

**August 21, 2017 (Monday)**

**Opening Remarks** 9:00–9:10

9:00–9:05 Mr. Masahito Inagaki (The Chairperson of the Summer School)

9:05–9:10 Prof. Masahiro Yamashita (Advisor of 10<sup>th</sup> Summer School)

Chairperson (Lecture-1 - O-2): Yuuki Nukadzuka (Ueda Lab.)

**Lecture-1** 9:10–9:55

**Thienoacenes; Molecules for Organic Semiconductors and Beyond**

Kazuo Takimiya

**O-1** 9:55–10:10

**Luminescence properties and size control of gold nanoclusters modified with  $\alpha$ -lipoic acid**

Mai Hashimoto, Takumi Nagasawa, Shunsuke Yamamoto, and Masaya Mitsuishi

**O-2 (Invited)** 10:10–10:40

**IDT-NTI Non-Fullerene Acceptors for Organic Solar Cells**

Johan Hamonnet, Masahiro Nakano, and Kazuo Takimiya

10:40–10:50 Coffee Break

Chairperson (O-3 - O-5): Shinya Gima (Terada Lab.)

**O-3** 10:50–11:05

**Concise Synthesis of Large Ring Size of Cycloparaphenylenes from Epoxide Precursor**

Naoya Miyamoto, Zhe Sun, Sota Sato, Hidetoshi Tokuyama, and Hiroyuki Isobe

**O-4 (Invited)** 11:05–11:35

**Synthetic Efforts Towards Akuammiline Indole Alkaloids**

Xiang Zhang, Ang Li

O-5 11:35–11:50

**Chiral Brønsted Acid-Catalyzed Addition of Nitrogen Nucleophile to  $\beta$ -Heteroaryl Substituted Acrylates: Efficient Synthesis of Unnatural Amino Acids Having Heterocycles**

Zhe Wang, Jun Kikuchi, Masahiro Terada

11:50–12:40 Lunch Break

12:40–13:30 Poster Session (Odd Number)

13:30–14:20 Poster Session (Even Number)

14:20–14:30 Coffee Break

Chairperson (O-6 - O-8): Hayato Anetai (Akutagawa Lab.)

O-6 14:30–14:45

**Hydrogen-Bonding Molecule Assemblies of Amphiphilic Isophthalic Acid Derivative with  $-\text{CONHC}_n\text{H}_{2n+1}$  Group**

Chao Lv, Takashi Takeda, Norihisa Hoshino and Tomoyuki Akutagawa

O-7 (Invited) 14:45–15:15

**Spectroscopic properties of new fluorescent  $\text{BF}_2$  derivatives with intramolecular charge transfer**

Liang Jiang

O-8 15:15–15:30

**Quasi-molecule formation in a cold antihydrogen-hydrogen reaction**

Takuma Yamashita, Yasushi Kino, Emiko Hiyama, Konrad Piszczatowski, and Piotr Froelich

15:30–15:40 Coffee Break

Chairperson (O-9 - O-14): Dwiky Rendra Graha Subekyi (Takahashi Lab.)

**O-9 (AMC)** 15:40–15:55

**Tuning the ionization potential of trans-heteroleptic paddlewheel-type diruthenium complexes by substitution on benzoate ligands**

K. Aliyah, Y. Sekine, W. Kosaka, K. Taniguchi, H. Miyasaka

**O-10 (AMC)** 15:55–16:10

**Investigating the effect of doping by divalent and monovalent ions on congruent lithium niobate (c-LN)**

Taqwa Aditya Atmaja, Satoshi Uda

**O-11 (AMC)** 16:10–16:25

**Unexpected heterogeneity and slow dynamics of simple poly-alanine peptides detected by single molecule fluorescence spectroscopy**

Supawich Kamonprasertsuk, Hiroyuki Oikawa, and Satoshi Takahashi

**O-12 (AMC)** 16:25–16:40

**Low-energy Electron Emissions after 2p Ionization of Argon Clusters by Synchrotron Radiation**

Yiwen Li, Daehyun You, Yuta Sakakibara, Hironobu Fukuzawa, Tsukasa Takanashi, Yuta Ito, Syuhei Yamada, Masaki Oura, Norio Saito, Kiyoshi Ueda

**O-13 (AMC)** 16:40–16:55

**Mechanistic basis of GPx7 and GPx8-driven catalytic cycles for PDI oxidation in concert with hydrogen peroxide**

Elza Firdiani Sofia, Shingo Kanemura, Masaki Okumura, Kenji Inaba

**O-14 (AMC)** 16:55–17:10

**Reconstitution kinetics of split GFPs expressed on M13 phage**

Revyann Magistra Yudhistira, Naoki Mikoshiba, Saya Nakano, Hiroyuki Oikawa, Seiji Sakamoto, Takehiko Wada and Satoshi Takahashi

17:10–17:20 Coffee Break

Chairperson (Special Lecture): Takehiro Nishimura (Oshima Lab.)

**Special Lecture** 17:20–18:20

**Sustainable Gold Catalysis in Water**

Norbert Krause

**August 22, 2017 (Tuesday)**

Chairperson (Lecture-2 - O-15): Shun Nagai (Kitahara Lab.)

