

June 23, Saturday

Opening remarks; 9:00-9:10 Hitoshi Tamiaki (Chairman, *Ritsumeikan Univ.*)

PL-1 9:10-9:50 (Chairperson: H. Tamiaki, *Ritsumeikan Univ.*)
Cucurbiturils at the Interface Between Supramolecular Chemistry and Materials
Science
Oren A. Scherman
Univ. Cambridge, Cambridge, United Kingdom

O-1 9:50-10:20 (Tamiaki)
Polymer Chemistry in Coordination Nanospaces
Takashi Uemura
Kyoto Univ., Kyoto, Japan

Coffee break: 10:20-10:40

O-2 10:40-11:10 (Chairperson: O. A. Scherman, *Univ. Cambridge*)
Biom mineralization in Diatoms
Jun-ichi Hotta
Yamagata Univ., Yonezawa, Japan; PRESTO, JST

O-3 11:10-11:40 (Scherman)
Molecular Biological Approach on Biosynthesis of Chlorophylls in Phototrophic
Bacteria
Yusuke Tsukatani, Jiro Harada, Hitoshi Tamiaki
Ritsumeikan Univ., Kusatsu, Japan; Kurume Univ., Kurume, Japan

S-1 11:40-11:50 (Scherman)
(P14) Synthesis, Structure and Optical Property of Chlorophyll Derivative Possessing a
 β -Diketonated Moiety at the C3 Position
Yusuke Kinoshita, Michio Kunieda, Yuji Mikata, Hitoshi Tamiaki
Ritsumeikan Univ., Kusatsu, Japan; Nara Women's Univ., Nara, Japan

S-2 11:50-12:00 (Scherman)
(P27) Structural Changes of Self-Aggregates of Bacteriochlorophyll *d* Derivatives
Possessing a Triethoxysilyl Group by Its Hydrolysis
Naoya Takahashi, Hitoshi Tamiaki, Yoshitaka Saga
Kinki Univ., Higashi-Osaka, Japan; Ritsumeikan Univ., Kusatsu, Japan

Lunch: 12:00-13:00

Poster session: 13:00-14:30 (K305 and K306. Odd number poster presenters, please stand by during 13:00-13:45. Even number poster presenters, please stand by during 13:45-14:30.)

PL-2 14:30-15:10 (Chairperson: H. Maeda, *Ritsumeikan Univ.*)
Self-Assembly Approach Towards Soft Light-Harvesting Hybrids
Subi J. George, K. Venkata Rao
J. Nehru Centre Adv. Sci. Res., Bangalore, India

O-4 15:10-15:40 (Maeda)
Regiospecific Accumulation of Organic Pigments in Highly Ordered Phase Segregated Nanostructure
Sadayuki Asaoka, Masashi Aotani, Shunsuke Yamada, Gensuke Akimoto, Masatoshi Otonari, Yuuki Watanabe, Motonori Komura, Hirohisa Yoshida
Kyoto Inst. Tech., Kyoto, Japan; Tokyo Inst. Tech., Yokohama, Japan; Tokyo Metropolitan Univ., Tokyo, Japan; PRESTO, JST

O-5 15:40-16:10 (Maeda)
Chemical Melting by Electron Transfers
Ho-Chol Chang
Hokkaido Univ, Sapporo, Japan

Coffee break: 16:10-16:30

O-6 16:30-17:00 (Chairperson: S. J. George, *JNCASR*)
Development of New Organic Materials and Nanomorphological Control for Efficient Polymer Solar Cells
Yen-Ju Cheng
National Chiao-Tung Univ., Hsin-Chu, Taiwan

O-7 17:00-17:30 (George)
Development of Fullerene-Diamine Adducts for Organic Solar Cells
Tsuyoshi Akiyama
Univ. Shiga Pref., Hikone, Japan

O-8 17:30-18:00 (George)
Synthesis of *meso*-Free and Core-Modified [14]Triphyrins(2.1.1)
Daiki Kuzuhara, Yuka Sakakibara, ZhaoLi Xue, Hiroko Yamada
Nara Inst. Sci. Tech., Ikoma, Japan

Closing remarks; 18:00-18:10 Hiromitsu Maeda (*Ritsumeikan Univ.*)

Banquet: 18:30- (1F) Dining Room

Poster Session (K305 and K306)

Please mount your poster by the noon of June 23 and stand by it during the following time: odd number, 13:00-13:45; even number, 13:45-14:30.

