

Plenary Lectures (Room A)

Dec. 4, 9:20 AM - 10:10 AM

[PL1] Catalytic Activation and Functionalization of Hydrocarbons

*Motomu Kanai¹ (1. The University of Tokyo (Japan))

Dec. 4, 10:10 AM - 11:00 AM

[PL2] Single-Atom Catalyst: A Bridge between Heterogeneous Catalysis and Homogeneous Catalysis

*Tao Zhang¹ (1. Dalian Institute of Chemical Physics, Chinese Academy of Sciences (China))

Dec. 5, 9:00 AM - 9:50 AM

[PL3] Dinitrogen Activation and Functionalization Directly Transforming N₂ into N-Containing Organic Compounds

*Zhenfeng Xi¹ (1. Peking University (China))

Dec. 6, 9:00 AM - 9:50 AM

[PL4] Catalysis for a more sustainable chemistry

*Rhett Kempe¹ (1. University Bayreuth (Germany))

Dec. 7, 8:50 AM - 9:40 AM

[PL5] Molecular Vanadium Catalysts for Efficient Olefin Insertion, Metathesis

*Kotohiro Nomura¹ (1. Tokyo Metropolitan University (Japan))

Keynote Lectures

Dec. 4, 11:20 AM - 11:55 AM Room A

[KL1] Cyclic and Acyclic Boron Molecules featuring Unsaturated B–B bonds

*Rei Kinjo¹ (1. Nanyang Technological University (Singapore))

Dec. 4, 1:15 PM - 1:50 PM Room A

[KL2] Production of biomass-derived C₄ chemicals by C–O hydrogenolysis and deoxydehydration of erythritol

*Keiichi Tomishige¹ (1. Tohoku University (Japan))

Dec. 5, 10:05 AM - 10:40 AM Room A

[KL3] Low Temperature Catalytic Water Activation and Hydrogen Production

*Ding Ma¹ (1. Peking University (China))

Dec. 5, 10:05 AM - 10:40 AM Room B

[KL4] Asymmetric Multicomponent Copper Catalysis for Organoboron Synthesis: Asymmetric Conjugate Addition of in-situ Derived Organocopper Nucleophiles

*Jaesook Yun¹ (1. Sungkyunkwan University (Korea))

Dec. 5, 1:15 PM - 1:50 PM Room A

[KL5] Late Transitionmetal Catalysts for Polymer Synthesis and Degradation

*Kyoko Nozaki¹ (1. The University of Tokyo (Japan))

Dec. 5, 1:15 PM - 1:50 PM Room B

[KL6] Manganese Organometallic Catalysis

*Congyang Wang¹ (1. Institute of Chemistry, Chinese Academy of Sciences (China))

Dec. 6, 10:05 AM - 10:40 AM Room A

[KL7] Radical Catalysis

*Hirohisa Ohmiya¹ (1. Kyoto University (Japan))

Dec. 6, 10:05 AM - 10:40 AM Room B

[KL8] Vanadyl Complex-Catalyzed Radical Type Cross Coupling Reactions

*Chien-Tien Chen¹, Seiji Mori (1. National Tsing Hua University (Taiwan))

Dec. 6, 1:15 PM - 1:50 PM Room A

[KL9] Enzymatic polymerization of Biopolymer for creating circular bioeconomy

*Shunsuke Sato¹ (1. KANEKA CORPORATION (Japan))

Dec. 6, 1:15 PM - 1:50 PM Room B

[KL10] Fe(III) Photocatalysis in Radical Cation Cycloaddition Reaction

*Eun Joo Kang¹ (1. Kyung Hee University (Korea))

Dec. 7, 9:55 AM - 10:30 AM Room A

[KL11] Novel Ethylene-based Polymers as Sustainable Elastomers

*Shojiro Kaita¹ (1. Bridgestone Corporation (Japan))

Dec. 7, 9:55 AM - 10:30 AM Room B

[KL12] Recent Progress on Catalytic Asymmetric Dearomatization Reactions

*Shuli You¹ (1. Shanghai Institute of Organic Chemistry (China))

Invited Lectures

Dec. 4, 1:15 PM - 2:55 PM Room B

[IL1] Catalytic Transformations of Reactive Metallic Dipoles

*Liang-Qiu Lu, Wen-Jing Xiao (Central China Normal University (China))

