

**August 18, 2016 (Thursday)**

**Opening Remarks** 9:00-9:15

9:00-9:05 Mr. Takehiro Nishimura (The Chairperson of the Summer School)

9:05-9:15 Prof. Masahiro Yamashita

Chairperson (Lecture-1, O-1): Yuta Nakane (Akutagawa Lab.)

**Lecture-1** 9:15-9:55

**Electrochemical Micro- and Nano-Analysis of Embryos and Embryonic Stem Cells**

Hitoshi Shiku

**O-1 (I)** 9:55-10:25

**Insight into Translational Regulation through Structural and Biochemical Characterisation of the Eukaryotic Translation Initiation Factor 2B**

Alisa Zyryanova, Felix Weis, Yusuke Sekine, Heather Harding, Alan Warren, David Ron

10:25-10:40 Coffee Break

Chairperson (O-2-O-5): Mariko Okada (Nakabayashi Lab.)

**O-2** 10:40-10:55

**Hydrogen-Bonding Networks and Ferroelasticity in Molecular Crystals**

Shota Uchikawa, Akira Yasuda, Norihisa Hoshino, Takashi Takeda and Tomoyuki Akutagawa

**O-3** 10:55-11:10

**Stepwise Internal Energy Control for Protonated Methanol Clusters by Using the Messenger Technique**

Takuto Shimamori and Asuka Fujii

**O-4** 11:10-11:25

**Fluorescent Properties of Perylene Embedded in Poly(St-co-MMA) Microspheres: Approach to “Intermediate State”.**

Koshiro Yoshioka, Tsunenobu Onodera, Tadashi Mitsui, Hitoshi Kasai and Hidetoshi Oikawa

**O-5** 11:25-11:40  
**Emitters Crystal Site Occupancy and Luminescence Properties of Phosphors**  
Dawei Wen

11:40-12:40 Lunch Break

12:40-13:40 Poster Session (Odd Number)

13:40-14:40 Poster Session (Even Number)

14:40-14:55 Coffee Break

Chairperson (Lecture-2, O-6-O-7): Takashi Yoshimoto (Tobita Lab.)

**Lecture-2** 14:55-15:35

**Self-Assembling Polymeric Nano-Structures Studied by Electron Tomography**  
Hiroshi Jinnai

**O-6** 15:35-15:50

**Experimental Identification for an Efficient Neutralization Pathway of a  
Dication in a Cluster**

Daehyun You, Hironobu Fukuzawa, Yuta Sakakibara, Tsukasa Takanashi, Yuta Ito, Gianluigi Grimaldi Maliyar, Koji Motomura, Kiyonobu Nagaya, Toshiyuki Nishiyama, Kazuki Asa, Yuhiro Sato, Norio Saito, Masaki Oura, Markus Schöffler, Gregor Kastirke, Uwe Hergenhausen, Vasili Stumpf, Kirill Gohkberg, Alexander I Kuleff, Lorenz S Cederbaum and Kiyoshi Ueda

**O-7 (I)** 15:50-16:20

**Synthesis of Iron-Based Nanoparticles Supported on Nanocarbons for the  
Production of Metamaterials**

Julien Mahin, Francisco Mederos-Henry, Isabelle Huynen, Sophie Hermans

16:20-16:35 Coffee Break

Chairperson (O-8-O-13): Kosuke Mano (Iwabuchi Lab.)

**O-8 (AMC)** 16:35-16:50

**Synthesis of Natural-Like Cross-Linked Duplex RNA and Study of Their  
Properties**

Hazemi Madoka Eurika, Onizuka Kazumitsu, Yamada Ken, Nagatsugi Fumi

**O-9 (AMC)** 16:50-17:05

**Pd-Catalyzed C-H/C-N Bonds Activation for Synthesis of Dibenzo[*a,c*]carbazoles**

Winalda Nugrahadi Fahmi, Hon Eong Ho, Tienan Jin

**O-10 (AMC)** 17:05-17:20

**Laser-Induced Electron Diffraction of Carbon Dioxide Molecule**

Gianluigi G. Maliyar, Yuta Ito, Misaki Okunishi, Toru Morishita, Robert R. Lucchese, and Kiyoshi Ueda

**O-11 (AMC)** 17:20-17:35

**Fabrication of Nano-Prodrugs and Control of Their Dispersion Stability through Nanoparticle-Protein Interaction**

Farsai Taemaitree, Yoshitaka Koseki, Tsunenobu Onodera, Hidetoshi Oikawa, Hiroshi Kadokura, Hitoshi Kasai

**O-12 (AMC)** 17:35-17:50

**Functional Analysis of Selenoprotein N1 (SEPN1)**

Enrikko Hazemi, Michio Inoue, Kenji Inaba

**O-13 (AMC)** 17:50-18:05

**Research on Electrical Characteristics Change of MoS<sub>2</sub>-based Field Effect Transistor by Conductive Atomic Force Microscopy**

Ran Jingyi Tadahi Kameda

18:20 - Workshop Banquet at Cafeteria

**August 19, 2016 (Friday)**

Chairperson (Lecture-3, O-14-O-15): Aruto Sugiyama (Umetsu Lab.)

