

PROGRAM

March 3 (Sat)

9:30-9:40 **Opening Remarks**

Prof. Munetaka Akita (Director of CLS, Tokyo Tech)

<Co-chair: Prof. Munetaka Akita and Prof. Hiroyuki Nakamura>

9:40-10:30 **Prof. Corey Stephenson (Univ. of Michigan, USA) (PL1)**

Redox Catalysis Strategies for Complex Molecules

10:30-11:00 **Prof. Vladimir Gevorgyan (Univ. of Illinois, Chicago, USA) (IL1)**

Development of Novel C–H Functionalization Methodologies

11:00-11:20 **Dr. Takashi Koike (CLS, Tokyo Tech) (OL1)**

Design of Photoredox Systems for Fluoromethylation of Alkenes

11:20-11:40 **Prof. Kazunari Nakajima (Univ. of Tokyo) (OL2)**

Photoredox-catalyzed Alkylation Reactions with 4-Alkyl-1,4-dihydropyridines

11:40-12:20 **Poster Session**

12:20-13:10 **Lunch**

<Co-chair: Prof. Junko Nomura Kondo and Prof. Vladimir Gevorgyan>

13:10-14:00 **Prof. Fengtao Fan (Chinese Academy of Sci., China) (PL2)**

Surface Imaging of Photogenerated Charge Separation on Single Photocatalyst

14:00-14:20 **Prof. Junko Nomura Kondo (CLS, Tokyo Tech) (OL 3)**

Amorphous Photo-catalysts for Overall Water Splitting with Mesoporous Structure

14:20-14:40 **Prof. Kiyotaka Nakajima (Hokkaido Univ.) (OL4)**
Catalytic Conversion of Biomass-derived Hydroxymethylfurfural to
Dicarboxylic Acid (FDCA) as a New Building Block for Biopolyester

14:40-14:55 **Break**

<Co-chair: Prof. Munetaka Akita and Prof. Eiji Shirakawa>

14:55-15:25 **Prof. Corinna Schindler (Univ. of Michigan, USA) (IL2)**
Iron(III)-catalyzed Carbonyl-Olefin Metathesis and Oxygen Atom Transfer

15:25-15:45 **Prof. Akiko Inagaki (Tokyo Metropolitan Univ.) (OL5)**
Syntheses and Reactivities of Multinuclear Rhodium and Iridium Complexes
Surrounded by Light-absorbing Ligands

15:45-16:05 **Prof. Tetsuro Murahashi (Tokyo Tech) (OL6)**
Chemistry of Sandwich Clusters

16:05-16:25 **Prof. Masaharu Nakamura (Kyoto Univ.) (OL7)**
Iron-catalyzed Oxidative C–H Amination of Diaryl Amines for the Synthesis of
Hole Transport Materials

16:25-16:40 **Break**

<Chair: Prof. Hiroyuki Nakamura>

16:40-17:30 **Prof. Yoshinori Yamamoto (Ritsumeikan Univ.) (PL3)**
Metal Nanoporous Catalysts for Organic Synthesis

17:30-18:00 **Break**

18:00-20:00 **Banquet**

March 4 (Sun)

<Co-chair: Prof. Fengtao Fan and Prof. Junko Nomura Kondo>

9:30-10:00 **Prof. Fumiaki Amano (Univ. of Kitakyusyu) (IL3)**

Photoelectrochemical Dehydrogenative Coupling of Methane under Blue Light Irradiation

10:00-10:20 **Prof. Kazuhiko Maeda (Tokyo Tech) (OL8)**

CO₂ Reduction and Water Oxidation Using Surface-modified Semiconductor Photocatalysts

10:20-10:40 **Prof. Takane Imaoka (CLS, Tokyo Tech) (OL9)**

Incremental Synthesis of Atom-precise Cluster Catalysts

10:40-10:55 **Break**

<Co-chair: Prof. Masaharu Nakamura and Prof. Corey Stephenson>

10:55-11:25 **Prof. Eiji Shirakawa (Kwansei Gakuin Univ.) (IL4)**

Electron-catalyzed Cross-coupling Reactions

11:25-12:15 **Prof. Hiroaki Misawa (Hokkaido Univ.) (PL4)**

Plasmon-induced Water Splitting and its Enhancement by Strong Coupling between Nanocavity and Localized Surface Plasmon Modes

