Smectite Studied by Solid State NMR (Kanazawa Univ.) KUMAGAI, Yoshihide; OHASHI, Ryutaro; HASEGAWA, Yuusuke;

- FUKUSHI, Keisuke; MIZUNO, Motohiro
- 3PA-039 ESR and Electronic Structures of TEMPO Radicals Pair-wise on DNA Duplex as Prototypical Models for Molecular Spin Quantum Computers (Graduate School of Science, Osaka City Univ.; The Institute of Scientific and Industrial Research, Osaka Univ.; Graduate School of Engineering Science, Osaka Univ.; JST-CREST) YAMAMOTO, Satoru; SUGISAKI, Kenji; ATSUMI, Hiroshi; MAEKAWA, Kensuke; NAKAZAWA, Shigeaki; SATO, Kazunobu; TOYOTA, Kazuo; SHIOMI, Daisuke; NAKATANI, Kazuhiko; KITAGAWA, Masahiro; TAKUI, Takeji
- 3PA-040 Transformation reaction of Au<sub>10</sub> cluster to Au<sub>11</sub>11 cluster (Coll. Sci., Ibaraki Univ.) OHNUMA, Saori; MAKUUCHI, Etsuyo; ITOI, Ayaka; IZUOKA. Akira

## Physical Chemistry - Properties-

- **3PA-043** Hydration structure and the dynamics of respective hydroxyl groups of alpha- and beta-glucose. Nuclear magnetic relaxation study. (Ochanomizu Univ.) NAKANISHI, Yui; MASUDA, Yuichi
- 3PA-044 Emission Quenching of Pyrenesulfonate Excimer by Pyrenesulfonate ion on dodecyltrimethylammonium micellar surfaces (Okayama Univ. of Sci.) TAKEZAKI, Makoto; YAMAGATA, Souichirou; TOMINAGA, Toshihiro
- 3PA-045 Interaction between balky amines and alcohols (Dept. Chem. Kinki Univ.) KIMURA, Takayoshi; SUZUKI, Tatsunori; KAMIYAMA, Tadashi; FUJISAWA, Masao
- **3PA-046** Volume properties and viscosity of biomolecule in water (Faculty of Science and Engineering, Kinki Univ.) KAMIYAMA, Tadashi; KANAOKA, Eri; TSUJI, Atsushi; ISHII, Ryota; KIMURA, Takayoshi
- 3PA-047<sup>†</sup> Measurements of Near Infrared Luminescence Quantum Yields Using an Integrating Sphere (Advanced Technology Research Center, Gunma Univ.) KOBAYASHI, Atsushi; SUZUKI, Kengo; YOSHIHARA, Toshitada; TOBITA, Seiji
- 3PA-048 Detection of interfacial water formed on hydrophobic surfaces and evaluation of its separation selectivity for inorganic ions and organic molecules (Saitama Univ.) KONDO, Yoshiki; SAITO, Shingo; SHIBUKAWA, Masami
- 3PA-049 Alkyl-Chain Dependence on Physicochemical Properties of Imidazolium-Based Ionic Liquids with Terminally Cyclohexylated Alkyl-Chain (Faculty of Science, Chiba Univ.) MATSUMURA, Akiko; MANDAI, Toshihiko; NISHIKAWA, Keiko
- 3PA-050 Glass Transition Behavior of Ionic Liquid, [bmim][Cl]-Water Mixtures (Nat. Def. Acad.) YOSHIMURA, Yukihiro; KIMURA, Hyosun; OKAMOTO, Chikara; MIYASHITA, Tomoki; TAKEKIYO, Takahiro; IMAI, Yusuke: ABE, Hiroshi
- 3PA-051 Withdrawn
- 3PA-052 Pressure Dependence of the Solubility of p- xylene in Water (Department of Applied Chemistry, Ritsumeikan Univ.) KUGA, Kento; SAWAMURA, Seiji
- **3PA-053** Viscosity of 0.51 mol/kg Aqueous Tetrapropylammonium Bromide Solution at High Pressures (Department of Applied Chemistry, Ritsumeikan Univ.) NODA, Katsufumi; SAWAMURA, Seiji
- 3PA-054 Pressure Dependence of the Solubility of L-Phenylalanine in Water at 298.2 K (Department of Applied Chemistry, Ritsumeikan Univ.) KOBAYASHI, Ryota; SAWAMURA, Seiji
- **3PA-055** Structural analysis of *Ia3d* cubic phase of 1,2-bis(4'-n-alkoxybenzoyl) hydrazine BABH(n) by maximum entropy method (Univ. of Tsukuba; Gifu Univ.) NAKAZAWA, Yuri; OZAWA, Kazumi; YAMAMURA, Yasuhisa; YASUZUKA, Syuma; KUTSUMIZU, Shoichi; SAITO, Kazuya
- **3PA-056** Infrared Spectroscopic Study of Crystal E Phase of 4-Alkyl-4'isothiocyanatobiphenyls (Univ. of Tsukuba) ADACHI, Takuya;
  HORIUCHI, Katsuya; YAMAMURA, Yasuhisa; SUMITA, Masato;
  YASUZUKA, Syuma; MASSALSKA-ARODZ, Maria; SAITO, Kazuya
- **3PA-057** Phase behaviors of non-aromatic ionic liquids (Graduate School of Advanced Integration Science, Chiba Univ.) HOSHINO, Shinpei; ENDO, Takatsugu; NISHIKAWA, Keiko
- **3PA-058** Melting property of ionic liquid [C<sub>12</sub>mim][Tf<sub>2</sub>N] (Materials and Structures Laboratory, Tokyo Institute of Technology) ICHIKAWA, Marie; KAWAJI, Hitoshi
- 3PA-059 Thermodynamic studies of phase transition phenomena in cyclohexane absorbed IRMOF-1 (Materials and Structures Laboratory, Tokyo Institute of Technology) HIRANO, Daiki; KAWAJI, Hitoshi; UEDA, Takahiro
- 3PA-060 Correlation between structure and properties of water pool confined in AOT reversed micelles in its phase transition (Tokyo Univ. of Science) SUZUKI, Akira; KONNO, Kohzoh; SOMEYA, Yuu; YUI, Hiroharu
- 3PA-061 Dynamical behavior of ionic liquid by means of NMR (College of Industrial Tech. Nihon Univ.) NISHIMURA, Taichiro; YAMANE, Youhei; YAMADA, Koji
- 3PA-062 Shear Stress Effects on Nitrospiropyran (Tokyo Univ. of Science, Yamaguchi; Faculty of Engineering) OHSHIMA, Shuhei; SAKAI, Ryosuke; INOKUCHI, Makoto; YABUUCHI, Kazuhiro; YAKUSHI, Kyuya; SHIROTANI, Ichimin
- 3PA-063 Stress Effects on Diarylethenes (Tokyo Univ. of Science, Yamaguchi; Faculty of Engineering) INOUE, Takeshi; INOKUCHI, Makoto; YAKUSHI, Kyuya; SHIROTANI, Ichimin

- **3PA-064** Preparation of Sexithiophene Derivertives with Phosphonate Group and Self-Assembled Monolayer on ITO Surface. (Toho Univ.) TAKASUNA, Tohru; KODAIRA, Akira; PAC, Chongjin; MORIYAMA, Hiroshi
- 3PA-065 Fabrication and Property of Self-Assembled Monolayer by Porhyrin Derivatives (Toho Univ.) YUI, Miki; MORI, Katsutoshi; PAC, Chyongjin; MORIYAMA. Hiroshi
- 3PA-066 Dynamics of water molecules in mesoporous silica SBA-15 as studied by deuterium NMR. (Kanazawa Univ.) MIYATOU, Tatsuya; SAZANAMI, Kouichi; OHASHI, Ryutaro; MIZUNO, Motohiro; KITTAKA, Shigeharu
- 3PA-067 Tip-enhanced Raman Spectroscopy using metal nanoparticles (saitama Univ.) ISHIBASHI, Takeshi; DANNO, Mami; FUTAMATA, Masayuki
- **3PA-068** Fabrication of high quality ZnO by a new CVD(CEW-CVD)method using hot H2O produced in a Pt-catalyzed H<sub>2</sub>-O<sub>2</sub> reaction (Nagaoka Univ. of Technology; Energy conversion material Laboratory) TAMURA, Kazunari; NISHIYAMA, Hiroshi; MATSUBARA, Hiroshi; INOUE, Yasunobu
- 3PA-069 Fabrication of Organic-inorganic layered perovskite-type mixed crystal compounds with functional materials incorporated into the organic layer, and controls of energy transfer property (Tohoku Univ. Asai laboratory) KAWANO, Naoki; KOSHIMIZU, Masanori; ASAI, Keisuke
- 3PA-070 Ionic conductibity of trimethylammonium chloride in the mesopore of MCM-41 (Yonago National College of Technology Department of Materials Science) NIIDE, Takahiro; TANAKA, Susumu
- 3PA-071 Purification of Li@C60 (Sendai National College of Technology, Touhoku Univ., idea) ENDO, Tomoaki; KASAMA, Yasuhiko; KAWACHI, Kazuhiko; KWON, Eunsang
- 3PA-072 Synthesis and characterization of electron donor-acceptor conjugates of an endohedral metallofullerene, La<sub>2</sub>@C<sub>80</sub>, and an electron accepting moiety. (Univ. Tsukuba, TARA) OBUCHI, Shota; TAKANO, Yuta; AKASAKA, Takeshi: MARTIN, Nazario
- 3PA-073<sup>#</sup> Synthesis and Characterization of Covalently Linked Porphyrin-La@C<sub>82</sub> Hybrids (Univ. of Tsukuba; IMS) FENG, Lai; SLANINA, Zdenek; SATO, Satoru; YOZA, Kenji; TSUCHIYA, Takahiro; MOZOROGI, Naomi; AKASAKA, Takeshi; NAGASE, Shigeru
- 3PA-074 Isolation and production of Novel Lanthanum Metallofullerenes (Univ. Tsukuba, TARA Center) TSUCHIYA, Takayoshi; ITO, Tsuyoshi; NIKAWA, Hidehumi; ZDENEK, Slanina; MIZOROGI, Naomi; TSUCHIYA, Takahiro; AKASAKA, Takeshi; NAGASE, Shigeru
- 3PA-075 Synthesis and Properties of Dimethyl-Substituted DHDA-TTP Derivative (Univ. of Hyogo) KOHZUKI, Naoharu; ICHIKAWA, Shun; MIURA, Kouki; AKUTSU, Hiroki; NAKATSUJI, Shin'ichi; YAMADA, Jun-ichi
- 3PA-076 Synthesis and Properties of Dimethyl-Substituted TTF and TTF-DT-Fused Donors (Univ. of Hyogo) FUJIKAWA, Kohei; WADA, Atsushi; AKUTSU, Hiroki; NAKATSUJI, Shin'ichi; YAMADA, Jun-ichi
- **3PA-077** Effect on selenium substitution in BDT-TTP derivatives with methoxy group (Grad. Sch. Sci., Eng., Ehime Univ.; Fac. Eng., Ehime Univ.) SHIRAHATA, Takashi; TOKI, Shinya; ITO, Tetsuya; ASAMITSU, Naoya; MISAKI, Yohji
- 3PA-078 Ion Dynamics in New Ionic Plastic Crystals of NR<sub>4</sub>BR'<sub>4</sub> (Graduate School of Nanobioscience, Yokohama City Univ.) HAYASAKI, Tomoyuki; HONDA, Hisashi
- 3PA-079 Synthesis and physical properties of a new EOM-EDT-TTF donor and its CT complexes (School of Sci. & Eng., Aoyama Gakuin Univ.) INAYOSHI, Tomoko; HIRATA, Kenntarou; TAKAHASHI, Masami
- 3PA-080 Development of multifunctional materials using TTF-transition metal quinolinato composite molecules (Grad. School of Sci., Osaka Pref. Univ.) YAMAMOTO, Shinya; FUJIHARA, Hideki
- 3PA-081 Structures and Properties of Novel Anionic Acceptor N,N'-Disulfo-2,5-dimethyl-1,4-benzoquinonediimine and their Charge-transfer Salts (Univ. of Hyogo) TAKIGAWA, Yuki; AKUTSU, Hiroki; YAMADA, Jun-ichi; NAKATSUJI, Shin'ichi
- **3PA-082** Structures and Properties of New Organic Magnetic Anion PO-COAC<sub>2</sub>H<sub>4</sub>SO<sub>3</sub> (A = O, S, N(CH<sub>3</sub>)) and their Charge-transfer Salts (Univ. of Hyogo) KAWAMURA, Atsushi; KOBAYASHI, Kenji; AKUTSU, Hiroki; YAMADA, Jun-ichi: NAKATSUJI, Shin'ichi
- 3PA-083 Structures and Properties of Anionic Acceptor 2-Sulfo-1,4-benzo-quinone and their Charge-transfer Salts (Univ. of Hyogo) MARUYAMA, Yuka: AKUTSU, Hiroki: YAMADA, Jun-ichi: NAKATSUJI, Shin'ichi
- 3PA-084 Structure and electric conductivity of Yttrium phthalocyanine partially oxidized salts (Grad. Sch. Sys Eng., Wakayama Univ.) SHIBANO, Yutaka: YAMAKADO, Hideo
- 3PA-085 Synthesis and Magnetic Properties of Molecular Magnetic Material; (TMA)(NITPBAH) constructed by hydrogen bonds (Graduate School of Science, Hiroshima Univ.) NAKANO, Yuki; NISHIHARA, Sadafumi; AKITA, Motoko; INOUE, Katuya
- 3PA-086 Crystal structures and magnetic properties of four kinds of tri- and tetrafluorophenyl nitronyl nitroxides (Dept. Phys. Sci., Osaka Pref. Univ.; INR, Osaka Pref. Univ., INR, Osaka Pref. Univ.) KANZAWA, Tuneki; NISHIHARA, Sadafumi; NOJIRI, Hiroyuki; HOSOKOSHI, Yuko
- 3PA-087 Magnetic and electric propertys of half metallic ferromagnet Ca<sub>2</sub>FeMo<sub>1-x</sub>Nb<sub>x</sub>O<sub>6</sub>(03cx3c0.9) (Tokyo Univ. of Science, Yamaguchi) SUSUKI, Tadakatu; KINERI, Tohru
- 3PA-088 Structure and Magnetic Properties of Ionic Crystals Composed of