**Lecture-3** 9:00-9:40

**The Novel Nano-Prodrugs Created by The Reprecipitation Method**

Hitoshi Kasai

**O-14** 9:40-9:55

**Creation of the Ischemia-Specific Oligonucleotide Therapeutics System with Intracellular Environment-Responsive Peptide Ribonucleic Acids (PRNAs):**

*Synthesis and Antisense Activities of Half-Gapmer Type Chimeric*

*PRNA-DNA-Locked Nucleic Acid (LNA) Derivatives*

Masahito Inagaki, Ryohei Uematsu, Daisuke Unabara, Yasuyuki Araki, Seiji Sakamoto, Satoru Ishibashi, Takanori Yokota and Takehiko Wada

**O-15** 9:55-10:10

**Development of Terpenoid Alkaloid-like Compound Library Based on a Humulene Skeleton**

Takehiro Nishimura, Haruhisa Kikuchi, Eunsang Kwon, Junya Kawai and Yoshiteru Oshima

10:10-10:25 Coffee Break

Chairperson (O-16-O-19): Van Hai Nguyen (Oshima Lab.)

**O-16 (I)** 10:25-10:55

**Applying Biosynthetic Logic to Kalihinol Synthesis**

Christopher A. Reiher, Sergey V. Pronin, Ryan A. Shenvi

**O-17** 10:55-11:10

**Development of High-Throughput Screening Method for Determining the Substrate and Substrate Specificity of Cytochrome P450s**

Ayano Kawamata, Takashi Moriya, Yusuke Takahashi, Yoshiharu Iwabuchi and Naoki Kanoh

**O-18 (I)** 11:10-11:40

**The Fe-Catalyzed Conversion of Olefins to Radicals: Applications to C–C and C–N Bond Construction**

Julian C. Lo

**O-19 (I)** 11:40-12:10

**Prins Cyclization of Geminalbisilyl Homoallylic Alcohol to Synthesis of Ring B of the Bryostatins and Biosynthesis Ring C of the Bryostatins**

Ji Lu

12:10-13:10 Lunch Break

Chairperson (Lecture-4, O-20-O-21): Higashi Kobayashi (Yamaguchi Lab.)

**Lecture-4** 13:10-13:50

**Diversity-Enhanced Extracts: a New Approach for Increasing Chemical Diversity of Natural Product-like Compounds**

Haruhisa Kikuchi

**O-20** 13:50-14:05

**Physiological Function of a Pancreas-Specific Protein Disulfide Isomerase Family Member Protein (PDIp)**

Takushi Fujimoto, Michiko Saito, Akio Tsuru, Masaki Matsumoto, Kenji Kohno, Kenji Inaba and Hiroshi Kadokura

**O-21** 14:05-14:20

**Electrochemical Detection of Apoptosis Based on Peptide-Bonded *p*-Methoxyaniline**

Sixiang Sun, Kumi Y. Inoue, Shusaku Shiimoto, Kosuke Ino, Hitoshi Shiku, and Tomokazu Matsue

14:20-14:35 Coffee Break

Chairperson (O-22-O-25): Kazunari Serizawa (Shoda Lab.)

**O-22** 14:35-14:50

**Studies on Photoexcited State Dynamics of Cyclodextrin Included Aromatic Compounds with High-Sensitive and High Time-Resolved Circular Dichroism (CD) Measurement System**

Makoto Kuronuma, Takehito Sato, Yasuyuki Araki, Seiji Sakamoto, Takehiko Wada

**O-23 (I)** 14:50-15:20

**Chiral Gold Nanoparticle Superstructures Directed by Silica Nanohelices:  
towards Innovative Chiro-Optical Properties**

Jie Gao, Jiaji Cheng, Emilie Pouget, Reiko Oda, Virginie Ponsinet, Philippe Barois,  
Jacques LENG

**O-24 (I)** 15:20-15:50

**Post-Translational Mutagenesis: a Chemical Synthetic Strategy for Exploration  
of Protein Side-Chain Diversity.**

Tom H. Wright, Benjamin G. Davis.

**O-25** 15:50-16:05

**A Facile Functionalization of Cellulose Nanofiber for Superhydrophobic  
Surfaces**

M.Mahbubul Bashar, Huie Zhu, Shunsuke Yamamoto, Tokuji Miyashita and  
Masaya Mitsuishi

16:05-16:20 Coffee Break

Chairperson (O-26-O-28): Shota Nagasawa (Iwabuchi Lab.)

**O-26 (I)** 16:20-16:50

**A Direct Access to 7-Aminoindoles via Iridium-Catalyzed Mild C–H Amidation  
of N-Pivaloylindoles with Organic Azides**

Youyoung Kim, Juhyeon Park, and Sukbok Chang

**O-27** 16:50-17:05

**Synthetic Study of Bioactive Flavonoids Using Lewis Base-Catalyzed  
Regioselective Cyclization of *o*-Alkynoylphenol Derivatives**

Koya Saito, Masahito Yoshida, and Takayuki Doi

**O-28** 17:05-17:20

**Enantioselective Intramolecular Cyclization of Alkynyl Esters Catalyzed by a  
Chiral Brønsted Base**

Tran Hoa Thi Quynh, Kyoko Kimura, Azusa Kondoh, Terada Masahiro

17:20-17:30 Closing Remarks