- P1** A Synthetic Approach to Elucidate the Role of a Transcription-Translation Feedback Loop in the Circadian System of the Cyanobacterial Clock Proteins
Sayuri Abe, Kazuki Terauchi
Ritsumeikan Univ., Kusatsu, Japan
- P2** Formation of Metal-Bridged π -Space Based on Acyclic Ligands Arranged in Acute Angles
Hiromitsu Maeda, Ryo Akuta
Ritsumeikan Univ., Kusatsu, Japan
- P3** Supramolecular Assemblies Based on Anion-Responsive β -Fused Pyrrole Rings
Yuya Bando, Hiromitsu Maeda
Ritsumeikan Univ., Kusatsu, Japan
- P4** Formation of Soft Materials Based on [2+2]-Type Ion-Pair Assemblies
Hiromitsu Maeda, Kengo Chigusa
Ritsumeikan Univ., Kusatsu, Japan
- P5** Cation Modules as Building Blocks Forming Supramolecular Assemblies with Planar Receptor–Anion Complexes
Bin Dong, Hiromitsu Maeda
Ritsumeikan Univ., Kusatsu, Japan
- P6** Dissociation Equilibrium Constant of Chlorophyll *c*
Ritsuko Fujii, Naoki Senju, Masahiko Iha, Hideki Hashimoto
Osaka City Univ. Osaka, Japan; PRESTO & CREST, JST, Saitama, Japan; South Product Co. Ltd., Okinawa, Japan
- P7** Biochemical Characterization of the Redox-Sensor Protein LdpA Involved in the Cyanobacterial Circadian Clock
Yusuke Hamamatsu, Kazuki Terauchi
Ritsumeikan Univ., Kusatsu, Japan
- P8** Ultra-High-Sensitive HPLC Analysis of Chlorophyll Pigments in Green Photosynthetic Bacteria
Megumi Isaji, Tadashi Mizoguchi, Hitoshi Tamiaki
Ritsumeikan Univ., Kusatsu, Japan
- P9** Kinase Assay with Cell-Penetrative Polymers and a Fluorogenic Liposome
Tomohiro Miyatake, Yuji Isotani, Hiroto Murata, Matile Stefan
Ryukoku Univ., Otsu, Japan; Univ. Geneva, Geneva, Switzerland

- P10** Molecular Characterization of a Plant Putative Photoreceptor, LOV/LOV Protein, in the Moss *Physcomitrella Patens*
Shogo Miyazaki, Kazunori Ohsumi, Masahiro Kasahara
Ritsumeikan Univ., Kusatsu, Japan
- P11** A Non-Fluorescent/ Non-Photosensitizing Chlorophyll Metabolites of Herbivorous Protists in Aquatic Ecosystems
Yuichiro Kashiyama, Yusuke Kinoshita, Akiko Yokoyama, Hideaki Miyashita, Tadashi Mizoguchi, Hitoshi Tamiaki
Ritsumeikan Univ., Kusatsu, Japan; Univ. Tsukuba, Tsukuba, Japan; Kyoto Univ., Kyoto, Japan
- P12** Anion-Binding Behaviors of Oligopyrrole-Based Receptors
Hiromitsu Maeda, Yuto Kawasaki
Ritsumeikan Univ., Kusatsu, Japan
- P13** Fabrication and Photoelectrochemical Properties of C₆₀ Fullerene-Porphyrin Composite Particle
Kento Kimura, Tsuyoshi Akiyama, Takeo Oku
Univ. Shiga Pref., Hikone, Japan
- P14** Synthesis, Structure and Optical Property of Chlorophyll Derivative Possessing a β -Diketonated Moiety at the C3 Position
Yusuke Kinoshita, Michio Kunieda, Yuji Mikata, Hitoshi Tamiaki
Ritsumeikan Univ., Kusatsu, Japan; Nara Women's Univ., Nara, Japan
- P15** Formation of Planar Charged Species as Potential Building Subunits of Ion Materials
Hiromitsu Maeda, Makoto Kobayashi
Ritsumeikan Univ., Kusatsu, Japan
- P16** Self-Aggregation of Synthetic Zinc Chlorophyll Derivatives Possessing Different Electron Withdrawing Groups
Hitoshi Tamiaki, Masaki Kuno, Michio Kunieda
Ritsumeikan Univ., Kusatsu, Japan
- P17** Regioselective Ring-Opening of Epoxide in Synthetic Chlorophyll Derivative
Shinnosuke Machida, Yasuaki Isoda, Hitoshi Tamiaki
Ritsumeikan Univ., Kusatsu, Japan
- P18** Synthesis and Self-Aggregation of Amphiphilic Zinc 3¹-N-Methylamino-Chlorins in Organic-Aqueous Media
Tomohiro Miyatake, Yohei Masuda, Hitoshi Tamiaki
Ryukoku Univ., Otsu, Japan; Ritsumeikan Univ. Kusatsu, Japan