- Organic Radical Cations and Transition Metal Complex Anions (Dept. Chem., TMU) SUZUKI, Ken-ichi; KODAMA, Takeshi; KIKUCHI, Koichi; FUJITA, Wataru
- 3PA-089 Construction of the molecular chains of TEMPONE radical using an organic 1-D porous material, "TPP", as a template (College of Humanities and Sciences) TAKEUCHI, Kanae; KOBAYASHI, Hirokazu; ASAJI, Tetsuo
- **3PA-090** Gas Adsorbing Property of Transition Metal and Lanthanoid Coordination Polymers (Hokkaido Univ.) MURAMATSU, Naoki; KAGEYAMA, Yoshiyuki; MARUTA, Goro; TAKEDA, Sadamu

## Physical Chemistry -Chemical Kinetics and Dynamics-

- 3PA-093 Fabricatin of acetylene-functionalized polystyrene nanowires by the single particle nano-fabrication technique (Graduate School of Engineering, Osaka Univ.) ASANO, Atsushi; TSUKUDA, Satoshi; SUGIMOTO, Masaki; SEKI. Shu
- **3PA-094** The reaction of Au<sub>11</sub> cluster with AuCl<sub>2</sub>- (Coll. Sci., Ibaraki Univ.) SAKAMOTO, Emiko; MAKUUCHI, Etsuyo; ITOI, Ayaka; IZUOKA, Akira
- 3PA-095 Influence of surfactant and dissolved gas on the particle diameter formed by the laser-ablation of silver plate in water (Nagaoka National College of Technology) CHUA, Ming Jing; MURAKAMI, Yoshinori
- **3PA-096** Pulsed Laser Processing of Nano-Porus Films Based on Resonant Surrface Plasmon Excictation. (Hokkaido Univ.) MURAOKA, Keita; KITAMURA, Noboru; YAMADA, Kazushi; TSUBOI, Yasuyuki
- **3PA-097** Phase separation dynamics of aqueous solution ofPoly(N-isopropylacrylamide) studied by a laser T-jump technique-Effects of concentration, molecular weight, and tacticity- (Hokkaido Univ.) TADA, Takanori; KITAMURA, Noboru; KATSUMOTO, Yukiteru; TSUBOI, Yasuyuki
- **3PA-098** Plasmon-based-optical Trapping of Polymer nano-beads: A Confrocal fluorescence microscopy study (Hokkaido Univ.) SHIBATA, Michiko; SHOJI, Tatsuya; KITAMURA, Noboru; TAKASE, Mai; MURAKOSI, Kei; TSUBOI, Yasuyuki
- 3PA-099 Photosensitized Generation of Singlet Oxygen Using Porphyrins Nanoparticle-Coated Membranes under Atmospheric Conditions (Nagaoka Univ. of Tech) ITOU, Daiki; TAKAHASHI, Yukiko; SAITO, Hironobu; NOSAKA, Yoshio
- 3PA-100 Solvation dynamics and structure of ionic liquids probed by betaine derivatives (Graduate School of Engineering Science and Center for Quantum Materials Science under Extreme Conditions) MURAMATSU, Masayasu; KONDO, Shin; NAGASAWA, Yutaka; MIYASAKA, Hiroshi; ABE, Jiro; ITO, Kiminori; HIKIMA, Takaaki; TANAKA, Yoshito
- 3PA-101 Temperature Dependence of Ultrafast Intramolecular Electron Transfer Reactions in Ionic Liquids. (Osaka Univ., Graduate School of Engineering Science and Kyokugen) MORISHIMA, Satoe; MURAMATSU, Masayasu; NAGASAWA, Yutaka; MIYASAKA, Hiroshi
- 3PA-102 Evaluation host-guest interaction through the single molecule tracking of guest molecules in mesoporous organosilica materials. (Osaka Univ. Graduate School of Engineering Science and Center for Quantum Material Science under Extreme Conditions) YAMADA, Keisuke; ITO, Syoji; MIYASAKA, Hiroshi; MIZOSHITA, Norihiro; MAEGAWA, Yoshifumi; TANI, Takao; INAGAKI, Shinji
- 3PA-103<sup>†</sup> Characteristic growth of silver nanoparticles under simultaneous irradiation of UV and NIR lasers (Graduate School of Engeneering Science and Center for Quantum Material Science under Extreme Conditions) YAMAUCHI, Hiroaki; ITO, Syoji; MIYASAKA, Hiroshi
- 3PA-104\* Ultrafast Fluorescence Dynamics of Serine Hydroxymethyl Transferase (SHMT) Enzyme (Institute for Laser Technology; Mahidol Univ.) CHOSROWJAN, Haik; MATAGA, Noboru; TANIGUCHI, Seiji; TANAKA, Fumio; WONGNATE, Thanyaporn; CHAIYEN, Pimchai
- **3PA-105** Ultrafast transient absorption studies of initial photoisomerization dynamics of Photoactive Yellow Protein (PYP) using sub-10fs laser pulses (Institute for Laser Technology; Institute for Laser Science, Graduate School of Informatics and Engineering, The Univ. of Electro-communications; Faculty of Science, Kyoto Univ.) TANIGUCHI, Seiji; CHOSROWJAN, Haik; MATAGA, Noboru; KOBAYASHI, Takayoshi; LIU, Jun; IMAMOTO, Yasushi
- 3PA-106 Nano-second transient absorption study on photochromic reactions (Saitama Univ.) MURATA, Ryutaro; YAGO, Tomoaki; WAKASA, Masanobu
- 3PA-107 Carbon Isotope Enrichment on the Photochemical reaction of Benzophenone by Pulsed-Microwave Irradiation (Graduate School of Science and Engineering, Saitama Univ.) IWAMI, Noriyuki; YAGO, Tomoaki; WAKASA, Masanobu
- 3PA-108 Reaction Dynamics of Excited Ketoprofen with Amino Acids (Aoyama Gakuin Univ.) SHINODA, Mio; ISOZAKI, Tasuku; SUZUKI, Tadashi
- 3PA-109 Thermal hysteresis of the fluorescence of aromatic ketones (Toho Univ.) YAGISHITA, Mayuko; OHSHIMA, Shigeru
- **3PA-110** Observation of Thermal Luminescence of Amino Acids by Control of Ionic States (Univ. of Agriculture and Technology; Japan Applied Technology Inc.) YAMADA, Taishi; KARAKISAWA, Takehito; SEKINE, Masahiko; ISHII, Hiroshi; SATOH, Chikahiro; NAKATA, Munetaka
- 3PA-111 Crystallzation of proteins induced by photochemicalreaction of

- quiones (Dept. of Chem, bio,. Gunma Univ.) TAKASE, Yuta; TAGUCHI, Tohru: HIRATSUKA, Hiroshi: HORIUCHI, Hiroaki: OKUTSU, Tetsuo
- 3PA-112 Mechanism of water droplet formation in undersaturation atmosphere (Dept. of Chem, bio, Gunma Univ.) SAITOH, Masaki; HORIUTI, Hiroaki; OKUTSU, Tetsuo
- 3PA-113 In-site observation light-induced crystallization of protein (Gunma Univ.) IHIRA, Hiroshi; KUROIWA, Takashi; KOBAYASHI, Kenta; HORIUCHI, Hiroaki; OKUTSU, Tetsuo
- 3PA-114 Attempt of protein crystallization that applies photochemical reaction of naphthol. (Gunma Univ.) TSUBOKAWA, Kazuhiro; HORIUCHI, Hiroaki; OKUTSU, Tetsuo
- 3PA-115 Development of MFE probe by using an emission of thiyl radical (Saitama Univ.) MATSUOKA, Hiroaki; WAKASA, Masanobu; YAGO, Tomoaki
- 3PA-116 Orientation of Radical Pair Generated by Triplet Precursor Photoreaction in Human Serum Albumin - Anthraquinone-1-Sulfonate Complex (Shizuoka Univ., PRESTO JST) FUKI, Masaaki; MURAI, Hisao; KOBORI, Yasuhiro
- 3PA-117 Photoinduced charge-separation in titanium dioxide nanoparticle adsorbed with zinc porphyrin (Faculty of Science, Shizuoka Univ., PRESTO JST) NOJI, Ryohei; KOBORI, Yasuhiro
- **3PA-118** Time-Resolved EPR Study on the molecular-wire function of oligosilane conjugate spacers (Faculty of Science, Shizuoka Univ.; Institute for Chemical Research, Kyoto Univ.; School of Science, Univ. of Tokyo; RIKEN; PRESTO, JST) SUZUKI, Minami; SHIBANO, Yuki; TSUJI, Hayato; MURAI, Hisao; TAMAO, Kohei; KOBORI, Yasuhiro
- 3PA-119 Superexchange interaction in intramolecular energy transfer of m-and p-di(phenylethynyl)benzene bridged porphyrin dimers (Grad. School of Science and Engineering, Tokyo Metropolitan Univ.) ASANO, Motoko; KAGOTA, Daichi; KITABAYASHI, Masato; KUSAMA, Kazuki; YAMASHITA, Ken-ichi; SUGIURA, Ken-ichi
- 3PA-120 Photoexcited states of a directly-linked pyrene trimer (Grad. School of Science and Engineering, Tokyo Metropolitan Univ.) ASANO, Motoko; KITABAYASHI, Masato; NISHIMOTO, Kazuaki; YAMASHITA, Ken-ichi; SUGIURA. Ken-ichi
- 3PA-121<sup>#</sup> Photoinduced Electron Transfer Processes in RuPt-based Photo-Hydrogen-Evolving Molecular Devices (Kyushu Univ.) Chettiyam Veettil, Suneesh: SAKAI. Ken
- **3PA-122** Photophysical Properties of BODIPY-Triphenylamine Dyads and Spacer Effects on Charge Separation and Recombination (Osaka City Univ., Univ. of Toyama, Kyoto Institute of Technology) IEKI, Nobuhiro; SUZUKI, Shuichi; SUGIMURA, Ryoji; NAITOH, Takahiro; KOZAKI, Masatoshi; KIMOTO, Kenshi; NOZAKI, Koichi; IKEDA, Noriaki; OKADA, Keiji
- 3PA-123 Studied on Photo-induced Electron Transfer of Triphenylaimine-Naphtaldiimide Dyads with Oligophenylene Spacers (Osaka City Univ., Univ. of Toyama, Kyoto Institute of Technology, and Tohoku Univ.) NAKATSUKA, Shoichi; SUZUKI, Shuichi; HORIKOSHI, Takafumi; SUGIMURA, Ryoji; KOZAKI, Masatoshi; KIMOTO, Kenshi; NOZAKI, Koichi; MATSUSITA, Hironori; IKEDA, Noriaki; AKIYAMA, Kimio; OKADA, Keiji
- 3PA-124 Fluorescence Behavior of Single Quantum Dot- Silver Nanorod Systems (Dep. Macromol. Sci. and Eng., Kyoto Inst. Tech.) FUKUBA, Mitsunari; MASUO, Sadahiro; MACHIDA, Shinjiro; ITAYA, Akira
- 3PA-125 Fluorescence properties of individual exciplexes in polymer films revealed by single fluorescence spectroscopy (Kyoto Inst. Tech.) SUGIYAMA, Dai; YAMANE, Yasumasa; MASUO, Sadahiro; MACHIDA, Shinjiro; ITAYA, Akira
- 3PA-126 Excited-state Dynamics of Biphenyl Bridged Periodic Mesoporous Organosilica in Solid Film by means of Femtosecond Time-resolved Measurement (Osaka Univ.; Toyota Central R&D Labs., Inc.) ISHIBASHI, Yukihide; KATAYAMA, Tetsuro; MIYASAKA, Hiroshi; YAMANAKA, Ken-ichi; GOTO, Yasutomo; TANI, Takao; INAGAKI, Shinji
- 3PA-127 The solvent dependence of delocalization of cationic state dynamics of poly(N-vinylcarbazole) system in femtoseconds time region. (Osaka Univ., Graduate School of Engineering Science) KATAYAMA, Tetsuro; ISHIBASHI, Yukihide; MIYASAKA, Hiroshi
- 3PA-128 Investigation on the Precursor Phenomena of a Discharge Plasma Generation in Aqueous Solutions by a High Speed Camera and Confocal Raman Micro-spectroscopy (Tokyo Univ. of Science) KUSAMA, Yuta; SOMEYA, Yuu; YUI, Hiroharu
- 3PA-129 Effect for the liquid junction potential of two-cylinder type reference electrode (Chubu Univ.) HIRAI, Satoki; ISHIKAWA, Norihisa
- 3PA-130 Dynamics of Oil Droplet in Emulsion of Reactive Surfactant and Lipophile (Univ. of Tokyo) NATSUME, Yuno; IZAKO, Ryota; KURIHARA, Kensuke; TOYOTA, Taro
- **3PA-131** Quantity of Immobilized Acid Phosphatase and Reaction Rate across Enzyme Membranes (Kyushu Univ. Faculty of Science) TAKEDA, Hideo; TANAKA, Hiroki; NOMURA, Kazuo

## Organic Chemistry -Reaction and Synthesis-Aromatic Compounds

3PA-133 Chiral behavior of aromatic cyclic triamide derivatives in the crystal and solution (Ochanomizu Univ.) FUJIMOTO, Noriko; MATSUMURA, Mio; KOMATSU, Daisuke; MASU, Hyuma; KATAGIRI, Kousuke;