[IL2] Synthesis and reactivity of functionalized tert-butyl peroxides

*Zhiping Li (Renmin University of China (China))

[IL3] Computational, data science, and spectroscopic studies for design of heterogeneous catalysis

*Kenichi Shimizu (Hokkaido University (Japan))

[IL4] Materials informatics study of Molecular Catalysis of Cyclic Olefin Copolymer

*Yu Kaneko¹, Mitsuru Ohno (Daicel Corporation (Japan))

Dec 4, 1:15 PM - 2:55 PM Room C

[IL5] Selective oxidation for the control syntheses using hydrogen peroxide through liquid flow reaction

*Yoshihiro Kon (AIST (Japan))

[IL6] Liquid Phase Continuous-flow Nitration Reaction of Aromatic Compounds on Mixed Metal Oxide Catalysts

*Haruro Ishitani, Masahiro Sasaya, Shu Kobayashi

(The University of Tokyo (Japan))

[IL7] Toward On-Demand Synthesis of Organic Small Molecules

*Jie Wu (National University of Singapore (Singapore))

[IL8] Reductive dimetalation of alkynes

*Hideki Yorimitsu, Takashi Kurogi (Kyoto University (Japan))

Dec 4, 1:50 PM - 3:05 PM Room A

[IL9] Studies on Biomass Resources via Cleavage of Inert Chemical Bonds

*Yang Li (Xi'an Jiaotong University (China))

[IL10] Carbon Dioxide Incorporation Reactions for Organic Synthesis

*Tohru Yamada (Keio University (Japan))

[IL11] Catalytic CO₂ Activation for Non-Reductive and Reductive Conversion

*Wen-Yueh Yu, Monica Mengdie Lin, Justin Tay (National Taiwan University (Taiwan))

Dec 4, 3:25 PM - 4:40 PM Room A

[IL12] Recent Progress on Light-Induced Synthesis of Carboxylic Acids Using CO₂

Bo Zhang, Zhengning Fan, Yaping Yi, *Chanjuan Xi (Tsinghua University (China))

[IL13] Hydrogenation of CO₂ over Mn-substituted SrTiO₃ (SrTi_{1-x}Mn_xO₃) Based on Reverse Mars-van Krevelen Mechanism

*Kentarō Teramura^{1,2,3}, Hiroki Matsuo¹, Minoru Kobayashi¹, Shimpei Naniwa¹, Shoji Iguchi¹, Tsunehiro Tanaka^{1,2} (1. Kyoto Univ., 2. Elements Strategy Initiative for Catalysts & Batteries (ESICB), Kyoto Univ. , 3. Fukui Institute for Fundamental Chemistry, Kyoto Univ. (Japan))

[IL14] Green Photocatalytic Derived by Polydopamine-Coated Bacterial Cellulose/g-C₃N₄

Piti Charurungsipong¹, Bhumini Thanardna^{1,2}, *Hathaikarn Manuspiya^{1,2} (1. The Petroleum and Petrochemical Collage, Chulalongkorn University, 2.

Center of Excellence in Petrochemical and Materials Technology (Thailand))

Dec 4, 3:25 PM - 4:40 PM Room B

[IL15] Chiral Phosphoric Acid–Palladium(II) Complex Catalyzed Asymmetric Desymmetrization of Biaryl Compounds by C(sp³)–H Activation

*Takahiko Akiyama (Gakushuin University (Japan))

[IL16] Palladium-Catalyzed Aminoalkylative Cyclization

*Hanmin Huang (University of Science and Technology of China (China))

[IL17] “Marriage” of C–H activation and chain-walking: Ir-catalyzed distal hydroarylation with linear/branch selectivity

*Takanori Shibata, King Hung Nige Tang, Ryo Tokutake, Kanako Uchida, Kazuki Nishihara, Mamoru Ito (Waseda University (Japan))

Dec 5, 10:40 AM - 11:55 AM Room A

[IL18] Biogas Upgrading Via Dry Reforming Over Ni-Phyllosilicate Structured Catalysts

*Vissanu Meeyoo, Nopadol Prachan (Mahanakorn University of Technology (Thailand))

[IL19] Simultaneous Production of Dicarboxylic Acids and Hydrogen from Aqueous Solution of Diols Catalyzed by an Iridium Complex

*Ken-ichi Fujita (Kyoto University (Japan))

