

4th International Symposium on Precisely Designed Catalysts with Customized Scaffolding

Kinsho Hall in Todaiji Culture Center

December 3 (Tue), 2019

13:50-13:55 Opening Remarks (Prof. Nobuharu Iwasawa)

13:55-14:35 Kuiling Ding (Chinese Academy of Sciences, China)

PL1 SpinPhox/Ir Catalyzed Enantioselective Hydrogenations and Beyond

14:35-15:05 Choon Hong Tan (Nanyang Technological University, Singapore)

IL1 Chiral Cationic Ion-Pairing Catalysis

15:05-15:35 Didier Bourissou (Université de Toulouse, CNRS, France)

IL2 Gold-Redox Catalysis: It is all a Question of Ligand Design

15:35-15:55 Shigeki Matsunaga (Hokkaido University)

JO1 Chiral Sulfonate-Enabled Achiral Cp*Rh(III) -Catalyzed Asymmetric C-H
Bond Functionalization

15:55-16:20 Coffee Break

16:20-16:50 Connie C. Lu (University of Minnesota, USA)

IL3 Innovating Bimetallic Active Sites for Small-Molecule Activation

16:50-17:20 Armido Studer (Westfälische Wilhelms University, Germany)

IL4 Boron an Emergent Element in Radical Chemistry

17:20-17:40 Shin Takemoto (Osaka Prefecture University)

JO2 Synthesis and Reactivity of Metal-Containing Ligands

17:40-18:00 Kazuaki Ishihara (Nagoya University)

JO3 Chiral Macrocyclic *O-Shaped* Catalysts for Enantioselective Addition of
Lithium Acetylides to Simple Ketones

19:00-21:00 Banquet

December 4 (Wed), 2019

9:00-9:40	Paul J. Chirik (Princeton University, USA)
PL2	Electronically-Enhanced, Site-Selective Cobalt-Catalyzed C–H Borylation
9:40-10:10	Shunsuke Chiba (Nanyang Technological University, Singapore)
IL5	Synthetic Organic Reactions by Main Group Metal Hydrides
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10:10-10:35	Coffee Break
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10:35-11:05	Gerard Roelfes (University of Groningen, The Netherlands)
IL6	Designer Enzymes Featuring Unnatural Catalytic Functionalities
11:05-11:25	Osami Shoji (Nagoya University)
JO4	Material Transformation Using Biocatalysts Assisted by External Additives
11:25-11:45	Nobutaka Fujieda (Osaka Prefecture University)
JO5	Development of Artificial Metalloenzymes with a Small Barrel Protein
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11:45-13:15	Lunch Break
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13:15-13:35	Junichiro Yamaguchi (Waseda University)
JO6	Dearomative Transformation via π -Benzyl Complex Intermediate
13:35-13:55	Yusuke Sunada (The University of Tokyo)
JO7	Catalyst Design Based on the Cooperative Functions Between Metal and Organosilyl Ligands
13:55-14:15	Yoshiaki Nakao (Kyoto University)
JO8	Cross-coupling Reactions of Nitroarenes
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14:15-14:40	Coffee Break
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14:40-15:20	Joost NH Reek (University of Amsterdam, The Netherlands)
PL3	Transition metal catalysis in confined spaces From enzyme mimics towards tools for complexity in catalysis
15:20-15:40	Takuya Hashimoto (Chiba University)
JO9	p-Block Element Catalysis for Alkene Functionalization
15:40-16:00	Naoya Kumagai (Institute of Microbial Chemistry)
JO10	Catalytic Function Dictated by the B ₃ NO ₂ Ring System
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16:00-18:00	Poster Session
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December 5 (Thu), 2019