**Lecture-2** 9:00–9:45

**Uniquely evolved ion transport system conferring abiotic stress tolerance in bacteria and plant cells**

Nobuyuki Uozumi

**O-15** 9:45–10:00

**Bio-based surfactant synthesis using heterogeneous resin catalyst**

Tomone Sasayama and Naomi Shibasaki-Kitakawa

10:00–10:15 Coffee Break

Chairperson (O-16 - O-19): Makoto Kuronuma (Wada Lab.)

**O-16 (Invited)** 10:15–10:45

**Metal-oxo cluster magnetic nanobeads as potential T1 contrast agents for magnetic resonance imaging**

Vidumin A. Dahanayake, Chanon Pornrungsroj, William J. Hickling, Brendan P. Kerwin, Olga Rodriguez, Chris Albanese, Edward Van Keuren and Sarah L. Stoll

**O-17** 10:45–11:00

**Supramolecular Asymmetric Photochirogenesis Mediated by Synthetic Antibody: Controlling the photoreaction by external factors**

Wijak Yospanya, Seiji Sakamoto, Yasuyuki Araki, Masaki Nishijima, Yoshihisa Inoue and Takehiko Wada

**O-18 (Invited)** 11:00–11:30

**Emission of Circularly Polarized Light by grafting of fluorophores on hybrid nanostructures**

Antoine Scalabre, Shaheen Pathan, Emilie Pouget, Dario Bassani and Reiko Oda

**O-19** 11:30–11:45

**Layer-by-Layer Deposition and Crystal Growth Control of Metal Organic Frameworks Nanoassembly on Polymer Films**

Hiroaki OHARA, Shunsuke YAMAMOTO, Huie ZHU, Hidetoshi OIKAWA and Masaya MITSUISHI

11:45–12:45 Lunch Break

Chairperson (Lecture-3 - O-21): Yuki Yokouchi (Iwamoto Lab.)

**Lecture-3** 12:45–13:30

**Spectroscopic and Photochemical Techniques for Understanding and Controlling Biological Systems**

Takakazu Nakabayashi

**O-20 (Invited)** 13:30–14:00

**Interfacial behavior of DPPC in response to soluble saccharides**

Katie Link and Robert Walker

**O-21** 14:00–14:15

**Distribution of hydrated ion clusters near the liquid-liquid interface**

Lingjian Wang, Nobuaki Kikkawa, and Akihiro Morita

14:15–14:30 Coffee Break

Chairperson (O-22 - O-24): Po-Jung Huang (Miyasaka Lab.)

**O-22** 14:30–14:45

**Reactions of a Hydrido(hydrogermylene)iron Complex with Polar Unsaturated Organic Compounds**

Tara Prasad Dhungana, Hisako Hashimoto, Hiromi Tobita

**O-23** 14:45–15:00

**Growth and Magnetic Properties of Ruddlesden-Popper Series  $\text{Sr}_{n+1}\text{V}_n\text{O}_{3n+1}$  Epitaxial Thin Films**

Shintaro Fukuda, Daichi Oka, and Tomoteru Fukumura

**O-24** 15:00–15:15

**Can radionuclides in the teeth be used for the assessment of environmental pollution?**

Kazuma Koarai, Yasushi Kino, Junpei Nishiyama, Atsushi Takahashi, Toshihiko Suzuki, Yoshinaka Shimizu, Mirei Chiba, Ken Osaka, Yusuke Urushihara, Tomokazu Fukuda, Emiko Isogai, Toshitaka Oka, Tsutomu Sekine, Manabu Fukumoto, and Hisashi Shinoda

15:15–15:30 Coffee Break

Chairperson (O-25 - O-27): Tsutomu Yamabayashi (Yamashita Lab.)

**O-25** 15:30–15:45

**Development of Organic-Based Nanostructures for Photocatalysis Under Visible Light Region**

Chanon PORNRUNGROJ, Mamiko OZAWA, Tsunenobu ONODERA, and Hidetoshi OIKAWA

**O-26** 15:45–16:00

**Fabrication of tropone derivatives-modified SN-38 nano-prodrugs and their drug efficacy**

Keita Tanita, Yoshitaka Koseki, Takaaki Kamishima and Hitoshi Kasai

**O-27 (Invited)** 16:00–16:30

**Development of small dipolar dyes with NIR solid state emission**

Maxime Rémond, Yann Bretonnière and Chantal Andraud

16:30–16:45 Coffee Break

Chairperson (O-28 - O-29): Daichi Kawauchi (Tokuyama Lab.)

**O-28** 16:45–17:00

**Development of Kornblum-DeLaMare-Type Reaction of Allylic Hydroperoxides Using Hypervalent Iodine Catalysts**

Tetsuya Kuga and Yoshiharu Iwabuchi

**O-29 (Invited)** 17:00–17:30

**A Short Synthesis of the Salvinorin KOR Chemotype: Integration of Target, Ligand, and Synthetic Strategy**

Jeremy Roach, Yusuke Sasano, Cullen Schmid, Laura Bohn, and Ryan Shenvi

17:30–17:45 Closing Remarks