- AZUMAYA, Isao; KAGECHIKA, Hiroyuki; TANATANI, Aya
- 3PA-134 Synthesis and properties of conjugation-expanded cyclo[8]pyrrole (Grad. Sch. Sci., Eng., Ehime Univ.) ANDO, Chie; MATSUMOTO, Naoki; JIN, Guangnan; KUZUHARA, Daiki; MORI, Shigeki; YAMADA, Hiroko; UNO, Hidemitsu: OKUJIMA. Tetsuo
- 3PA-135 Synthesis of [14]triphyrin(2.1.1) metal complexes (Grad. Sch. Sci., Eng., Ehime Univ.; Grad. Sch. Material Science, Nara Institute of Science and Technology, NAIST; JST, CREST; Integrated Center for Science, Ehime Univ.) KUZUHARA, Daiki; XUE, Zhaoli; YAMADA, Hiroko; MORI, Shigeki; OKUJIMA, Tetsuo; UNO, Hidemitsu
- **3PA-136** The synthesis and photo properties of 5,14-pentacene diketone (Grad. Sch. Sci., Eng., Ehime Univ.) AOTAKE, Tatsuya; YAMASHITA, Yuko; YAMADA, Hiroko; OKUJIMA, Tetsuo; UNO, Hidemitsu
- 3PA-137 Synthesis and light-emitting characteristics of Fluoro and CF3substituted Phenyleneethynylenes (Okayama Univ. of Sci.) ORITA, Akihiro; MATSUO, Daisuke; SUZUMA, Yoshinori; YANG, Xin; OTERA, Junzo
- 3PA-138 Reaction behavior of natural organic compounds having the catechol structure with active oxygen species using apolyaniline/oxygen/aqueous system (Toin Univ. of Yokohama) YOUTA, Taichi; KUNIYOSHI, Hitomi; SAITO, Kiyoshi
- 3PA-139 Asymmetric hydrolysis of axial chirality compoundscatalized by phase transfer catalyst. (Dept. of Chemistry, Kyushu Univ.; Catalysis Organic Chemistry Lab.) NAGAI, Ayano; YAMAMOTO, Eizi; HAMASAKI, Akiyuki; TOKUNAGA, Makoto
- 3PA-140 Selective oxidation of toluenes to benzaldehydes with hydrogen peroxide (Osaka Municipal Technical Research Ins.) NAKAI, Takeo; IWAI, Toshiyuki; MIHARA, Masatoshi; ITO, Takatoshi; MIZUNO, Takumi
- 3PA-141 Synthesis of phloroglucin[4]arene and its property (Grad. Sch. Sci., Eng., Yamagata Univ.) ONODERA, Keita; YASHIRO, Akihito; KAMANAKA, Yasuhiko; SUZUKI, Yukiko; RI, Chunlei; SATO, Shingo
- 3PA-142 Synthesis and Oxidation of Chiral 2-Alkyl-3-Phenyl-1-propanols (School of Engineering, The Univ. of Shiga Prefecture; Institute of Multidisciplinary Research of Advanced Materials, Tohoku Univ.; Tohoku Pharmaceutial Univ.) MATSUURA, Kei; YONEZAWA, Nagisa; INOUE, Yoshinori; MATSUMOTO, Takatoshi; TAKESHITA, Mitsuhiro; WATANABE, Masataka; KUMAGAI, Tsutomu
- **3PA-143** Reaction of azulenes with ninhydrin (Josai Univ.) YAMADA, Hiroyuki; SATO, Akira; IMAI, Kazunori; KOBAYASHI, Keiji; WAKABAYASHI, Hidetsugu
- 3PA-144 The synthesis of metal-complexing aminotroponeiminates derivied from p-aniline derivatives (Josai Univ.) HIRUTA, Rie; MASUDA, Ayu; WAKABAYASHI, Hidetsugu
- 3PA-145 The Study of Radical Scavenging Ability in Calix[4]resorcarene (Tokyo,Insititute of Polytechnic Univ.) MAEDA, Mizuho
- 3PA-146 12-Catalyzed, Novel and Metal free α-Tosyloxylation of Ketones (Graduate School of Science, Chiba Univ.) TANAKA, Ayumi; MORIYAMA, Katsuhiko; TOGO, Hideo
- 3PA-147 One pot Conversion of Aromatic Bromides into aromatic Amides (Chiba Univ.) TAKAHATA, Misato; MORIYAMA, Katuhiko; TOGO,
- 3PA-148 Synthesis of chiral oxaclix[4]arene (Graduate School of Engineering, Tottori Univ.) OHMICHI, Taira; YASUKAWA, Yusuke; KOBAYASHI, Kazuhiro; KONISHI, Hisatoshi
- 3PA-149 Syntheses of azobenzene derivatives with gold-like metallic luster 3 (Tokyo Medical Univ.) TONEGAWA, Masami; MASUBUCHI, Shin-ichi; KOBAYASHI, Yoshihiko; ARAI, Sadao
- **3PA-150** Ritter Reaction Using Water-Soluble Calix[4]resorcinarene and Trifluoromethanesulfonic Acid in Water (College of Industrial Technology, Nihon Univ.) XU, Jing; ICHIKAWA, Hayato; SHIMIZU, Shouichi
- 3PA-151 Aerobic oxidation of alcohols catalyzed by silica gel supported 4-hydroxy TEMPO (College of Science and Technology, NIHON Univ.) TAMURA, Naoya; AOYAMA, Tadashi; TAKIDO, Toshio; KODOMARI, Mitsuo
- 3PA-152 Synthesis of triarylmethanes using Silica Gel supported Sodium Hydrogen Sulfate. (College of Science and Technology, NIHON Univ.) SATO, Yuta; AOYAMA, Tadashi; TAKIDO, Toshio; KODOMARI, Mitsuo
- **3PA-153**<sup>†</sup> Synthesis of Sterically-Hindered Phthalocyanine Complex Tethered Sixteen Polycondensable Alkoxysilyl Moieties (Toyota Central R&D Labs., Inc.; JST-CREST) ODA, Masafumi; TANI, Takao; INAGAKI, Shinji
- 3PA-154 A improved synthesis of 6,6'-dibromoindigo (Faculty of Science and Engineering, Meisei Univ.; Chemical Research Club, Meisei Univ.)
  SAWADA, Tadanobu; TAKEZAWA, Takashi; SAOTOME, Mika; ENOKIDA, Shou; HACHIGASAKI, Hidemine; ISHII, Hiroyuki
- 3PA-155 Development of silica gel supported sulfamic acid and synthesis of acetals. (College of Science and Technology, NIHON Univ.) SUZUKI, Toshihiko; AOYAMA, Tadashi; TAKIDO, Toshio; KODOMARI, Mitsuo

## Organic Chemistry -Reaction and Synthesis-Metallo-organic Chemistry

3PA-157<sup>†</sup> Soft metal extraction property of TPEN [Tetrakis(2-pyridylmethyl) ethylenediamine] derivatives, synthesized by using ruthenium catalyzed-[2+2+2]cycloaddition (Graduate School of Engineering, Kobe Univ.) MIYAZAKI, Yuji; TANAKA, Fujimaru; TAKESHITA, Kenji; MORI, Atsunori

- 3PA-158 Preparation and application of silole derivatives having porphyrin at 2,5-positions (Saitama Univ.) OHYA, Tatsuki; KOYAMA, Tetsuo; MATSUOKA, Kouji; HATANO, Ken
- 3PA-159 Efficient Synthesis of Multisubstituted Azepine Oxides by Rhodium Catalyst (Graduate School of Science, Tohoku Univ.) OKAMOTO, Masashi; NAKAMURA, Itaru; TERADA, Masahiro
- 3PA-160 Synthesis of novel bisoxazoline ligand containing perfluorocyclopentene (Yokohama National Univ.) ASAEDA Takabiro: MINATO Makoto
- 3PA-161 The Convenient and Useful Strontium Reagent as an equivalent to Grignard Reagent (Faculty of Integrated Arts and Sciences, The Univ. of Tokushima) KANEHIRO, Daisuke; YUASA, Aya; KIKUCHI, Makoto; WADA, Makoto; MIYOSHI, Norikazu
- **3PA-162** The Convenient and Useful Esterification of the Bulky Tertialy Alcohol and Its Application (Faculty of Integrated Arts and Sciences, The Univ. of Tokushima) TAJIMA, Takahiro; ASAOKA, Masashi; KIKUCHI, Makoto; WADA, Makoto; MIYOSHI, Norikazu
- 3PA-163 The reaction of alkylstrontium species with carbon dioxide or its equivalent (Faculty of Integrated Arts and Sciences, The Univ. of Tokushima) MIYAZAKI, Yasuaki; KAWAI, Yika; KIKUCHI, Makoto; WADA, Makoto; MIYOSHI, Norikazu
- 3PA-164 ClickFerrophos/palladium complex catalyzed Buchwald-Hartwig coupling reaction (Institute of Science and Engineering, Chuo Univ.)
  HAGA, Masatake; OGATA, Kenichi; FUKUZAWA, Shin-ichi
- 3PA-165 Development of a method for construction of diyne frameworks from amines, aldehydes and alkynylsilanes by a cooperative catalytic system comprised of Cu(I) and Cu(II) (Tokyo Univ. of Science) SAKAI, Norio; INODA, Daiki; NAKAIKE, Yumi; IKEDA, Reiko; KONAKAHARA, Takeo
- **3PA-166** Palladium-catalyzed one-pot sequential triarylation of azoles (Dept. Chem., Fac. Eng., Gifu Univ.) YAMAUCHI, Takayuki; SHIBAHARA, Fumitoshi; YAMAGUCHI, Eiji; MURAI, Toshiaki
- 3PA-167 Metathesis reaction of olefin and alkyne substituted silyl compounds (Department of chemistry, Faculty of Science, Kanagawa Univ.) SUGOMORI, Noboru; YASUMATSU, Junnya; ISHII, Yoshinori; KAGEYAMA, Kazuya; KABE, Yoshio
- 3PA-168<sup>†</sup> Reactivity and functional transformation of acyl substituted phenylsilsesquioxane (Kanagawa Univ.) KAWAKAMI, Yoshiteru; KABE, Yoshio
- 3PA-169 Synthesis of Bipyridine Compounds by Iron-Catalyzed Homo-coupling Reaction (Yokohama National Univ.) FUJIMOTO, Nao; ANDO, Hiroaki; ASAMI, Masatoshi; YAMAGUCHI, Yoshitaka
- 3PA-170 Mechanistic Aspect for Asymmetric Nucleophilic Addition of Organoboronic Acid by Pd (Doshisha Univ., Faculty of Life and Medical Sciences) OHTA, Tetsuo; YOSHIMURA, Noboru; TANAKA, Yui; SUZUMA, Yoshinori; OE, Yohei
- **3PA-171** Application of Reusable Pd-DPPF Catalyst to Buchwald-Hartwig Amination (Nara National College of Technology; Kyoeisha Chemical Co. Ltd) KAMEI, Toshiyuki; ISHIBASHI, Aoi; MATSUURA, Arisa; TAKAMATSU, Yoshinori; HOSOI, Hiroyuki; SHIMADA, Toyoshi
- **3PA-172** Bromination of silyl-substituted aromatic compounds with N-Bromosuccinimide (Nara National College of Technology) KAMEI, Toshiyuki; NISHIGUCHI, Makoto; MIYAMOTO, Takafumi; TANAKA, Tomohiro; SHIMADA, Toyoshi
- 3PA-173 Introduction of Isoprene Unit by Using Allyltin Reagents Containing a Chiral Oxygen Functionality (Univ. of Shimane) MAEJIMA, Yui; NISHIGAICHI, Yutaka
- **3PA-174** PdCl<sub>2</sub>(dtbpf)-Catalyzed Borylation of Aryl Electrophiles with Pinacolborane (Kitami Inst. of Tech.) MURATA, Miki; AKASAKA, Yusuke; NAMIKOSHI, Takeshi; WATANABE, Shinji
- 3PA-175 Ru complex having hydroxyamide-functionalized N-heterocyclic carbene ligand: Synthesis, structure and asymmetric reaction (Kansai Univ.) KAMISUE, Ryo; SAKAGUCHI, Satoshi
- 3PA-176 C<sub>2</sub>-symmetric functionalized azolium compound for Cu-catalyzed asymmetric conjugate addition reaction (Kansai Univ.) DOHI, Kenta; HARANO, Ayako; SAKAGUCHI, Satoshi
- 3PA-177 Synthesis of α, β-unsaturated ketones via oxidation and isomerization reaction using tungsten catalysis (Faculty of Biomedical Sciences, Doshisha Univ.) OE, Yohei; HIDA, Takemasa; ENDO, Tomohiro; ENDO, Satoshi; OHTA, Tetsuo
- 3PA-178 Synthesis of Alcohols from Olefins using Ruthenium Catalysis (Faculty of Biomedical Sciences, Doshisha Univ.) HIGASHI, Shoko; OE, Yohei: OHTA, Tetsuo
- 3PA-179 Novel palladium-catalyzed cross-coupling reaction between hexaphenyldisiloxane and aryl halides (Grad. Sch. Eng., Gunma Univ.) NAKAZAWA, Hidekazu; KOSUGI, Masanori; SANO, Hirosi; FUGAMI, Keigo
- 3PA-180 Iridium-Catalyzed Benzylation of Ketene Silyl Acetal and Silyl Enol Ether (Aoyama Gakuin Univ.) ONODERA, Gen; KAWASAKI, Yuki; TAKEUCHI, Rvo
- 3PA-181 Development of partially fluorinated lipids for reconstitution of membrane proteinsIntroduction of perfuluoroalkyl group into unsaturated compounds using indium (Natl Inst Adv Ind Sci & Technol (AIST),Res Center of Stem Cell Eng (RCSC)) TAKAGI, Toshiyuki; KANAMORI, Toshiyuki
- 3PA-182 Vanadium-Catalyzed Pinacol Coupling Reaction in Water (Osaka Univ.) AMAYA, Toru; MIYASAKA, Akihiro; HIRAO, Toshikazu