9:00-9:40	Christophe Copéret (ETH Zürich, Switzerland)
PL4	Single-sites: Concept and Methods to Decipher Industrial Catalysts
9:40-10:10	Brad P. Carrow (Princeton University, USA)
IL7	Catalyst Polarization by Design for Selective Non-Directed C–H Functionalization
10:10-10:30	Mitsuhiro Arisawa (Osaka University)
JO11	Recyclable, Low-Leaching, and Ligand-Free Suzuki–Miyaura Coupling / Carbon-Nitrogen Bond Formation Using Iron(0) Nanoparticles
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10:30-10:50	Coffee Break
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10:50-11:20	Ian A. Tonks (University of Minnesota, USA)
IL8	Small Molecule Amination via Ti-Catalyzed Nitrene Transfer
11:20-11:40	Takashi Koike (Tokyo Institute of Technology)
JO12	New Design of Highly Reducing Organic Photoredox Catalysts
11:40-12:00	Hideki Yorimitsu (Kyoto University)
JO13	Aromatic Metamorphosis of Benzofurans
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12:00-13:20	Lunch Break
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13:20-13:40	Yoshiharu Iwabuchi (Tohoku University)
JO14	Aerobic Oxidative Kinetic Resolution of Racemic Secondary Alcohols Using Chiral AZADO/Copper Catalysis
13:40-14:00	Mamoru Tobisu (Osaka University)
JO15	Nickel-Catalyzed Decarbonylation of Carbonyl Compounds
14:00-14:20	Yoshiaki Nishibayashi (The University of Tokyo)
JO16	Molybdenum-Catalyzed Reduction of Molecular Dinitrogen into Ammonia under Ambient Conditions
14:20-14:50	Jun Okuda (RWTH Aachen University, Germany)
IL9	Artificial Metalloenzymes for Olefin Metathesis
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14:50-15:00	Closing Remarks (Prof. Kazushi Mashima)
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* Lunch is included in the registration fee.

Poster Presentation

- PA-1 **Kyoko Nozaki** (The University of Tokyo)
Selective Hydrogenolysis of Phenols to Arenes Enabled by Metal-Support Cooperation
- PA-2 **Noritaka Mizuno** (The University of Tokyo)
Methyl-Selective Oxygenation of Tertiary Amines to Formamides by Employing Copper/Nitroxyl Radical
- PA-3 **Hidetoshi Tokuyama** (Tohoku University)
Oxidative Transformations of 1,3-Dithiane Derivatives Catalyzed by Metal Phthalocyanine Complexes
- PA-4 **Seiji Mori** (Ibaraki University)
DFT Investigations of Oxidative Kinetic Resolution of Racemic Secondary Alcohols Using Chiral Ligand-Hybridized Nitroxyl Radical/Copper Cooperative Catalysis
- PA-5 **Junji Ichikawa** (University of Tsukuba)
Cyclizations in Cation-Stabilizing Hexafluoroisopropyl Alcohol, $(\text{CF}_3)_2\text{CHOH}$ (HFIP)
- PA-6 **Hideki Amii** (Gunma University)
Solvent-Promoted Catalyst-Free Fluoroalkylation of Carbonyl Compounds
- PA-7 **Yasuhiro Ohki** (Nagoya University)
 N_2 Activation by Bio-inspired Mo-Fe-S Cubes Supported by $\text{C}_5\text{Me}_4\text{R}$ Ligands
- PA-8 **Susumu Saito** (Nagoya University)
Reaction of H_2 with Krebs Cycle-Relevant Metabolites Using Single-Metal Molecular Catalysts
- PA-9 **Takuya Kurahashi** (Kyoto University)
A Ferric Boroperoxo Porphyrin for Aerobic Oxidation of Alkenes
- PA-10 **Ken-ichi Fujita** (Kyoto University)
Synthesis of 2-Methylquinoxaline Derivatives from Glycerol and Diamines Catalyzed by Iridium Complex
- PA-11 **Takashi Nishikata** (Yamaguchi University)
Stereoconvergent tertiary alkylation of beta-substituted styrenes
- PA-12 **Ryo Yazaki** (Kyushu University)
Chemoselective Catalytic α -Oxidation of Carboxylic Acids