12:15-12:25 **Closing Remarks**

Poster Presentations

Poster Number	Presentator	Title
P1	Shinichi Sato (CLS, Tokyo Tech)	Photocatalyst-proximity-dependent Protein Chemical Labeling
P2	Liang Wenbin (Univ. Tokyo)	Synthesis of 1,3-Azaphospholes based on Copper-Catalyzed [3+2] Cycloaddition Reactions of Phosphaalkynes
P3	Reo Kawano (CLS, Tokyo Tech)	Ruthenium Dinuclear Organometallic Molecular Wires with Acene Linkers: Synthesis and Effect of Bridging Ligand
P4	Yoshiki Nakayama (CLS, Tokyo Tech)	Photocatalytic Keto-difluoromethylation of Olefins
P5	Christopher Musgrave (CLS, Tokyo Tech)	Generation of 13.5 nm Extreme Ultraviolet Light (EUV); a Materials Perspective
P6	Rika Ochi (CLS, Tokyo Tech)	Direct Amidation of Aromatics through Generation of Amidyl Radicals by Photoredox Catalysis
P7	Yeana Bae (CLS, Tokyo Tech)	Design and Synthesis of Organometallic Molecular Wires with Long-legged Ligand for Stable Molecular Junction
P8	Megumi Okazaki (Tokyo Tech)	Effects of SrTiO ₃ Support for Photocatalytic Water Oxidation Using Co ₃ O ₄ /SrTiO ₃ under Visible Light
P9	Satomu Ishii (CLS, Tokyo Tech)	Development of Albumin-based Boron Delivery Systems for Neutron Capture Therapy
P10	Naoki Noto (CLS, Tokyo Tech)	Design of Diarylaminoanthracene-based Photoredox Catalysts for Fluoroalkylation
P11	Ahmad MohdFairus (CLS, Tokyo Tech)	An Effect of Charge Localization in Domain Interface towards the Enhancement of Photoanodic Current of Organic Heterojunction Photocatalyst
P12	Kyogo Maeda (Tokyo Tech)	Immobilized Rh Complex and Tertiary Amine on a Same Silica Surface: Characterization and Catalysis for Efficient Hydrosilylation of Olefins
P13	Akiko Inagaki (Tokyo Metropolitan Univ.)	Nonradical Visible-light-controlled Copolymerization of Styrene and Vinyl Ether by Ir-Pd Dinuclear Catalyst
P14	Yusuke Konishi (CLS, Tokyo Tech)	Sulfanyl-trifluoromethylation of Alkenes by Ir Photoredox Catalysts Bearing SF ₅ Groups
P15	Keiji Nakayama (CLS, Tokyo Tech)	Evaluation of the Electronic States of Mixed-valence Complexes with Unsymmetrical Bridging Ligands
P16	Naoto Tashima (Tokyo Tech)	Reactions of Ruthenium Complexes Having Protic Pyrazole Ligands with Propargylic Alcohols
P17	Michihiko Tsushima (CLS, Tokyo Tech)	Catalytic Labeling of Ligand-binding Proteins on Ruthenium Photocatalyst-functionalized Affinity Beads