- 3PA-183 Application of Palladium-Copper multinuclear complexes for Sono-gashira cross-coupling reaction. (Shizuoka Univ.) OTA, Teppei; TSUKADA, Naofumi
- 3PA-184 Dehydrogenative Oxidation of Alcohols Catalyzed by Cp\*Ir-Complexes Having Functional Chelate Ligands and Mechanistic Study (Kyoto Univ.) YOSHIDA, Tetsuya; FUJITA, Ken-ichi; YAMAGUCHI, Ryohei
- 3PA-185 Asymmetric reaction of benzyl nitriles with sulfonylimines using palladium(II) NCN-pincer complexes with novel chiral bis(imidazoline) ligands. (Nagoya Institute of Technology) OGAWA, Takahiro; HYODO, Kengo; TUJI, Kotaro; NAKAMURA, Shuichi
- 3PA-186 Palladium-Catalyzed Reaction of Propargylic Compounds bearing a Latent Nucleophilic Moiety with Various Nucleophiles (Dept. Appl. Chem., Nat. Def. Acad.) ISHIKURA, Fujio; NISHIOKA, Noriyuki; KOIZUMI, Toshio
- 3PA-187 Copper-catalyzed etherification of aryl halides using the novel bridging ligand (Shizuoka Univ.) NAKANE, Takayuki; TSUKADA, Naofumi
- 3PA-188 Low-Valent Titanium Mediated Cleavage of Sulfonamides and Its Mechanism (Kanagawa Univ.) SHOJI, Noriaki; KAWAJI, Tsuyoshi; OKAMOTO, Sentaro
- 3PA-189 Low-Valent Titanium Mediated Reduction of Epoxides and Its Mechanism (Kanagawa Univ.) AISAKA, Shinji; MIYASHITA, Kenji; SHOJI, Noriaki; KAWAJI, Tsuyoshi; OKAMOTO, Sentaro
- 3PA-190 Catalytic Grignard Allylic Substitution with Imidazol-2-, Imidazol-4and 1,2,3-Triazol-5-ylidene Ligands (Kanagawa Univ.) TSUCHIYA, Yu-ji; AWA, Yu-ta: OKAMOTO, Sentaro
- 3PA-191 Preparation of Allyltin Reagents with Chiral Nitrogen functional group (Shimane Univ.) KOUNO, Akinori; NSHIGAICHI, Yutaka
- 3PA-192<sup>†</sup> Selective Monolithiation and Transformation into Formyl Group of Bis(bromophenyl)methane Derivative Using Microflow System (College of Industrial Technology, Nihon Univ.) UCHIDA, Kazunori; ICHIKAWA, Hayato; SHIMIZU, Shoichi

## Organic Chemistry -Reaction and Synthesis-Organic Photochemistry

- **3PA-195** Stereoselective [2+2]photodimerization of butadiene derivatives using cation-pi interactions (Ochanomizu Univ.) AYA, Kanae; YAMADA, Shinii
- 3PA-196 Solid-state [2+2]photodimerization of azastilbenes using cation-pi interactions (Ochanomizu Univ.) KUSAFUKA, Momoko; YAMADA, Shinii
- 3PA-197 Synthesis and Photoreactions of 5-bromo-1-aryl-7-azaisatins (Aichi Institute of Technology) MAEDERA, Kouta; TATSUGI, Jiro
- 3PA-198 Preparation and luminescent properties of anthracenedicarboxyic-acid-derived PET probes incorporating dipycolylamino receptors (Okayama Univ.) OKAMOTO, Hideki; MATSUI, Ayako; YAMASAKI, Naomi; SATAKE, Kyosuke
- 3PA-199 Synthesis and Photoreactions of 1-Alkyl-6-azaisatin derivatives (Aichi Institute of Technology) MIZUNO, Keiichi; TATSUGI, Jiro
- 3PA-200 Photochemical Reaction of the [3n] Cyclophanes (Institute for materials chemistry and engineering (IMCE); Department of chemistry, graduate school of sciences, kyushu Univ.) ZHANG, Hua; GOTO, Kenta; SHINMYOZU, Teruo
- **3PA-201** Enantiodifferentiating Photocyclodimerization of 2-Anthracenecarboxylic Acid in (R)-1-Methyl-3-(2,3-dihydroxypropyl)imidazolium Acetate (Graduated School of Engineering, Osaka Univ.) OKAZAKI, Takahiro; FUKUHARA, Gaku; YANG, Cheng; MORI, Tadashi; INOUE, Yoshihisa
- 3PA-202 Reduction reaction of redox dyes in ionic liquid by photo irradiation (Kagoshima Univ.) OHTA, Tomoya; WAKIZONO, Satoshi; YAMAMOTO, Kazuya; KADOKAWA, Jun-ichi
- **3PA-203** Crystal Structure and Photophysical Property of a Boron Complex Containing [2.2]Paracyclophane Framework. (Grad. Sch. of Eng., Osaka Pref. Univ.) IKEDA, Hiroshi; MURAOKA, Shunsuke; YOSHIMOTO, Yuichi; MIZUNO, Kazuhiko
- 3PA-204 One-pot synthesis of macrocyclic compounds using photocycloaddition of aryl-substituted di-2-pyrones with alpha,omega-diolefin (Kagoshima Univ. Graduate School of Science and Engineering) KAWABATA, Kazuya; SHIMO. Tetsuro
- 3PA-205 Substituent and Solvent Effects on Photobenzylation Reaction of Carbonyl Compounds with Various Benzylsilanes (Shimane Univ.) SAEKI, Yuuta: NISHIGAICHI, Yutaka: IWAMOTO, Hidetoshi
- 3PA-206 Synthesis and photoreactions of aryl-substituted oligosilanes (Department of Engineering Science, The Univ. of Electro-Communications) TAKEYA. Osamu: IDA. Yusuke: KAKO. Masahiro
- 3PA-207 Photoreaction of Aromatic Boronate Esters in the Presence of Aliphatic Amines. (Shimane Univ.) TOYODA, Shintaro; SHIRATORI, Hideo; KUBO, Yasuo
- 3PA-208 Photo-induced Electron Transfer Reactions of Cyclic Organosilicon Compounds (Department of Engineering Science, The Univ. of Electro-Communications) SATOH, Haruhiko; IDA, Yusuke; KAKO, Masahiro
- **3PA-209** Synthesis and Chemiluminescent Decomposition of Dioxetanes Bearing a Hydroxyhelicene Moiety (Kanagawa Univ. Dept. of Chemistry) KOYAMA, Youhei; WATANABE, Nobuko; IJUIN, Hisako; MATSUMOTO, Masakatsu

- 3PA-210 Inter- and Intramolecular [2+2] Photocycloaddition Reaction of Chromone Derivatives (Graduate School of Eng., Chiba Univ.) SAKAMOTO, Masami; YOSHIWARA, Kazuya; MINO, Takashi; FUJITA, Tsutomu
- 3PA-211 Synthesis and chemiluminescent decomposition of dioxetanes bearing new type of biaryl moiety (Kanagawa Univ. Dept. of Chemistry) MATSUMOTO, Masakatsu; TAKATSUKA, Hikaru; KOYAMA, Youhei; WATANABE Nobuko: IIIIIN Hisako
- 3PA-212 Enantio- and Diastereo-selective Photodimerization Involving Crystallization-induced Stereoisomer Transformations (Graduate School of Eng., Chiba Univ.) SAKAMOTO, Masami; YAGISHITA, Fumitoshi; ANDO, Kanako; MINO, Takashi; FUJITA, Tsutomu
- 3PA-213 Modulation of the Luminescent Properties of Fluorescent Dyes Based on Cypridina Bioluminescence: Zeolite-inclusion effect (Univ. of Electro Communications) KODAKA, Ai; NAKAGAWA, Tatsuki; MAKI, Shojiro; NIWA, Haruki; HIRANO, Takashi
- 3PA-214 Synthesis of Amino-substituted Bicyclic Dioxetanes Bearing a 4-(Benzothiazol-2-yl)-3-hydroxy-6-methylphenyl Moiety and Their Base-induced Chemiluminescence (Kanagawa Univ. Dept. of Chemistry) WATANABE, Nobuko; TANAKA, Teruhiko; TANIMURA, Masatoshi; IJUIN, Hisako; MATSUMOTO, Masakatsu
- 3PA-215 Modulation of chemiluminescence property of phenyl-conjugated imidazopyrazinones (Univ. of Electro-Communications) ISHII, Yuki; KOBAYASHI, Hirokazu; MAKI, Shojiro; NIWA, Haruki; HIRANO, Takashi
- 3PA-216 Synthesis of dioxetanes bearing a 1-(hydroxydiphenylmethyl)-2-hydroxy naphthalen-5-yl moiety and their base-induced chemiluminescent decomposition (Kanagawa Univ. Dept. of Chemistry) MATSUMOTO, Masakatsu; MASUDA, Shun; KAWASHIMA, Hidehisa; WATANABE, Nobuko; JJUIN, Hisako
- 3PA-217 Light-color modulation mechanism of firefly bioluminescence: substituent effect of oxyluciferin (Univ. of Electro-Communications) NAGAI, Hiroyuki; HASUMI, Yosuke; MAKI, Syoujirou; NIWA, Haruki; HIRANO. Takasi
- **3PA-218** [3+2]-Photocycloadditions of Methyl Substituted 1,4-Dicyanonaphthalenes and Phenylacetylene (Faculty of Science and Engineering, Shimane Univ.) MORIWAKI, Tadasuke; SHIRATORI, Hideo; KUBO, Yasuo
- 3PA-219 Synthesis of Optically Active Dioxetanes Bearing a Sterically Crowded Bisnaphthol Moiety and Their Base-induced Chemiluminescence (Kanagawa Univ. Dept. of Chemistry) WATANABE, Nobuko; KAWASHIMA, Hidehisa; IJUIN, Hisako; MATSUMOTO, Masakatsu
- 3PA-220 [3+2]-Photocycloadditions of 2,3-Dicyanonaphthalene with 1,3-Butadiene and 2,3-Dimethyl-1,3-Butadiene (Faculty of Science and Engineering, Shimane Univ.) KUROKI, Kenshirou; SHIRATORI, Hideo; KUBO, Yasuo
- 3PA-221 Synthesis and fluorescent property of dihydrohexaazaanthracene derivatives (Univ. of Electro-Communications) TSUBAKI, Shogo; HACHIYA, Sojiro; MAKI, Shojiro; NIWA, Haruki; HIRANO, Takashi
- **3PA-222** Effect of Introduction of Electron-Withdrawing Cyano Group into Methyl Group of *N*-Methyl-1,8-naphthalimide on Photoreactions with Alkylbenzenes (Faculty of Science and Engineering, Shimane Univ.) YAMANE, Kouta; SHIRATORI, Hideo; KUBO, Yasuo
- 3PA-223 Photoreactivities of 1-(Substituted Naphthalen-1-ylmethyloxy)pyrene and Related Derivatives and Their Abilities to Initiate Photopolymerizations (Kanagawa Univ.) UCHIDA, Naoki; IGARASHI, Tetsutaro; SAKURAI, Tadamitsu
- 3PA-224 Effects on Photoreaction by derivatives of 8-quinolinyl sulfonates (Faculty of Pharmaceutical Science, Tokyo Univ. of Science, and Center of Technologies against Cancer, Tokyo Univ. of Science) TSUNODA, Megumi; HANAYA, Kengo; ARIYASU, Shinya; KITAMURA, Masanori; AOKI, Shin
- 3PA-225 Photo-butylation Reaction of Aromatic Carbonyl Compounds with Monobutylpentachlorostannate (Univ. of Shimane) ARISAWA, Akihiro; NISHIGAICHI, Yutaka
- 3PA-226 Paterno-Buchi type cycloaddition of 1-methoxynaphthalene with uracil derivatives (Health Sciences Univ. of Hokkaido; Hokkaido Univ.) OHKURA, Kazue; FUJIOKA, Yuka; OSHIMA, Nobuhiro; AKIZAWA, Hiromichhi; SEKI, Koh-ichi
- 3PA-227 Photochemical Synthesis of Benzylisoquinoline Alkaloids with Tetracoodinated Benzylboron Reagents (Univ. of Shimane) SASAKI, Go; NISHIGAICHI, Yutaka
- 3PA-228<sup>†</sup> Synthesis and Properties of Porphyrin-Linked Single-Molecular Quinone Pools Containing Two Types of Quinones (Inst. for Molecular Science) KAWAO, Masahiro; KON, Hiroki; NAGATA, Toshi
- **3PA-229** Reaction Behavior of Photoadducts of *N*-Methyl-1,8-naphthalimides Having Electron Withdrawing Substituents at the Methyl Group and Dimethylthymine (Faculty of Science and Engineering, Shimane Univ.) HIU, Takashi; NAKASHIMA, Yui; SHIRATORI, Hideo; KUBO, Yasuo
- 3PA-230 Synthesis of amino-substituted dioxetanes bearing a bisnaphthol moiety and thier base-induced chemiluminescent decomposition (Kanagawa Univ. Dept. of Chemistry) MATSUMOTO, Masakatsu; MATSUMOTO, Kairi; TANAKA, Teruhiko; WATANABE, Nobuko; IJUIN, Hisako
- 3PA-231 Photorearrangement of 1-imino-2-arylindan-3-one derivatives (Josai Univ.) KAWAI, Masayuki; MOMOCHI, Mai; WAKABAYASHI, Hidetsugu; KOBAYASHI, Keiji

- **3PA-232** Synthesis of (Z)-N-Benzoyl-α-dehydro(substituted 2-hydroxyphenyl)alaninamides and Their Amine-Regenerating Photocyclization Reactions (Kanagawa Univ.) MORI, Jin; YADAI, Hiroyuki; IGARASHI, Tetsutaro; SAKURAI, Tadamitsu
- 3PA-233 Visualization of the binding of drug molecules to Human serum albumin by fluorescent probe displacement (Shibaura Inst. Tech.; Supramolecular Chemistry Lab.) SAKATANI, Yoshiaki; NAKAMURA, Asao
- 3PA-234 Photo-Fries Rearrangement of 4-tert-Butylphenols Having Acyloxyaryl Group and Photoinduced Refractive Index Change of Polymer Film (Kanagawa Univ.) ARAI, Taichi; SUDA, Hiroya; IGARASHI, Tetsutaro; SAKURAI, Tadamitsu
- 3PA-235 Synthesis and photochemistry of porphyrin derivatives with tweezer-like bridges (Graduate Univ. for Advanced Studies; Inst. for Mol. Sci.) MIURA, Takahiro; NAGATA, Toshi
- 3PA-236 Supramolecular Enantiodifferentiating Photocyclodimerization of 2-Anthracenecarboxylate with Phage Display Techniquel (IMRAM, Tohoku Univ.) MIYACHI, Ayumi; SUGAWARA, Yui; SAKAMOTO, Seiji; NAKAKIDO, Makoto; UI, Mihoko; ARAKI, Yasuyuki; NISHIJIMA, Masaki; TSUMOTO, Kouhei; KINBARA, Kazushi; INOUE, Yoshihisa;
- 3PA-237 New Photoreactions with Metallophthalocyanines (Grad. Univ. Adv. Studies; Inst. Mol. Sci.) YUSA, Masaaki; NAGATA, Toshi