- PA-13 **Tatsuya Uchida** (Kyushu University)
Catalytic Asymmetric Acyl Nitrene Transfer: Synthesis of Chiral *N*- Acyl Sulfides
- PA-14 **Masanari Kimura** (Nagoya University)
Copper Catalyzed Three-component Coupling Reaction of Terminal Alkyne, Organoborane, and Aldehyde
- PA-15 **Tetsuya Satoh** (Osaka City University)
Iridium-Catalyzed Dehydrogenative and Decarboxylative Coupling of Salicylic Acids with Internal Alkynes
- PA-16 **Takuya Kochi** (Keio University)
Asymmetric Functionalization of Unreactive Methylene C(sp³)-H Bonds via Chain Walking
- PA-17 **Laurean Ilies** (RIKEN)
Iron-Catalyzed Multifold C-H Coupling
- PA-18 **Nobuharu Iwasawa** (Tokyo Institute of Technology)
Selective Hydrosilylation of Nitriles to Imines Catalyzed by Rhodium Complexes Having Pincer-type Group 13 Metallylene Ligands
- PA-19 **Masaya Sawamura** (Hokkaido University)
Iridium-Catalyzed Alkene-Selective Transfer Hydrogenation with 1,4-Dioxane as Hydrogen Donor
- PA-20 **Sensuke Ogoshi** (Osaka University)
Nickel-catalyzed Synthesis of Benzoxasiloles: Ligand-Controlled Switching from Inter- to Intramolecular Aryl-Transfer Process
- PA-21 **Kazuhiro Yoshida** (Chiba University)
Versatile and Enantioselective Preparation of Planar-Chiral Metallocene-Fused 4-Dialkylaminopyridines and Their Application in Asymmetric Organocatalysis
- PA-22 **Takayoshi Arai** (Chiba University)
Chiral Dinuclear Palladium Complexes for Catalytic Asymmetric Mannich reaction
- PA-23 **Kounosuke Oisaki** (The University of Tokyo)
A Bond-Weakening Borinate Complex for Improved Scope of Photoredox α -C-H Alkylation of Alcohols
- PA-24 **Fuyuhiko Inagaki** (Kobe Gakuin University)
Construction of 2,2-Dimethyloxepane Frameworks by Using Coinage Metal Catalyzed *7-Endo-Trig* Cyclization of Ene-Dios

- PA-25 **Fumitoshi Shibahara** (Gifu University)
Synthesis of 5-(Arylsulfonyl)imidazo[1,5-*a*]pyridine-3-ylidene and Its Catalytic Applications
- PA-26 **Yoshihiro Miyake** (Nagoya University)
Direct C–H Fluorination of Alkanes with Manganese Diazaporphyrin Complexes
- PA-27 **Masato Kitamura** (Nagoya University)
Catalytic Asymmetric Dehydrative Allylation of Protic Nucleophiles Using a Monocationic CpRu Complex
- PA-28 **Ken Kamikawa** (Osaka Prefecture University)
Catalytic Asymmetric Synthesis of Planer-Chiral Ferrocenyl Complexes via Rh-Catalyzed Asymmetric Ring-Opening Reaction
- PA-29 **Yoshihiro Sohtome** (RIKEN)
Cross-Coupling of Persistent Tertiary Carbon-Centered Radicals with Azo Compounds
- PA-30 **Yumiko Nakajima** (National Institute of Advanced Industrial Science and Technology)
Catalytic Transformation of Chlorosilanes via Si–Cl Bond Cleavage
- PA-31 **Takashi Hayashi** (Osaka University)
A Proton Transfer Pathway for an H₂-Evolving Molecular Diiron Catalyst Embedded within a Protein Scaffold
- PA-32 **Jun-ya Hasegawa** (Hokkaido University)
Mechanistic Investigation for the Copolymerization of CO₂ and Cyclohexene Oxide Catalyzed by Novel Bifunctional Al(III) Porphyrin Catalyst
- PA-33 **Hiroyasu Yamaguchi** (Osaka University)
Creation of Supramolecular Catalysts with Monoclonal Antibodies as the Second Coordination Sphere
- PA-34 **Yoshio Hisaeda** (Kyushu University)
Construction of Bioinspired Catalytic System with Specific Reaction Environment
- PA-35 **Yutaka Hitomi** (Doshisha University)
Development of Artificial Nonheme Iron-dependent Peroxidase through Covalent Conjugation of Tetradentate Ligand with Protein
- PA-36 **Kazushi Mashima** (Osaka University)
Protic Compounds Mediated Telomerization of Alternating Copolymerization of CO₂ and Epoxides by Macrocyclic CeZn₃ Catalysts