P18	Yuma Otake (CLS, Tokyo Tech)	Rapid and Mild Synthesis of Amino Acid <i>N</i> -Carboxy Anhydrides Using Basic-to-acidic Flash Switching in a Micro-flow Reactor
P19	Yusuke Inomata (CLS, Tokyo Tech)	Size-Dependent Oxidation State and CO Oxidation Activity of Tin Oxide Clusters
P20	Xinyi Ji (CLS, Tokyo Tech)	Synthesis and Characterization of Ti-MWW with Different Ti Atom Distributions
P21	Ryota Osuga (CLS, Tokyo Tech)	Elucidation of Behavior of Proton Hopping on Zeolites at High Temperatures
P22	Sungsik Park (CLS, Tokyo Tech)	Investigation of Acidic Properties of CON-type Zeolite by FTIR
P23	Peipei Xiao (CLS, Tokyo Tech)	One-pot Synthesized Fe-containing MWW Zeolite for Hydroxylation of Methane to Methanol with H ₂ O ₂
P24	Hiroki Ueda (CLS, Tokyo Tech)	Design, Synthesis, and Biological Evaluation of α -Helix Mimetic Small Molecules Targeting Hypoxia Inducible Factor Protein-Protein Interaction
P25	Pradeepa Kumara (CLS, Tokyo Tech)	AlCl ₃ -mediated Dehydrogenative Cyclization of Diaryl-1,2-diones under Solvent-Free Conditions
P26	Somaraju Yugandar (CLS, Tokyo Tech)	Synthesis of Substituted Benzo[<i>b</i>]thiophenes via Sequential One-Pot Copper-Catalyzed Intermolecular C-S Bond formation and Palladium-Catalyzed Intramolecular Arene-Alkene Coupling of 1,3-Monothiodiketones and <i>o</i> -Bromiodoarenes
P27	Hitomi Nakamura (Tokyo Tech)	Concise Synthesis of Tethered-Diamine Ir Complexes as Effective Hydrogen Transfer Catalysts
P28	Mitsuki Yamashita (Tokyo Tech)	Synthesis and Structures of Bis-carotene Metal Chain Clusters
P29	Eiji Kudo (Tokyo Tech)	<i>E</i> → <i>Z</i> Isomerization of 1,3-Dienes Mediated by Pd(I)-Pd(I) Dinuclear Complexes
P30	Tsuyoshi Sugawa (Tokyo Tech)	Oxidative π -Addition of Polycyclic Arenes to a Pd ₃ Cluster
P31	Kyosuke Matsumoto (CLS, Tokyo Tech)	Transformable M ₂ L ₄ Double Capsule/ML ₂ Double Tube with Multiple Anthracene Panels
P32	Tomoya Nishioka (CLS, Tokyo Tech)	Linkage of V-Shaped Amphiphilic Molecules with Anthracene Panels and its Assembly Behavior
P33	Takahiro Tsutsui (CLS, Tokyo Tech)	Construction of Coordination Cages Bearing Anthracene-based Asymmetric Ligands
P34	Kazuki Miyazawa (CLS, Tokyo Tech)	Photoredox Radical C–H Oxygenation of Aromatics with Aroyloxylutidinium Salts
P35	Katsuya Shimomaki (Tokyo Tech)	Visible Light-Driven Carboxylation of Aryl Halides by Using Pd and Photoredox Dual Catalysts

P36	Yong Wang (CLS, Tokyo Tech)	Copper-exchanged Template-free SSZ-13 Zeolite as NH ₃ -SCR Catalyst
P37	Yunan Wang (CLS, Tokyo Tech)	Development of Titanium Oxide Layers Coated on Mesoporous Silica Substrate
P38	Yusuke Kunitake (CLS, Tokyo Tech)	Diversification of AEI-type Zeolite and its Catalytic Application
P39	Toshiki Nishitoba (CLS, Tokyo Tech)	Impact of Starting Materials on Al Distribution and Hydrothermal Stability of the CHA Type Aluminosilicate Zeolite
P40	Shuhei Nishigaki (Tokyo Tech)	Rhodium-Catalyzed Intermolecular Cross-cyclotrimerization of Non-activated Terminal and Internal Alkynes and its Application to Synthesis of Symmetrically Multi-functionalized Cycloparaphenylenes
P41	Tomoya Namba (Tokyo Tech)	Rhodium-Catalyzed Cycloisomerization through 1,2-Silicon/1,3-Carbon Migration Constructing Stereogenic Silicon Centers
P42	Masakazu Satoh (Tokyo Tech)	Enantioselective Synthesis of Carbo[6]helicenes by Gold-catalyzed Intramolecular Hydroarylation
P43	Takayuki Yamada (Tokyo Tech)	Coupling Reactions of <i>N</i> -Acyloxyamides with Alkynes via Formal Lossen Rearrangement Catalyzed by Modified Cp Rhodium(III) Complexes
P44	Yu Shibata (Tokyo Tech)	Synthesis and Catalytic Activity of Cyclopentadienyl-Rhodium(III) Complexes with Pendant Amides
P45	Yukimasa Aida (Tokyo Tech)	Rhodium-catalyzed Asymmetric [2+2+2] Cycloaddition of α,ω -Diyne with Acenaphthylene at Room Temperature
P46	Yusuke Nakanishi (Tokyo Tech)	Activation and Functionalization of N ₂ Using Ti/K Complexes