## Monday, March 28, AM

(12:30~14:00)

## Organic Chemistry -Reaction and Synthesis-Aliphatic and Alicyclic Compounds

- **3PB-031** Dinuclear Zinc Bisamidinate Catalyzed Enantioselective Hydrophosphonylation of α-ketoesters (Rikkyo Univ.) HORIUCHI, Yumi; YAMANAKA, Masahiro
- 3PB-032 Development of chiral dinuclear zinc bisamidinate catalysts and its application to the catalytic asymmetric Friedel-Crafts reaction of indoles with niroalkenes (Rikkyo Univ.) HOSHINO, Masaya; YAMANAKA, Masahiro
- 3PB-033 Asymmetric allylation of α-ketoesters catalyzed by multinuclear Zn-bisamidinate catalyst (Rikkyo Univ.) UDAGAWA, Takao; YAMANAKA, Masahiro
- 3PB-034 TBD-catalyzed nucleophilic addition to aziridines and imines (Ibaraki Univ.) HARADA, Takeru; MATSUKAWA, Satoru
- 3PB-035 Synthesis of chiral 1,3-aminosulfonamides and their application to catalytic asymmetric addition of diethylzinc to aldehydes (Graduate school of science and engineering, Saitama univ.) SUGAWARA, Kazuyuki; KODAMA, Koichi; HIROSE, Takuji
- 3PB-036 Nucleophilic Addition Reaction to the Iminium Salts Generated from Amino Silyl Enol Ethers (Mie Univ.) MAEKAWA, Izumi; HATA, Shingo; SHIMIZU, Makoto
- 3PB-037 Chemistry of Nitrogen-Substituted Chiral Benzyllithiums (Japan Women's Univ.) OHKI, Maria; SADAMURA, Yuko; TAKENAKA, Keiko; ASAOKA, Morio
- **3PB-038** Enantioselective Reaction of N-Heteroarenesulfonyl Imines with Isonitriles Using Organocatalysts (Nagoya Institute of Technology) MAENO, Yuri; YAMAMURA, Akiko; NAKAMURA, Shuichi
- **3PB-039** Chiral Bis28imidazoline29 Catalyzed Enantioselective Three2dComponent Synthesis of α 2dAmino Phosphates (Nagoya Institute of Technology) OHARA, Mutsuyo; NAKAMURA, Shuichi
- **3PB-040** Catalytic Aymmetric Synthesis of Efavirenz, an HIV-1 Reverse Transcriptase Inhibitor (Nagoya Institute of Technology, Graduated School of Engineering) KITAYAMA, Takashi; KAWAI, Hiroyuki; TOKUNAGA, Etsuko; SHIBATA, Norio
- 3PB-041 Primary Selective Acylation Catalyzed by Imidazobenzothiazoles (Kanagawa Univ.) HASEGAWA, Yu-suke; BABY, Viswambharan; MATSUNO, Chikashi; OKAMOTO, Sentaro
- **3PB-042**<sup>#</sup> Asymmetric Steglich Rearrangement Catalyzed by 4-Aryl Dihydropyrimidobenzothiazoles (Kanagawa Univ.) BABY, Viswambharan; OKIMURA, Tatsuya; SUZUKI, Satoko; MATSUNO, Chikashi; OKAMOTO, Sentaro
- 3PB-043<sup>#</sup> Aldol Reaction of Azlactones Catalyzed by 4-Aryl Dihydropyrimi-dobenzothiazoles (Kanagawa Univ.) BABY, Viswambharan; OKIMURA, Tatsuva: SUZUKI, Satoko: MATSUNO. Chikashi: OKAMOTO. Sentaro
- 3PB-044 Catalytic C-C bond formations of ketene silyl acetals with nitriles or oxime ethers promoted by pentafluorophenylammonium trifluoromethansulfonimide catalyst (School of Science and Technology, Kwansei Gakuin Univ.) FUJISAWA, Yuto; TAMAGAKI, Hiroaki; OSADA, Jyun; TANABE, Yoo
- **3PB-045** Highly stereocomplementary method for the preparation of tetrasubstituted  $\alpha$ ,  $\beta$ -unsaturated esters using. (*E*)- or (*Z*)-stereoselective enol tosylation and Suzuki-Miyaura coupling. (Kwansei Gakuin Univ.) SATO, Yuka; NISHIKADO, Hiroshi; UENO, Kanako; NAKATSUJI, Hidefumi; TANABE, Yoo
- 3PB-046 Synthesis of acylic chiral synthon with consecutive chiral centers from α or β substituted aldehydes utilizing asymmetric Ti-Claisen-Aldol domino reaction. (Kwansei Gakuin Univ.) HAYASHI, Kouta;

- MASUYAMA, Yoshikazu; NAKAZAWA, Syogo; TANAKA, Akihiro; TANABE, Yoo
- 3PB-047 Catalytic Synthesis of 2-Substituted 4,4,4-Trifluoro-2-Butenal (Gifu Univ.) FUNABIKI, Kazumasa; OIDA, Kiyofumi; KUBOTA, Yasuhiro; MATSUI. Masaki
- 3PB-048 Synthesis of novel proline derivatives, which have a photo-responsive antenna site, and its catalytic ability (Department of Chemistry, Graduate School of Science, Hiroshima Univ.; JST) ITOU, Tomoka; HIRAGA, Yoshikazu: ABE, Manabu
- **3PB-049**<sup>†#</sup>Self-assembled proline-amino thioureas as efficient organocatalysts for asymmetric Michael addition of aldehydes to nitroolefins (Saitama Univ.) WANG, Wan-hui; ABE, Takeshi; WANG, Xiang-bo; KODAMA, Koichi; HIROSE, Takuji; ZHANG, Guang-you
- **3PB-050** Highly Enantioselective aza-Morita-Baylis-Hillman Reaction with a Bisphenol-based Bifunctional Organocatalyst (3) (Fukuoka Univ. of Education) ITO, Katsuji; HATA, Tomohisa; TANAKA, Hanako
- 3PB-051 Asymmetric Cycloadditions of o-Quinodimethane Utilizing its Spontaneous Generation (Gunma Univ.) SHIRAKAWA, Hidenori; SANO, Hiroshi
- **3PB-052** Generation of α-Amino-o-quinodimethane in the Presence of Proline Catalyst and its Asymmetric Cycloadditions (Gunma Univ.) SHIRAKAWA, Hidenori; SANO, Hiroshi
- **3PB-053** Enantioselective Cycloadditions of α-Amino-o-quinodimethane Using Proline Derivatives (Gunma Univ.) OKADA, Kazuya; SANO, Hiroshi
- **3PB-054** Hetero Diels-Alder Reaction of α-Amino-ο-quinodimethane (Gunma Univ.) EHARA, Yuki; SAITO, Kohta; SANO, Hiroshi
- 3PB-055 Development of a New Precursor for an Atom-Economy Generation of o-Quinodimethane (Gunma Univ.) KAMISAKAMOTO, Hideaki; MOTOYOSHI, Takehiko; SANO, Hiroshi
- 3PB-056 Theoretical Studies on Chiral Phosphoric Acid-Catalyzed Aza-Darzens Reaction and Friedel-Crafts Reaction of Diazoacetate and Imine (Rikkyo Univ.) SHIBATA, Yukihiro; YAMANAKA, Masahiro
- 3PB-057 Oxidation of metal complexes of 1,3-dicalbonyl compounds in the presence of iodine and methanol under oxygen atmosphere (Tokyo Gakugei Univ.) YOSHIHARA, Nobutoshi; RIKIMARU, Masataka; KUROSAWA, Kazutoshi
- **3PB-058** The oxidation of 2-benzoylcycloalcanone metal complexes (Tokyo Gakugei Univ.) YOSHIHARA, Nobutoshi; KUROSAWA, Kazutoshi; RIKIMARU, Masataka; YONEKAWA, Yuu
- 3PB-059 Diastereomeric resolution of optically active propagyl alcohol derivatives by chiral uxiliaries (Yamagata Univ.; Biochemical Engineering) KUSAKARI, Miho; SAGAWA, Nanae; MURAKAMI, Satoshi; MATSUMOTO, Takatoshi; WATANABE, Masataka; SATO, Eichi; KIJIMA, Tatsuro

#### Organic Chemistry -Reaction and Synthesis-

3PB-061 Ether Cleavage Reaction Using Gaseous Hydrogen Iodide under Solvent-free Conditions (Graduate School of Engineering, Chiba Univ.; Godo Shigen Sangyo Co.,LTD.) MATSUMOTO, Shoji; HASHIMOTO, Akinori; MORI, Takahiro; AKAZOME, Motohiro; OTANI, Yasuhiko

## Organic Chemistry -Reaction and Synthesis-Aliphatic and Alicyclic Compounds

- **3PB-062**<sup>†</sup> Reaction of surfactant type thioester with amines (Rikkyo Univ.) TORIHATA, Atsushi; KURODA, Chiaki
- 3PB-063 Oxidation and Ketoesterification of Diols with Ammonium Tribromide-Antimony(III)bromide (Dept. of Chemistry,Fukushima Medical Univ.) SAYAMA, Shinsei
- **3PB-064** Stereoselective Construction of Bicyclo[5.3.0]decane Frameworks by Tungsten Catalyzed Tandem Cyclization and Synthetic Studies toward the Synthesis of Guaianolides. (Tokyo Institute of Technology) TSUJIMOTO, Msahiro; HASHIMOTO, Takuya; KARIBE, Yusuke; KUSAMA, Hiroyuki; IWASAWA, Nobuharu
- 3PB-065 Solid Bronsted acid catalyzed Ritter Reaction under Solvent-free condition (Graduate School of Socio-Arts and Science, The Univ. of Tokushima) KIKUCHI, Makoto; INOUE, Takeshi; MIYOSHI, Norikazu; WADA, Makoto
- 3PB-066 Design and development of UV-NIL materials for optical devices (Fac. Eng., Iwate Univ.) OGAWA, Satoshi; SATOU, Shunsuke; MURAOKA, Hiroki; SHIMADA, Kazuaki
- **3PB-067** Development of Branched Dicarboxylic Acid for the Use of High Performance Aluminum Electrolytic Capacitor (Mie Univ.) MATSUNAGA, Sei; ISOMURA, Rinpei; SHIMIZU, Makoto; YOKOTSUZI, Hokuto; ISITOBI, Ryuji; KIYOSAWA, Junichi; SANO, Takaaki
- 3PB-068 Synthesis of C,D-Ring Unit Intermediate for Vitamin D Analogues (Kanagawa Univ.) KENMOCHI, Kiyohide; HAYASHI, Naoto; MATSUNO, Chikashi; OKAMOTO, Sentaro
- 3PB-069 Acetoxylation of alkylbenzenes at benzylic position with DIB and iodine (Graduate School of Science, Chiba Univ.) BABA, Haruka; TOGO, Hideo; MORIYAMA, Katsuhiko
- **3PB-070** Ni(0)-catalyzed  $\alpha$ -iodo- $\beta$ -cyanation of conjugated ynone and cyclic enone (Graduate School of Science, Chiba Univ.) WATANABE,

- Yota; HOSHINO, Katsuyoshi; ARAI, Takayoshi
- 3PB-071 Synthesis of malonates having several same units and synthesis of their transition metal complexes. (Tokyo Gakugei Univ.) YOSHIHARA, Nobutoshi; NAGAI, Yukari; IWASAKI, Kei
- **3PB-072** Synthesis of malonoamide having several same units and synthesis of their transition metal complexes. (Tokyo Gakugei Univ.) YOSHIHARA, Nobutoshi; IWASAKI, Kei; NAGAI, Yukari
- **3PB-073** Synthesis of metal complexes of 1,3-diketonato oligomer (Tokyo Gakugei Univ.) YOSHIHARA, Nobutoshi; YAMAGUCHI, Yuri; NAGAI, Yukari; IWASAKI, Kei
- 3PB-074 The study of substitution effects of the oxidation of p-substituted benzoyl acetonato nickel complexes. (Tokyo Gakugei Univ.) YOSHIHARA, Nobutoshi; YONEKAWA, Yuu; RIKIMARU, Masataka; KUROSAWA, Kazutoshi
- **3PB-075** Synthesis of poly(benzoyliminoacetylene) (Tokyo Gakugei Univ.) YOSHIHARA, Nobutoshi; MIYAZAWA, Yuuki; SAWAHATA, Yuuko

## Organic Chemistry -Reaction and Synthesis-

3PB-076 Development and application of oxygen isotope labeled compounds (Tsukuba Laboratories, TAIYO NIPPON SANSO Corporation) SHIMODAIRA, Haruki