- PA-37 **Michinori Suginome** (Kyoto University)
Copper–Bipyridine-Catalyzed Stereoinvertive Intramolecular
C–C Bond Formation of α -(2-Bromobenzamido)benzylboronic Esters
- PA-38 **Ken Motokura** (Tokyo Institute of Technology)
Accelerating Effect of co-Immobilized Organic Functionality on Rh Complex-
Catalyzed Heterogeneous Hydrosilylation
- PA-39 **Masahiko Inouye** (University of Toyama)
Development of Pyridine–Acetylene–Aniline Molecules having 4-
Dimethylaminopyridine Units as Acylation Catalysts for Saccharides
- PA-40 **Tetsuaki Fujihara** (Kyoto University)
Remarkable Steric Effect of Carboxylate Ligand: Pd-Catalyzed Intramolecular
C–H Bond Arylation Reactions
- PA-41 **Keisuke Asano** (Kyoto University)
Organocatalytic Enantio- and Diastereoselective Construction of *syn*-1,3-Diol
Motifs via Dynamic Kinetic Resolution of In Situ Generated Chiral
Cyanohydrins
- PA-42 **Kenji Hara** (Tokyo University of Technology)
Utilization of High-density Molecular Monolayers Aiming for Synergistic
Unique Catalysis
- PA-43 **Norie Momiyama** (Institute for Molecular Science, SOKENDAI)
Development of Organocatalyst based on the Halogen Bond

- PB-1 **Falk William Seidel** (The University of Tokyo) *et al.*
A novel rigid bidentate B/P ligand: Synthesis and Coordination Chemistry
- PB-2 **Satoshi Takayama** (The University of Tokyo) *et al.*
Hybrid relay catalysis using Pd/C and *p*-toluenesulfonic acid for synthesizing unsymmetrically substituted triaryl amines *via* acceptorless dehydrogenative aromatization
- PB-3 **Meng Fanqiang** (The University of Tokyo) *et al.*
Catalytic Reduction of Dinitrogen to Ammonia and N(SiMe₃)₃ Using Rhenium Complexes
- PB-4 **Ikuya Fujii** (Kyoto University) *et al.*
Magnesiation of Aryl Fluorides Catalyzed by Rhodium–Aluminum Bimetallic Complexes
- PB-5 **Kosuke Okada** (Tohoku University) *et al.*
Total Synthesis of (–)-Deoxoapodine
- PB-6 **Ryota Sasaki** (Tohoku University) *et al.*
Nitroxyl Radical/Copper-Catalyzed Chemoselective Aerobic Oxidation of Divalent Sulfur-Containing Alcohols and Vicinal Amino Alcohols
- PB-7 **Ryoma Fujii** (Ibaraki University) *et al.*
Theoretical Investigations of Ir-Catalyzed Enantioselective Carbene C(sp³)-H Insertion of ethylbenzene
- PB-8 **Kosei Hachinohe** (University of Tsukuba) *et al.*
Synthesis of Difluoroalkenes and Fluorothiophenes via Difluorinated Thiiranes
- PB-9 **Sichen Yue** (Gunma University) *et al.*
Copper-Catalyzed Trifluoromethylation of Haloalkenes
- PB-10 **Kodai Ishihara** (Nagoya University) *et al.*
Hydride-Bridged Dinuclear Mo-Fe complexes: Synthesis and Catalytic N₂ Silylation
- PB-11 **Shota Yoshioka** (Nagoya University) *et al.*
Development of Highly Active Ruthenium Catalysts for Selective Hydrogenation of Carboxylic Acids
- PB-12 **Toshifumi Takahashi** (Kyoto University) *et al.*
Nickel-Catalyzed Cycloaddition of Benzothiophenes and Alkynes
- PB-13 **Hayate Saito** (Kyoto University) *et al.*
Copper-Catalyzed Ring-Opening Silylation of Benzofurans with Disilane