- P19** The Structure and Function of Glycolipids in Photosynthesis
Tadashi Mizoguchi, Jiro Harada, Taichi Yoshitomi, Hitoshi Tamiaki
Ritsumeikan Univ., Kusatsu, Japan; Kurume Univ. Kurume, Japan
- P20** Photocatalysts for Reduction of Carbon Dioxide Composed of Dinuclear Rhenium(I) Complexes
Tatsuki Morimoto, Osamu Ishitani
Tokyo Inst. Tech., Tokyo, Japan; PRESTO, JST
- P21** Cooperative Interaction of Amino and Zinc Moieties of Synthetic Chlorophyll Derivatives with Any Molecular Species
Hitoshi Tamiaki, Tomoaki Nagai, Shinnosuke Machida
Ritsumeikan Univ., Kusatsu, Japan
- P22** Formation of Metal-Bridged Assemblies Comprising Linearly Arranged Oligomers of π -Conjugated Ligands
Hiromitsu Maeda, Yuki Nishimura
Ritsumeikan Univ., Kusatsu, Japan
- P23** Dynamic Covalent Linkages Derived from Zwitterions
Harunobu Komatsu, Wataru Oi, Kazumasa Naritani, Hiromitsu Maeda
Ritsumeikan Univ., Kusatsu, Japan
- P24** Self-Assembly of Zinc Chlorins Possessing a Heterocyclic Substituent at the 3-Position
Shin-ichi Sasaki, Keisuke Mizutani, Michio Kunieda, Hitoshi Tamiaki
Nagahama Inst. Bio-Sci. Tech., Nagahama, Japan; Ritsumeikan Univ., Kusatsu, Japan
- P25** Anion-Driven Assemblies Based on Radially Arranged Receptor Oligomers
Hiromitsu Maeda, Tomohiro Shirai
Ritsumeikan Univ., Kusatsu, Japan
- P26** Supramolecular Nanostructures of Synthetic Bacteriochlorophyll-*d* Analogs Possessing Various Substituents
Sunao Shoji, Takeshi Hashishin, Hitoshi Tamiaki
Ritsumeikan Univ., Kusatsu, Japan; Osaka Univ., Osaka, Japan
- P27** Structural Changes of Self-Aggregates of Bacteriochlorophyll *d* Derivatives Possessing a Triethoxysilyl Group by Its Hydrolysis
Naoya Takahashi, Hitoshi Tamiaki, Yoshitaka Saga
Kinki Univ., Higashi-Osaka, Japan; Ritsumeikan Univ., Kusatsu, Japan
- P28** Novel Supramolecular Assembling System at Dynamic Liquid-Liquid Interface Generated by Microfluidic Device
Momoko Takayama, Munenori Numata, Hitoshi Tamiaki, Shoji Sunao
Kyoto Pref. Univ., Kyoto, Japan; Ritsumeikan Univ., Kusatsu, Japan

- P29** Synthesis and Properties of Sulfur-Containing Chlorins
Toru Oba, Natsuki Takei, Yubi Tateno, Misaki Morioka, Takanori Fukusumi,
Satoshi Ito, Hitoshi Tamiaki
Utsunomiya Univ., Utsunomiya, Japan; Ritsumeikan Univ., Kusatsu, Japan
- P30** Creation of Hierarchical Polysaccharide Strand: Supramolecular Spinning of
Nanofibers by Microfluidic Device
Yusuke Takigami, Munenori Numata, Momoko Takayama
Kyoto Pref. Univ., Kyoto, Japan
- P31** White-Color Emission from a Single Material: Photoluminescence Behavior and
Liquid Crystallinity of Calamitic Gold Complexes
Sho Tamai, Kaori Fujisawa, Osamu Tsutsumi
Ritsumeikan Univ., Kusatsu, Japan
- P32** Full-Color Emission from a Single Material: Correlation Between Emission Color
and Aggregation Structure in Liquid-Crystalline Gold Complexes
Masakazu Tamaru, Kaori Fujisawa, Osamu Tsutsumi
Ritsumeikan Univ., Kusatsu, Japan
- P33** Formation of Supramolecular Assemblies Based on π -Conjugated
Anion-Responsive Molecules
Yoshitaka Terashima, Hiromitsu Maeda
Ritsumeikan Univ., Kusatsu, Japan
- P34** Synthesis and Properties of Organic-Inorganic Hybrid Materials Containing
Giant-Ring-Shaped Polyoxomolybdate and Liquid-Crystalline Molecules
Tatsuhiro Tsumori, Ayumi Kiyohara, Osamu Tsutsumi
Ritsumeikan Univ., Kusatsu, Japan
- P35** New Synthetic Methods of Photofunctional Metal Complexes Using Coupling
Reactions
Yasuomi Yamazaki, Tatsuki Morimoto, Osamu Ishitani
Tokyo Inst. Tech., Tokyo, Japan; PRESTO, JST