## Organic Chemistry -Reaction and Synthesis-High-Throughput Synthesis

- 3PB-079 Precise screening using solid state microwave reactor and energy saving and high quality synthesis of metal complexes (Minerva Light Laboratory; National Institute of Advanced Science and Technology; J Science Laboratory) MATSUMURA, Takeko; MASUDA, Yoshitaka; NISHIOKA, Masateru; YAMASHITA, Ayako
- **3PB-080** Synthesis of Cyclohexenones by Dehydrative Friedel-Crafts Type Reactions Using Microwave Irradiation and Solid Acid Catalysts (Natl. Inst. of Advanced Industrial Science and Technology (AIST)) YAMASHITA, Hiroshi; HATORI, Makiko; MITSUKURA, Yumi
- **3PB-081** Microwave-assisted synthesis of *N*-methylated peptides (Grad. Sch. Eng., Gunma Univ.; Bioproduction Res. Inst., AIST) NAKAJIMA, Tetsuya; YAMADA, Keiichi; NAGASHIMA, Izuru; OKU, Hiroyuki; MATSUO, Ichirou; SHIMIZU, Hiroki
- 3PB-082 Microwave-Assisted Advanced-Experiments for Students in Organic Chemistry (Ochanomizu Univ.; Minerva Light Lab) MORI, Yoshihito; YAMASHITA, Ayako; MATSUMURA, Takeko
- 3PB-083 Diastereodifferentiating [2+2] Photocycloaddition Using Microreactor (Graduate School of Materials Science, Nara Institute of Science and Technology (NAIST)) AIDA, Shin; NISHIYAMA, Yasuhiro; TERAO, Kimitada; KAKIUCHI, Kiyomi
- 3PB-084<sup>†#</sup> A New Reaction of Dienals Initiated by Addition of Alcohols under the High-temperature and High-pressure Conditions (Kochi Univ. of Technology) CHEN, Xin; SUMOTO, Kana; MITANI, Sotatsu; WANG, Pengyu; KOBIRO, Kazuya
- 3PB-085 Solid Phase Synthesis of Olefin Terminated Aryls by Beta Elimination of Sulfonium Salts. (Osaka Institute of Technology) SHIMOMURA, Osamu; UEOKA, Hiroki; SHINTANI, Tomoki; OHTAKA, Atsushi; NOMURA, Ryoki
- 3PB-086 Intramolecular Oxidative Amination of Olefinic amines with Palladium-consisting Coordination Polymer Catalysts and Magnetic Separation of Catalysts (Graduate School of Science, Chiba Univ.) SUZUKI, Takashi: ARAI, Takayoshi

#### Monday, March 28, PM

(15:00~16:30)

## Organic Chemistry -Reaction and Synthesis-Heterocyclic Compounds

- 3PC-031 Short-step Construction of Fused Pyridine Alkaloid Skeletons through the Key Step iinvolving Hetero Diels-Alder Reaction of Isotellurazoles and Acetylenic Dienopihles (Fac. Eng., Iwate Univ.) SHIMADA, Kazuaki; ITO. Takumi: OSAKI, Yu: OGAWA, Satoshi
- **3PC-032**<sup>†</sup> Cobalt Salt Mediated Beckmann Rearrangment of Cyclohexanone Oxime (Yamaguchi Univ.; Ube Industries, Ltd) YAMAMOTO, Hidetoshi; KOMEDA, Masahiro; HAYASHI, Keita; YAMADA, Naohiro; SUMIMOTO, Michinori; HORI, Kenji; SUGIMOTO, Tsunemi
- 3PC-033 Lewis Acid Catalyzed Beckmann Rearrangment of Cyclohexanone Oxime (Yamaguchi Univ.; Ube Industries, Ltd) YAMAMOTO, Hidetoshi; KOMEDA, Masahiro; HAYASHI, Keita; SHIRAI, Emiko; SUMIMOTO, Michinori; HORI, Kenji; SUGIMOTO, Tsunemi
- **3PC-034** The solvent effect on the reaction of 2,3,6,7-tetracyano-1,4,5,8-tetraazanaphthalene with amines (Wakayama National College of Technology) TAKAGI, Koichi; NOMURA, Eisaku; IWAMOTO, Hitoshi; HOSODA, Asao; MIYAKE, Yasuhito; ASAKAWA, Tomonori
- 3PC-035 Synthesis of 4-substituted ellipticine derivatives (Tokyo Univ. of Science) KONAKAHARA, Takeo; TANAKA, Takayuki; NAKAIKE, Yumi; IKEDA, Reiko; SAKAI, Norio

- **3PC-036** Synthesis of 4,4-Disubstituted 4*H*-Pyrrolo[2,1-*c*][1,4]benzothiazines (Engineering, Tottori Univ.) HYOTA, Akane; KONDO, Hideaki; KOBAYASHI, Kazuhiro; KONISHI, Hisatoshi
- 3PC-037 Synthesis of 1-amino-1-aryl-1,2-dihydro-3H-pyrrolo[3,4-c]pyridin-3-one (6-azaisoindolin-1-one)derivatives from pyridine-3-carbonitrile (Graduate School of Engineering, Tottori Univ.) NAKAGAWA, Kazuhiro; KOZUKI, Taketoshi; KONISHI, Hisatoshi; KOBAYASHI, Kazuhiro
- 3PC-038 Synthesis of 2-amino-4-aryl-4H-3,1-benzothiazine derivatives from 2-isothiocyanatobenzophenones (Graduate School of Engineering, Tottori) KANBE, Yuuki; KONISHI, Hisatoshi; KOBAYASHI, Kazuhiro
- 3PC-039 One-pot synthesis of 6,7-disubstituted thieno[2,3-b]pyrazines from 3-chloropyrazin-2-yl ketones (Graduate School of Engineering) SUZUKI, Teruhiko; KONISHI, Hisatoshi; KOBAYASHI, Kazuhiro
- 3PC-040 Synthesis of 2,3-Dihydro-1,3-oxazin-4-ones Using Mn(III)-Based Oxidative Intramolecular Cyclization of N-Benzyl-3-oxobutanamides (Department of Chemistry, Kumamoto Univ.) HIDESHIMA, Kouta; NISHINO. Hiroshi
- 3PC-041 Synthesis and the property of novel cyclophane-type bipyridine (Waseda Univ.) SAKAMOTO, Norihiko; KANOMATA, Nobuhiro
- 3PC-042 Synthesis of Tyrian purple's related compounds (National Fisheries Univ.) TANOUE, Yasuhiro; KAI, Norihisa
- **3PC-043** Synthesis and properties of a pincer-type ligand containing 1-azaazulene (Shinshu Univ.; Univ. of Toyama) ODA, Mitsunori; YAMAGA, Yuko; MATUMOTO, Naoko; KURODA, Shigeyasu
- 3PC-044 Novel synthesis and emission behavior of N-substituted 1,6-methano [10]annulene-3,4-dicarboximides (Shinshu Univ.; Univ. of Toyama) ODA, Mitsunori; MIYAWAKI, Daisuke; TAMURA, Naoko; TATSUMOTO, Naoko; MIYATAKE, Ryuta; KURODA, Shigeyasu
- 3PC-045 Transformation from 2-substituted 1-pyrroline into 2,3-disubstituted pyrrole (Shinshu Univ.; Univ. of Toyama) ODA, Mitsunori; FUJIWARA, Yurie; MATSUMOTO, Naoko; KURODA, Shigeyasu
- 3PC-046 Synthesis of cyclic carbazole tetramer connected with ethynyl group (Univ. of Yamanashi; Graduate School of Yamanashi) HANAI, Kaito; OGAWA, Kazuya
- 3PC-047 Efficient Synthesis of Azaazulenotropone Derivatives (Graduate School of Medicine, Yamaguchi Univ.) NAKATANI, Makoto; MATSUURA, Youko; FUJII, Hiroyuki; MURAFUJI, Toshihiro; ABE, Noritaka
- 3PC-048 Antitumor activities of β-carboline derivatives and 7-amino-1,6-naphthyridine derivatives (Tokyo univ.of Science) IKEDA, Reiko; MASUJIMA, Hiroshi; NAKAIKE, Yumi; SAKAI, Norio; KONAKAHARA, Takeo
- 3PC-049 Synthesis of chalcogenophens by using 1,4-dicarbonyl compounds, elemental chalcogens, hydrochlorosilanes and amines. (Department of Chemistry, Faculty of Engineering, Gifu Univ.) KONDO, Hideaki; SHIBAHARA, Fumitoshi; MURAI, Toshiaki
- 3PC-050<sup>#</sup> Synthesis of oxa[9]helicenes by the reaction of heliacal quinone with thiols (Grad. Sch. Eng., Utsunomiya Univ.) SALIM, Mohammad; KIMURA, Takao; KARIKOMI, Michinori
- 3PC-051 A Convenient Synthesis of Furobenzopyran-2-one Derivatives from 3-Alkoxyflavothiones (Aichi Univ. of Education; Department of Molecule Function and Life Sciences) NAKANO, Hirofumi; TSUBAMOTO, Daisuke
- 3PC-052 Synthesis of sulfides using one-pot S-alkylation by ammonium thiogrycolate (Meiji Univ.) ENJO, Naoki; ITABASHI, Saori; MIYAKOSHI, Tetsuo
- 3PC-053 Development of a new construction of heterocycles by Ni-catalyzed trimerization of 1,6-diyne. (Tokyo Univ. of Science) SAKAI, Norio; NAKATSUKA, Hitoshi; IKEDA, Reiko; NAKAIKE, Yumi; KONAKAHARA, Takeo
- 3PC-054 Synthesis of 2-arylthiochromen-4-ones (thioflavones) by iodine-mediated cyclization of 2'-t-butylsulfanylchalcones (Graduate School of Engineering, Tottori Univ.) KOBYSHI, Akihiro; KONISHI, Hisatoshi; KOBYASHI, Kazuhiro
- 3PC-055 Synthesis of 3-arylquinazoline-2,4-(1H-,3H-)-dithiones by the reaction of 2-lithiophenyl isothiocyanates with aryl isothiocyanates (Graduate School of Engineering, Tottori Univ.) YOKOI, Yuki; KONISHI, Hisatoshi; KOBAYASHI, Kazuhiro
- **3PC-056** Pressure Effects on Thermal Cyclization of Cyano Substituted Chromene in Ionic Liquids (Oita Univ.) YUKI, Yosuke; KITAOKA, Satoshi; NOBUOKA, Kaoru; OHGA, Yasushi; ISHIKAWA, Yuichi
- 3PC-057 Cycloaddition reaction of β-alkoxyvinylsulfides and aldehydoaldose derivatives (Aoyama Gakuin Univ.) KUSAKABE, Kousuke; TSUJIMOTO, Takashi: SUGIMURA, Hidevuki
- 3PC-058 Self-disproportionation of Enantiomers of Thalidomide on chromatography with a non-chiral system (Nagoya Institute of Technology) MAENO, Mayaka; ITOU, Emi; YAMAMOTO, Takeshi; TOKUNAGA, Etsuko; SHIBATA, Norio
- **3PC-059** Development of Optically Active Ionic Liquids using Amino Acids (Nihon Univ.) YAMASHINA, Yuka; TSUNO, Takashi
- 3PC-060 Stereoselective Synthesis and Transformations of Isoxazoline Derivative Leading to Lopinavir and Ritonavir (Institute of Technology and Science, The Univ. of Tokushima) WATANABE, Hiroshi; NISHIUCHI, Masaki; FUJIKAWA, Kazuyuki; KAWAMURA, Yasuhiko
- 3PC-061 Synthesis of perfluoroalkylated phenanthrolines andtheir complexation with ruthenium (III) chloride (Faculty of Engineering, Shizuoka Univ.;

- Life Science Research Center, Gifu Univ.) TAKAHASHI, Masaki; KAWAKOSHI, Tomohito; INUZUKA, Toshiyasu; SENGOKU, Tetsuya; YODA, Hidemi
- 3PC-062 Synthetic Studies of the New Polyketide Lactone of Citrus Plant Origin (Faculty of Engineering, Shizuoka Univ.) SENGOKU, Tetsuya; MITAMURA, Hiromi; MURATA, Yusuke; TAKAHASHI, Masaki; YODA, Hidemi
- 3PC-063 Synthetic Studies of Vittarilide A, a Cytotocic polyketide (Faculty of Engineering, Shizuoka Univ.) SENGOKU, Tetsuya; NISHIO, Shuhei; HAKAMATA, Yuki; TAKAHASHI, Masaki; YODA, Hidemi
- **3PC-064** Synthesis of 2-substituted tetrahydroquinoline alkaloids.(Synthesis of Angustureine, Galipinine, and Cuspareine, ) (College of Engineering, Nihon Univ..) ISHII, Keita; NODA, Yoshihiro
- 3PC-065 Preparation and spectra of fluorescent NIR dyes (KSU; IST) ISOBE, Shinichro; SETO, Nobuyuki; SANO, Youichi; HIRANO, Yoshiki; YAZUMI, Takashi; KAWAHARADA, Tadashi
- 3PC-066 Synthesis and prorerties of diformylisothianaphthene oligomer (Grad. Sch. Sci., Eng., Ehime Univ.) MIYAMOTO, Tomoyuki; OKUJIMA, Tetsuo; YAMADA, Hiroko; UNO, Hidemitsu
- 3PC-067 Synthesis of Octa-Cyclic Polyethers Using the Convergent Methodology Based on Oxyranyl Anion Strategy (Faculty of Pharmacy, Meijo Univ.) SAKAI, Takeo; SUGIMOTO, Ai; MORI, Yuji
- **3PC-068** Synthesis of Novel Octaesterporphyrin (Kitasato Univ.) KAJIYAMA, Kazumasa; YAMAMOTO, Koji; YUGE, Hidetaka
- 3PC-069 Syntheses of 2,5-diarlypyrazines having electron donating aromatic groups and their fluorescent properties. (Kitakyushu National College of Technology) SAJIMA, Takanori; TAKEHARA, Kenji; ISOMURA, Kazuaki
- 3PC-070 Synthesis of discotic triphenylene compound having pyrimidine ring within side-chain part (2) (Kitakyushu National College of Technology) SANNOMIYA, Yu; KIHARA, Tomomi; TAKEHARA, Kenji
- 3PC-071 Synthesis of Highly Polarized Amphiphilic Compound Having Pyridazine Ring (Kitakyushu National College of Technology) TAKAKI, Miki; YOSHIO, Noriko; TAKEHARA, Kenji
- 3PC-072 Aggregation and Solvation Behaviour in Ionic Liquid Molecular Solvent Mixtures (Oita Univ.) TOKUMARU, Masaki; NOBUOKA, Kaoru; KITAOKA, Satoshi; OHGA, Yasushi; ISHIKAWA, Yuichi
- 3PC-073 Photodimers of Heterocyclic Compounds Bearing Two Long Chains Substituted with Anthracen-9-yl Group at the ω-Position (Kanagawa Univ. Dept. of Chemistry) ABE, Seiko; WATANABE, Nobuko; IJUIN, Hisako; MATSUMOTO, Masakatsu