- PB-14 **Jaeyoung Jeong** (Kyoto university) *et al.*
Iridium-Catalyzed Rapid Conversion of 2,5-Dimethylpiperazine into 2,5-Dimethylpyrazine Accompanying the Evolution of Hydrogen
- PB-15 **Shun Sakurai** (Osaka University) *et al.*
Iridium-Mediated Arylation of Quinoline via the Cleavage of Carbon-Carbon and Carbon-Nitrogen Bonds of N-Heterocyclic Carbenes
- PB-16 **Tukasa Inishi** (Yamaguchi University) *et al.*
Iron-catalyzed Michael additions of indoles
- PB-17 **Yohei Matsumoto** (Kyushu University) *et al.*
Radical Cross-Coupling of Amino Acid Schiff Bases for Highly Congested Unnatural α -Amino Acid Synthesis
- PB-18 **Daiki Doiuchi** (Kyushu University) *et al.*
Ruthenium-Catalyzed Regio-Selective C–H Oxidation
- PB-19 **Junya Nakao** (Nagasaki University) *et al.*
Palladium Catalyzed Coupling Reaction of 3-Hydroxy-4-pentenoic Acid with Aldehyde via C–C Bond Cleavage Reaction
- PB-20 **Risa Yoshimoto** (Osaka City University) *et al.*
Rhodium(III)-Catalyzed Functionalization of α -Trifluoromethylacrylic Acid
- PB-21 **Shota Kanno** (Keio University) *et al.*
Selective Long-Distance Isomerization of Terminal Alkenes via Nondissociative Chain Walking
- PB-22 **Miki Kurosawa** (Waseda University) *et al.*
Pd-Catalyzed Deoxygenative C–P Bond Formation of Aromatic Esters with Organophosphorus Compounds
- PB-23 **Yuya Ota** (Institute of Microbial Chemistry) *et al.*
TriQuinoline and Its O-Embedded Congeners
- PB-24 **Ryota Nakaya** (Tokyo Institute of Technology) *et al.*
C–H Bond Transformation of Benzene Mediated by PSiP-Pincer Platinum Complexes and a Silver Salt
- PB-25 **Deliang Zhang** (Hokkaido University) *et al.*
Acceptorless Dehydrogenation of N-Heterocycles with a Polystyrene-Cross-Linking Bisphosphine-Ir Catalyst
- PB-26 **Eiki Tomita** (Hokkaido University) *et al.*
Synthesis of Cp^AIr(III) Complexes and Their Application

- PB-27 **Keita Ashida** (Osaka University) *et al.*
Enantioselective Synthesis of Chiral γ -Lactams by Ni(0)-Catalyzed Asymmetric Carbonylative Cycloaddition
- PB-28 **Risa Yasue** (Chiba University) *et al.*
Synthesis and Application of Planar Chiral Cyclic (Amino)(ferrocenyl)carbene Ligands Bearing FeCp*
- PB-29 **Takumi Suzuki** (Chiba University) *et al.*
Electrophilic Activation of 2-Alkenylindoles through C-I... π Halogen Bond for [4+2] Cycloaddition
- PB-30 **Kentaro Sakai** (The University of Tokyo) *et al.*
Identification of Bond-Weakening Spirosilane Catalyst for Photoredox α -C-H Alkylation of Alcohols
- PB-31 **Yoshinao Kobayashi** (The University of Tokyo) *et al.*
Four Coordinated Iron Disilyl- and Digermyl Complexes: Effective Catalysts for Reduction Reactions
- PB-32 **Seiya Tanaka** (Tokyo Institute of Technology) *et al.*
Atom-economical Sulfony-fluoroalkylation of Unsaturated C-C Bonds by Photoredox Catalysis
- PB-33 **Hiroto Tanishima** (Kobe Gakuin University) *et al.*
Synthesis of (Au \rightarrow B)⁸-type gold complex and its catalytic reaction
- PB-34 **Yoshifuru Shibata** (Gifu University) *et al.*
Substituent Effect on 1,5-Diarylimidazo[1,5-*a*]pyridine-3-ylidene-Pd Complexes and Their Catalytic Applications
- PB-35 **Tsubasa Nishimura** (Nagoya University) *et al.*
Selective Hydroxylation of Alkanes Catalyzed by Transition Metal Pyridinophane Complexes
- PB-36 **Thien Phuc Le** (Nagoya University) *et al.*
Water, an Essential Element for a Zn^{II}-Catalyzed Asymmetric Quinone Diels-Alder Reaction: Multi-Selective Construction of Highly Functionalized *cis*-Decalines
- PB-37 **Hiroaki Fujita** (Osaka Prefecture University) *et al.*
Ru₂ complex / SnO Dual Catalytic System for Conversion of Formic Acid to Methanol
- PB-38 **Tomoka Hosokawa** (Osaka Prefecture University) *et al.*
Synthesis, Structures, and Theoretical Studies of Hexapole Helicene Bearing Six [5]Helicene Substructures