## Organic Chemistry -Reaction and Synthesis-Heteroatom Compounds

- 3PC-075 Chirality control of ammonium phosphoromonofluoridates from phosphorothioic esters possessing a binaphthyl group (Dept. Chem., Fac. Eng., Gifu Univ.) HAYASHI, Takae; YAMADA, Kyohei; MURAI, Toshiaki
- 3PC-076 Discrimination and resolution of chiral secondary alcohols via binaphtyl phosphoroselenoic acid esters (Dept. Chem., Fac. Eng., Gifu Univ.) MIWA, Tomoaki; IMAIZUMI, Satoko; MURAI, Toshiaki
- 3PC-077 The Sequential addition reactions of Grignard reagents and electrophiles to thioformesters (Dept. Chem., Fac. Eng., Gifu Univ.) MORIKAWA, Kenta; OHASHI, Takaaki; MURAI, Toshiaki
- 3PC-078 Solvent-Free Iron Chloride Catalyzed O-, S-, and N-Acylation (Osaka Municipal Technical Research Ins.) MIHARA, Masatoshi; NAKAI, Takeo; IWAI, Toshiyuki; ITO, Takatoshi; OHNO, Toshinobu; MIZUNO, Takumi
- **3PC-079** Solid acid catalyzed Friedel-Crafts Reaction of 2-Hydroxybiphenyls with Phosphorus Trichloride (Osaka Municipal Technical Research Ins.; Marubishi Oil Chemical Co.,Ltd.) ITO, Takatoshi; MIHARA, Masatoshi; NAKAI, Takeo; IWAI, Toshiyuki; MIZUNO, Takumi; OHNO, Toshinobu; ISHIKAWA, Akira; KOBAYASHI, Jun-ichi
- 3PC-080 Synthesis and Structure of Aluminium Complex with an [OSSO]-type Bis(phenolato) Ligand Having a trans-Cyclooctane Ring (Saitama Univ.) SAITO, Yusuke; NAKATA, Norio; ISHII, Akihiko
- 3PC-081 Oxdation of 1,3-Imidazole-2-chalcogenones with Triflic Acid Anhydride (Saitama Univ.) KAWAUCHI, Fumihiko; NAKATA, Norio; ISHII, Akihiko
- 3PC-082 Skeletal rearrangement in the TiCl<sub>4</sub>-mediated reactions of 2-phenyl-1,3-indandione with phenylhydrazines (Josai Univ.) SAKANOSHITA, Eriko; YAMADA, Gakushi; WAKABAYASHI, Hidetsugu; KOBAYASHI, Keiji
- 3PC-083 Synthesis and Photoisomerization of Bisazobenzenes Using Condensation reaction of Nitrosobenzenes (Fac. Eng., Soka Univ.) WATANABE, Masaaki; HOSOKAWA, Yuji; WATANABE, Kazuma; ITO, M. Masato
- 3PC-084 Reaction of 1,1-dihalophosphoenium salts with polyalcohols (Chubu Univ.) KATO, Naoki; NIYOMURA, Osamu; KOKETSU, Jugo; ANDO, Fumio
- **3PC-085** Synthesis and Property of Compounds having 2-Azaindolizylselanyl Groups (Chubu Univ.) NIWA, Rikiya; NOMURA, Shintaro; NIYOMURA, Osamu; ANDO, Fumio; KOKETSU, Jugo
- 3PC-086 The Synthesis and Reaction of Phenylsulfinyl Ethylene Oxide (Tokai Univ.) WATANABE, Mikio; IKEDA, Hisataka

- **3PC-087** Reaction of Alkenes Activated by a Selenenyl Iodide Bearing a Cavity-Shaped Substitutent (Tokyo Institute of Technology) EBISAWA, Kazuaki; SASE, Shohei; GOTO, Kei
- 3PC-088 Attempts at synthesis of anti-apicophilic antimony compounds (toho Univ.) TAKEUCHI, Toshihiro; MATSUKAWA, Shiro; TAKAHASHI, Masashi
- 3PC-089 Synthesis of Eirht-membered Multi-Element Cyclic Compounds from the Reaction of Disulfanenitrile with R<sup>2</sup>ECl<sup>2</sup> (E = Ge, Sn) (Coll. Ind. Tech., Nihon Univ.) SUZUKI, Yasuhito; YOKOYAMA, Yuuji; FUJII, Takayoshi
- 3PC-090<sup>#</sup> Studies on the Syntheses of Thianthrene Derivatives Linked with Carbon Chain (Univ. of Toyama, Graduate School of Science and Engineering) MORITA, Hiroyuki; YOSHIMURA, Toshiaki; SHEIKH, Md. Chanmiya; IWASAWA, Takashi; NAKAJIMA, Akitaka; KITAO, Atsutaka
- 3PC-091 Synthesis of Disulfides Having 1,3-O,S Structure via 1,4-Nucleophilic addition. (Yonago National College of Technology) HORIGUCHI, Takashi; TANIFUJI, Naoki
- 3PC-092 Factors to Determine Fine Structures of β-Phenylchalcogeno Carbonyl Compounds: Role of O—Z-C (Z = S, Se, Te) Interactions (Wakayama Univ.) OHISHI, Rintaro; HAYASHI, Satoko; NAKANISHI, Waro; OZAKI, Toshiya; NOMOTO, Akihiro; OGAWA, Akiya

## Organic Chemistry -Reaction and Synthesis-Organic Electron Transfer Chemistry

- 3PC-095 Synthesis of Si-1-vinylimidazole copolymer using electrontransfer reaction (Kinki Univ.) KASHIMURA, Sigenori; ISHIFUNE, Manabu; MATAYOSHI, Kohei
- 3PC-096 Synthesis of Functional Carbon Materials Using Anodic Oxidation (Kinki Univ.) KASHIMURA, Shigenori; ISHIFUNE, Manabu; NAKATUJI, Takeshi; SUZUKI, Taturou
- 3PC-097 Reductive copolymerization of PhMeSiCl2 and vinyl monomers (Kinki Univ.) KASHIMURA, Sigenori; ISHIFUNE, Manabu; MORITA, Tomoki
- 3PC-098 Innovation of high selective hydrogenation catalyst (The Univ. of Electro-Communications) KOBAYASHI, Yoshinao; KAWASAKI, Yuka; MAKI, Svouiirou; HIRANO, Takashi; NIWA, Haruki

## **Analytical Chemistry**

- 3PC-101 Quantum Chemical Calculation of the Molecular Parameters for Analysis of Pesticides Using Gas Chromatograph/Laser Multiphoton Ionization/Time-of-Flight Mass Spectrometry (Kyushu Univ.) IMASAKA, Tomoko; LI, Adan; IMASAKA, Totaro
- **3PC-102** Size distribution analysis of nano-particles by small angle X-ray scattering (UBE Scientific Analysis Laboratory, Inc.) NAKAMURA, Akira

#### Reagent for analysis

- 3PC-103 Design and synthesis of polymerizable fluorescent enzyme substrate monomer molecule for use in high performance hydrogel sensor. (Graduate School of Engineering, Osaka Prefecture Univ.) WAKAYAMA, Hideki; OKAMOTO, Yoshinori; KAWAMURA, Kunio; HISAMOTO, Hideaki
- 3PC-104 Development of the sensing devices based on the combination of hydrogel and soluble membrane toward the development of single step biosensor (Osaka Prefecture Univ., Department of Applied Chemistry) OKAMOTO, Yoshinori; WAKAYAMA, Hideki; KAWAMURA, Kunio; HISAMOTO, Hideaki
- 3PC-105 Measurements of oxygen concentration based on ratiometric method (Gunma Univ.) YOSHIHARA, Toshitada; MASHIMA, Kenta; TOBITA, Seiji

#### Electroanalysis

- 3PC-106 Study of antioxidant ability evaluation sensor using printed carbon electrodes (Tokyo Univ. of Technology, National Institute of Advanced Industrial Science and Technology Biotechnology Industrialization Center Advanced Industrial Science and Technology) HIROSE, Hideo; ISHIKAWA, Tomoko; YOKOYAMA, Kenji; GOTOH, Masao
- 3PC-107 Oxidation-reduction behavior of polyvalent elemental in the borate glass melts (Ehime Univ.) OKAMOTO, Ryota; YAMASHITA, Hiroshi
- 3PC-108 Electrochemical Sugar recognition by the use of cyclodextrin assembled on the gold electrode (Sophia Univ.) ENDO, Akira; MARUYAMA, Yugo; HASHIMOTO, Takeshi; HAYASHITA, Takashi
- 3PC-109 Rapid immunosensing based on the patterning with particle aggregation formed by the quadrupole electrode device (Univ. of Hyogo; Graduate School of Material Science) YAMAMOTO, Msashi; YASUKAWA, Tomoyuki; MIZUTANI, Fumio
- 3PC-110 Characterization of ferrocene derivative immobilized on temperature-responsive polymer membrane fabricated by iniferter polymerization (Univ. of Hyogo; Graduate School of Material Science) MIKI, Shuji; WATANABE, Kazuya; YABUUCHI, Yasuyuki; YASUKAWA, Tomoyuki; MIZUTANI, Fumio
- 3PC-111 Analysis of biological samples based on coulometry (Ritsumeikan

Univ.) SAKAKIBARA, Yasuhito; SHIRAISHI, Haruki; TAKAGI, Kazuyoshi

#### MS

- **3PC-112** Deteremination of Cu(II) Using Dithizone-Impregnated Carbon Paste Electrodes (Graduate School of Science and Engineering, Ritsumeikan Univ.) KUWAMURA, Toshiyuki; GOTOU, Shuuhei; SHIRAISHI, Haruki
- 3PC-113 ESI-MS and MS/MS analysis of early synthetic azo dyes and applications for cultural textiles. (Kyoto Institute of Technology; Univ. of Hyogo) SASAKI, Yoshiko; SASAKI, Ken; FUKAE, Ryohei
- 3PC-114 Instrumentation of a laser post ionization secondary nutral mass spectrometer(2)- 1-photon ionization by vacuum ultra violet laser (Research Institute of Instrumentation Frontier, AIST) NAGAI, Hidekazu; NAKANAGA, Taisuke
- 3PC-115 Detection and crystallization of crystal coordination polymers by mass spectrometry (Univ. of Tokushima Bunri) OHARA, Kazuaki; YAMAGUCHI, Kentarou

#### FIA, Chromatography

- 3PC-116 FIA using the reaction of the cobalt complexes (Okayama Univ. of Sci.) YAMAZAKI, Haruka; SAGA, Makoto; YAMAZAKI, Sigeo; NGAI, Megumi; MIYAHARA, Wakayo
- 3PC-117 Hydrothermal Flow Injection Analysis for Platinum Group Metal IonsUsing Fluorescence Determination of Ruthenium (III) with 1, 10-phenanthroline (Osaka Prefecture Univ.; Department of applied chemistry) NAKAI, Takayuki; IKOMA, Keisuke; HISAMOTO, Hideaki; KAWAMURA. Kunio
- **3PC-118** Separation behaviors of 1 30-mer oligonucleotides using capillary LC with a monolithic column (Graduate school of engineering; Osaka prefecture Univ.) IKOMA, Keisuke; HAMAHIGA, Kazuhiro; HISAMOTO, Hideaki; KAWAMURA, Kunio
- 3PC-119 Determination of trace amount of cobalt in steel samples by two-dimensional on-line redox derivatization liquid chromatography. (Graduate School of Science and Engineering, Saitama Univ.) YAMAZAKI, Hideaki; SAITO, Shingo; SHIBUKAWA, Masami
- 3PC-120 Determination of Four Tocopherols in Soya Bean Oil by High Performance Liquid Chromatography on a C30 Reversed-Phase Column (Tokai Univ.) KITAMI, Hideaki; ISHIHARA, Yoshimi; TAKANO, Jiro

#### Capillary electrophoresis

- 3PC-121 Study on Highly Emissive Probes with Various Chelating Moieties for Analysis of Actinides by Capillary Electrophoresis with Laser Induced Fluorescent Detection (Japan Atomic Energy Agency; Saitama Univ.) HARAGA, Tomoko; NAKANO, Yuta; SHIBUKAWA, Masami; SAITO, Shingo; KAMEO, Yutaka; TAKAHASHI, Kuniaki
- **3PC-122** Development of hydrothermal flow reactor-microchip electrophoresis device for amino acid analysis (Osaka Prefecture Univ.,Graduate school of Engineering) FUNAUCHI, Naoki; HISAMOTO, Hideaki; KAWAMURA, Kunio
- 3PC-123 Design and synthesis of novel fluorescent enzyme substrate for use in highly-sensitive bioassay based on capillary isoelectric focusing (Graduate School of Engineering, Osaka Prefecture Univ.) UENOYAMA, Yuta; IKEGAMI, Ken; UMEZAWA, Keitaro; YOKOYAMA, Hiroki; KAWAMURA, Kunio; CITTERIO, Daniel; SUZUKI, Koji; HISAMOTO, Hidagli
- 3PC-124 Highly sensitive CE-LIF of lanthanide ions in radioactive liquid wastes: combination of new fluorescent probes and dynamics ternary complex equilibrium (Saitama Univ.; Japan Atomic Energy Agency) SATO, Yoshiyuki; NAKANO, Yuta; SAITO, Shingo; HARAGA, Tomoko; ASAI, Shiho; KAMEO, Yutaka; TAKAHASHI, Kuniaki; SHIBUKAWA, Masami

### Nanoparticle, Reagent

- **3PC-125** Highly Sensitive Assay of Lectin Using Sugar-Immobilized Gold Nanoparticles (Kochi Univ.) YAMAMOTO, Shuji; WATANABE, Shigeru
- 3PC-126 Template-Directed Self-Assembly of Gold Nanoparticle Arrays for Local Surface Plasmon Resonance Sensors (Kochi Univ.) YAHATA, Tatsuya; WATANABE, Shigeru
- 3PC-127 Selective Analysis of sodium and potassium ions with nano-pipette probes (Konkuk Univ.) TAKAMI, Tomohide; SON, Jong Wan; LEE, Jookyung; PARK, Bae Ho; KAWAI, Tomoji
- 3PC-128 Liquid liquid extraction of rhenium(VII), palladium(II) and molybdenum(VI) by the new reagent, 2 -(Imino)bis(N,N-Dialkylacetamide) (IDAA) (Grad. Sch. Sci. Eng., Ibaraki Univ.) NAGATSUKA, Akihisa; KONNO, Ayaka; OHASHI, Akira; ORIYAMA, Takeshi; YAMAGUCHI, Akira; KIM, Haeng-boo; SASAKI, Yuji
- 3PC-129 Development and Anion Effect of Fluorescent Ion Sensors Based on Carbazolophane. (Osaka Kyoiku Univ.) KUSUMOTO, Nao; KUBONO, Koji; TANI, Keita; YOKOI, Kunihiko

#### Separation, Extraction

- 3PC-130 Silver diethyldithiocarbamate complex as a new coprecipitant for preconcentration of trace metals prior to their graphite furnace atomic absorption spectrometric determination (Department of General Education, Kobe City College of Technology) SATO, Hirotoshi
- 3PC-131 Chromatographic property of mesoporous silica materials as a stationary phase (Inst. Nanosci. Nanotech., Waseda Univ.; Faculty of Sci. Eng., Waseda, Univ.; Kagami Memorial Research Institute for Materials Science and Technology, Waseda Univ.) SUMITOMO, Keiko; URATA, Chihiro; KURODA, Kazuyuki
- 3PC-132 Extraction and Separation Methods for Organic Compounds in Aqueous Phase Using Ionic Liquids (Industrial Technology Center of Wakayama Prefecture) OSAKI, Shusuke; TAKAGAKI, Masafumi; MATSUMOTO, Akihiro; MORI, Megumi; KOBATA, Toshitsugu
- 3PC-133 Scanning Tunneling Microscope Designed for Operation in Air and Liquid (Dept. of Chem., Fukushima-NCT) KOBAYASHI, Takuma; SUGANAMI, Hikaru; SATO, Soichiro; FUKUSHIMA, Misato; SUZUKI, Hiromasa; KUROSAWA, Yuuki; SAKAMKI, Kenji; MATSUDAIRA, Masahki

#### Environmental analysis

- **3PC-134** Determination of lead by solid-phase extraction (Kogakuin Univ.) KURODA, Akihiro; KAMAYA, Minori; NAGASHIMA, Kunio
- 3PC-135 A Coloring paper filter to detect a Cyanide ion in Water using Cu(2)-SBT and UV irradiation decomposition of pretreatment (Kogakuin Univ.) NAKASHIMA, Kenji; MORIYA, Yuta; NAGASHIMA, Kunio; KAMAYA, Minori
- 3PC-136 VOC-Adsorption and Desorption Properties of Oga Tan and Woodceramics Prepared from Oga Tan (Kanagawa Univ.) TAKAYAMA, Yoshiki; ONUKI, Satomi; OKABE, Toshihiro; TSUGOSHI, Takahisa; NISHIMOTO, Yuko
- 3PC-137 Influence of carbonized temperature on VOC-Adsorption and Desorption Properties of Woodceramics Prepared from Cedar 2 (Kanagawa Univ.) ONUKI, Satomi; YAMADA, Saki; OKABE, Toshihiro; NISHIMOTO, Yuko
- 3PC-138 Analytical Study on Boron Separation of Environmental Water (Kanagawa Univ.) SHIMIZU, Hideyo; YAMAMOTO, Kohei; NISHIMOTO, Yuko
- 3PC-139 Characterization of fungi using SPME-GC/MS of microbial volatile organic compounds from Aspergillus fumigatus and nidulans, Fusarium solani and Penicillium paneum (Nara Women's Univ.) TAKANA, Haruna; KIMURA, Tomoko; KANEKO, Sachiyo; SUZUKI, Takahito; TAKEUCHI, Takae
- 3PC-140 Influence of salt on interaction polyethylene glycol and water (Kanagawa Univ) INABA, Mayumi; UEHARA, Yuduru; NISHIMOTO, Yuko

### Bioanalysis

- 3PC-141 Development of anti- Norovirus monoclonal antibodies using the phage display techniques, and Its application to immunoassay (Numazu Industrial Research Institute of Shizuoka Pref.) OHTA, Toshiya; MUROFUSHI, Keita; MATSUNO, Masayuki; TUJI, Mutumi; WATABE, Satoshi: UEMATSU, Shoichi: NAKANO, Michibiko
- 3PC-142 Organelle-Targetable Fluorescent pH Probes via Genetically Expressed Halo Tag Protein (Keio Univ.) HORIMATSU, Mai; MASHIBA, Takuya; UMEZAWA, Keitaro; SHINDO, Yutaka; OKA, Koutaro; CITTERIO, Daniel; SUZUKI, Koji
- 3PC-143 Highly sensitive DNA microarrays with an optical interference slide (Tokyo Univ. of Tech.) YASUDA, Mitsuru; AKIMOTO, Takuo
- 3PC-144 Temperature cycling unit regulated by programmable logic controller for PCR amplification in a confined micro-space (Faculty of Science and Engineering, Doshisha Univ.) TORII, Masayuki; HASHIMOTO, Masahiko; TSUKAGOSHI, Kazuhiko
- **3PC-145** A simple method for determination of non polar compounds (NPC) content in the edible oils (NFRI) TSUZUKI, Wakako
- 3PC-146 Rapid Measurement of α-Glucosidase Activity in Rice Koji Using Hydroquinone-α-D-Glucopyranoside as Substrate (Nara National College of Technology; Chemical Engineering) HORII, Makoto; MIKI, Kojiro
- **3PC-147** Iinhibitory Effect of Cyclodextrins on Complexation between Risperidone and Tea Catechins (Faculty of Pharmaceutical Sciences, Fukuoka Univ.; College of Pharmaceutical Sciences, Daiichi Univ.) MORIWAKI, Hanae; MATSUBARA, Tomonori; IKEDA, Hirohito; YUKAWA, Miho; YUKAWA, Ejij; AKI, Hatsumi

#### Others

- **3PC-148** Measurement of the hydrogen content and evaluation of film property in DLC coating (TIRI) FUJIMAKI, Yasuto; NAKAO, Setsuo; UEDA, Shizuyo; TERAYAMA, Nobuyuki; SASAKURA, Daisuke; MOTOI, Akia
- 3PC-149 Analysis of Iron(II) by chemiluminescent method combined with

- solvent extraction. (Kanazawa Institute of Technology) GAHO, Yousuke; MIYAGUCHI, Ryousuke; OOYABU, Matashige
- **3PC-150** Catalytic oxidation reaction of tetrabase by iodide ion. (Kogakuin Univ.) SHIMOSE, Masato; NAGASHIMA, Kunio; KAMAYA, Minori
- 3PC-151 Thermal diffusivity in the phase transitions of liquid crystals with temperature wave analysis incorporated with DSC-Raman analysis (Tokyo Institute of Technology, PerkinElmer Japan) MORIKAWA, Junko; SUZUKI, Toshiyuki; TSUJII, Tetsuya; HASHIMOTO, Toshimasa
- 3PC-152 Analyses of Laminate Components of Paper by Near-Infrared Spectroscopy (Tokyo Univ. Agricult. and Technol.) BAI, Wenming; YOSHIMURA, Norio; TAKAYANAGI, Masao

#### Monday, March 28, PM

 $(18:00\sim19:30)$ 

## "International Year of Chemistry 2011" JST-PRESTO Joint Symposium on Research and Development Challenging to Save Human beings from Energy Crisis: Utilization of Solar Energy

- 3PD-031 Watching Light-Energy Conversion with Time-resolved X-ray Structural Analysis (Institute of Materials Structure Science, High Energy Accelerator Research Organization (KEK)) ADACHI, Shin-ichi
- 3PD-032 Electron transfer in photosynthetic reaction centers (Kyoto Univ.) ISHIKITA, Hiroshi
- **3PD-033** Molecular Design and Synthesis of Catalysts for Multi-Electron Reduction of Carbon Dioxide by Using Peptide Origami Methodology ISHIDA, Hitoshi
- 3PD-034 Synthesis of Iron Complexes Bearing a Bis(phosphaethenyl)pyridine Ligand Directing toward Activation of CO2 NAKAJIMA, Yumiko; OZAWA, Fumiyuki
- 3PD-035 Photoelectrochemical water splitting without an external applied voltage using p-type and n-type oxide semiconductors IDA, Shintaro; YAMADA, Keisuke; MATSUNAGA Takuya; HAGIWARA, Hidehisa; MATSUMOTO, Yasumichi; ISHIHARA Tatsumi
- 3PD-036 Synthesis and Reaction Studies of the Pd Catalysts containing Visible-Light-Sensitive Chromophores (Chem. Res. Lab., Tokyo Tech) INAGAKI, Akiko
- 3PD-037 Protein Engineering to Create Algae with High Formate Productivity IHARA, Masaki
- 3PD-038 Organization and Functional Analysis of Supramolecular Assembly of Photosynthetic Membrane Proteins DEWA, Takehisa
- **3PD-039** Water Splitting Reaction Catalyzed by Metal Comlexes MASAOKA, Shigeyuki; YOSHIDA, Masaki; YAMAGUCHI, Toshiki; KIMOTO, Ayano; KIYOTA, Josaku; OKAMURA, Masaya; YAMAUCHI, Kosci; SAKAI, Ken
- **3PD-040** Challenge to complete water splitting by visible light using metal complex systems Masayuki Yagi
- **3PD-041** Development of Multinuclear Active Metal Sites Constructed inside a Cage-type Ligand FUNAHASHI, Yasuhiro
- 3PD-042<sup>#</sup> Photocatalytic surface reaction on titanium dioxide (TiO2) surface studied by sum frequency generation (SFG) spectroscopy NOGUCHI, Hidenori; UOSAKI Kohei
- **3PD-043** Microspectrometry of chloroplasts by anti-Stokes fluorescence KUMAZAKI, Shigeichi; HASEGAWA, Makoto; YOSHIDA, Takahiko, YABUTA, Mitsunori; TERAZAMA, Masahide
- **3PD-044** Visible-light water splitting using modified oxynitride powder as photocatalysts MAEDA, Kazuhiko
- 3PD-045 Structural basis for Fd-dependency of Ferredoxin NADP<sup>+</sup> reductase from *Chlorobaculum tepidum* MURAKI, Norifumi; SEO, Daisuke; SAKURAI, Takesi; KURISU, Genji
- **3PD-046** Artificial metabolic processes powered by photosynthesis:Trials based on mutageneses with bacteria NAGASHIMA, Kenji
- 3PD-047 Development of Super-resolution Fluorescence Microscope for Photosynthetic Organisms HOTTA, Jun-ichi; SEMPLES, Wouter; MIZUNO, Hideaki; HOFKENS, Johan
- **3PD-048** Multiple Metal Binding by Carotenoids and Synthetic Polyenes MURAHASHI, Tetsuro; TAKASE, Kohei; TATSUMI, Yasuki; OGOSHI, Sensuke
- **3PD-049** Water oxidation activity of ruthenium substituted polyoxometalates SADAKANE, Masahiro
- 3PD-050 Organic thin film solar cells with interlayer excitation energy transfer ICHIKAWA, Musubu
- **3PD-051** Formation of poly-Si films for solar cells by rapid crystallization OHDAIRA, Keisuke; MATSUMURA, Hideki
- 3PD-052 High-Efficient and Ultra-Thin Solar Cells using Plasmonics (Grad. Sch. Eng., Kyoto Univ.; JST PRESTO) OKAMOTO, Koichi
- 3PD-053 Photogenerated charge carrier dynamics in donor-acceptor films studied by microwave conductivity (Grad. Sch. Eng., Osaka Univ.; JST PRESTO) SAEKI, Akinori
- **3PD-054** Organic Photovoltaic Cells Fabricated by Alternative Deposition Method (RCPV, AIST) Tetsuya TAIMA; Ying ZHOU; Tetsuhiko MIYADERA; Toshihiko YAMANARI; Yuji YOSHIDA
- 3PD-055 Design nd Synthesis of Two-Dimensional Polymers (IMS; JST

- PRESTO) JIANG Donglin
- 3PD-056 Elucidation of Degradation Mechanism of Organic Thin-Film Solar Cells from Microscopic Viewpoints and Improvement of Device Performance MARUMOTO, Kazuhiro
- **3PD-057** X-ray photoemission spectroscopy with depth resolution: Application to the electronic structure of buried organic semiconductor interfaces (Inst. Chem. Res., Kyoto Univ.) YOSHIDA, Hirovuki
- 3PD-058 Development of pi-conjugated molecules for application to n-type organic semiconductors (ISIR, Osaka Univ.) IE, Yutaka
- 3PD-059 Nanocarbon Composite Materials for Photoelectrochemical Devices (Grad. Sch. Eng., Kyoto Univ.) UMEYAMA, Tomokazu
- 3PD-060 New Semiconducting Polymers Toward High-Efficiency Organic Thin-Film Solar Cells OSAKA, Itaru; ABE, Toru; SAITO, Masahiko; SHINAMURA, Shoji; MORI, Hiroki; TAKIMIYA, Kazuo
- 3PD-061 Characterizing Molecular Geometries of the Photoinduced Charge-Separated States to Evaluate the Function of the Molecular Solar-Energy Converstion Systems KOBORI, Yasuhiro; FUKI, Masaaki; SUZUKI, Minami; NAGATA, Hiroto; MURAI, Hisao; SHIBANO, Yuki; TSUJI, Hayato; TAMAO, Kohei
- 3PD-062 Development of intermediate-band solar cells based on multiple-bandgap semiconductor ZnTeO TANAKA, Tooru
- **3PD-063** Synthesis of Well-Defined Block Copolymers with Polythiophene Segments and Their Application to Organic Photovoltaic Cells HIGASHIHARA, Tomoya
- **3PD-064** Design and synthesis of phthalocyanine analogues with near-infrared absorption MURANAKA, Atsuya; YONEHARA, Mitsuhiro; HIRAYAMA, Machiko; UCHIYAMA, Masanobu
- **3PD-065** Development of pi-Electron Acceptor Unit using Intramolecular Coordination Bond (Inst. Chem. Res., Kyoto Univ.) Wakamiya, Atsushi