- PB-39 **Nai-Yuan Jheng** (National Institute of Advanced Industrial Science and Technology) *et al.*
Synthesis and Properties of Co(I) complexes bearing a tetradentate-PNNP ligand: A New Mode of Metal-ligand Cooperation
- PB-40 **Shunsuke Kato** (Osaka University) *et al.*
Directed Evolution of a Rh(III)-Linked Biohybrid Catalyst for Isoquinoline Synthesis via C–H Bond Activation
- PB-41 **Liming Zhao** (Hokkaido University) *et al.*
Controlled intersystem crossing in iron porphycene substituted myoglobin for cyclopropanation reaction: a theoretical study
- PB-42 **Kai Yonemura** (Nagoya University) *et al.*
Regulation of the Reaction Site of Cytochrome P450BM3 with Peptide Derivatives
- PB-43 **Miki Shiihara** (Osaka University) *et al.*
Utilization of Monoclonal Antibodies as an Asymmetric Reaction Field to Synthesize Spiro Compounds
- PB-44 **Yuki Anai** (Kyushu University) *et al.*
Development of Visible Light Responsive Vitamin B₁₂ Photocatalytic System for Green Molecular Transformation
- PB-45 **Miho Yuasa** (Osaka Prefecture University) *et al.*
Development of Artificial Metalloenzyme for Stereoselective Michael Addition Reaction
- PB-46 **Keisuke Amanai** (Doshisha University) *et al.*
Alkene Epoxidation with Electrochemically Generated Percarbonate Catalyzed by Manganese Complex
- PB-47 **Kohei Nishi** (Osaka University) *et al.*
Chromium-Catalyzed Cyclopropanation of Alkenes with Bromoform Using 2,3,5,6-Tetramethyl-1,4-bis(trimethylsilyl)-1,4-dihydropyrazine
- PB-48 **Daiki Kato** (Osaka University) *et al.*
Alkoxide-bridged Dinuclear Manganese Complexes as Catalysts for Esterification of Simple Tertiary *N,N*-Dialkylamides
- PB-49 **Nagataka Tsujimoto** (Osaka University) *et al.*
Asymmetric Hydrogenation of Simple Olefins Catalyzed by A Mononuclear Monohydride-dichloro Rhodium(III) Complex bearing (*S*)-DTBM-SEGPHOS
- PB-50 **Takuya Mochizuki** (Nagoya University) *et al.*
Extremely Active Chiral Dilithium(I) Binaphthyldisulfonate Catalysts for Enantio- and Chemoselective Strecker-Type Reactions

- PB-51 **Naoaki Kamiya** (Kyoto University) *et al.*
Asymmetric Suzuki–Miyaura Cross-coupling Reactions in Pure Water with Water-Soluble Helical Polymer Ligands
- PB-52 **Yuto Shimazaki** (Kyoto University) *et al.*
Indanol-Based Chiral Organoiodine Catalysts for Enantioselective Hydrative Dearomatization
- PB-53 **Chihiro Nakagawa** (Tokyo Institute of Technology) *et al.*
Homogeneous and Heterogeneous Organocatalysts for Carbon Dioxide Reduction with Silicon Based Reducing Agents
- PB-54 **Tomoya Hayashi** (University of Toyama) *et al.*
Developments of New Hydrogen-bond-donating Catalysts Consisting of Two Phenol Rings Liked by a Benzene Ring
- PB-55 **Ryo Hamaguchi** (Kyoto University) *et al.*
Steric Effect of Carboxylate Ligands on Pd-Catalyzed Intermolecular C–H Bond Arylation Reactions
- PB-56 **Ryuichi Murata** (Kyoto University) *et al.*
Desymmetrization of *gem*-Diols via Enantio- and Diastereoselective Cycloetherification of Using Bifunctional Organocatalysts
- PB-57 **Makito Yamada** (Osaka University) *et al.*
Ligand-Free Suzuki-Miyaura Coupling of Aryl Chloride Using a Continuous Irradiation Type Microwave and Metal Nanoparticle Catalyst: Effect of a Coexisting Metal
- PB-58 **Hiroshi Mizukoshi** (Tokyo University of Technology) *et al.*
Immobilization of TiO₂ Nanosheet on Gold Surface via Organic Monolayer
- PB-59 **Chanantida Jongwohan** (Institute for Molecular Science, SOKENDAI) *et al.*
Brønsted Acid-initiated Formal [1,3]-Rearrangement Reaction of β -Substituted Ene-Aldimines