[IL20] Supported Gold Nanoparticles as Single-Electron Transfer Catalysts for Cross-Coupling Reactions

*Hiroki Miura, Masafumi Doi, Yuki Yasui, Keade Ameyama, Tetsuya Shishido (Tokyo Metropolitan University (Japan))

Dec 5, 10:40 AM - 11:55 AM Room B

[IL21] Synthesis of Benzo[b]furans and Indoles by Nickel(0)-Catalyzed Migratory Cycloisomerization

*Yoshihiro Sato (Hokkaido University (Japan))

[IL22] Development and Application of Metal-

Catalyzed Cycloadditions

*Zhi-Xiang Yu (Peking University (China))

[IL23] Stereo-, Regio-, and Chemo-selective Reactions Catalyzed by Mesoporous Silica-supported Oxovanadium

*Shuji Akai¹, Kyohei Kanomata (Osaka University (Japan))

Dec 5, 10:40 AM - 11:55 AM Room C

[IL24] P[^]N Ligands in Ni-Catalyzed Reactions of Alkynes

*Eun Jin Cho (Chung-Ang University (Korea))

[IL25] Development of titania-supported iridium catalysts for the synthesis of N-containing chemical

*Kenji Wada (Kagawa University (Japan))

[IL26] Colloidal DMF-Stabilized Single-Nano-Sized Metal Nanoparticles as Catalyst for Organic Transformations

*Yasushi Obora (Kansai University (Japan))

Dec 5, 1:15 PM - 2:55 PM Room C

[IL27] Catalyst preparation using structurally-defined surface of molecular array

*Kenji Hara (Tokyo University of Technology (Japan))

[IL28] Catalytic transformations of unsaturated systems to access fine chemicals and synthetic electrolyte additives

*Sung You Hong (Ulsan National Institute of Science and Technology (UNIST) (Korea))

[IL29] Long-range metal-ligand cooperation behavior of phenanthroline-based PNNP-cobalt(I) complex and its application in catalysis

*Yumiko Nakajima¹, Yoshihiro Shimoyama², Heng Zhang² (1. Tokyo Institute of Technology (Japan), 2. National Institute of Advanced Industrial Science and Technology (AIST) (Japan))

[IL30] Catalyst immobilized polymer monolith for continuous flow synthesis

*Yoshiko Miura, Hikaru Matsumoto, Masanori Nagao (Kyushu University (Japan))

Dec 5, 1:50 PM - 3:05 PM Room A

[IL31] Revolutionizing Organic Synthesis: Unlocking Efficiency with Mechanochemical Reactions

*Hajime Ito Ito (Hokkaido University (Japan))

[IL32] Hydrogenation of the C=C bonds in unsaturated compounds by Ni-Ir alloy catalysts

*Masazumi Tamura (Osaka Metropolitan University)

[IL33] La(III)-Catalyzed Depolymerization of Polyesters and Polycarbonates

*Masafumi Hirano (Tokyo University of Agriculture and Technology (Japan))

Dec 5, 1:50 PM - 3:05 PM Room B

[IL34] Carbenes with its Elusive Bonding Description and Broad Implication Complementary to NHC-Carbenes

*Tiow-Gan Ong^{1,2} (1. Academia Sinica (Taiwan), 2. National Taiwan University (Taiwan))

[IL35] Development of a platinum group metal-catalyzed deuterium labeling method using hydrogen as an activator

*Hironao Sajiki (Gifu Pharmaceutical University (Japan))

[IL36] Oxidative dehydrogenation reactions by gold nanoparticle catalysis

*Kazuya Yamaguchi, Takafumi Yatabe (The University of Tokyo (Japan))

Dec 5, 3:25 PM - 4:40 PM Room A

[IL37] Strategies for Improving the Catalytic Activity of Aluminum Catalysts in Ring-Opening Polymerization of ϵ -Caprolactone

*Hsuan-Ying Chen (Kaohsiung Medical University (Taiwan))

[IL38] Continuous Flow Process for the Preparation of Polyethylene Derivatives

*Wei You^{1,2} (1. Institute of Chemistry, Chinese Academy of Sciences (China), 2. University of Chinese Academy of Sciences (China))

[IL39] Designed Polymer Synthesis Using Halogen Bonding

*Atsushi Goto (Nanyang Technological University (Singapore))

Dec 5, 3:25 PM - 4:40 PM Room B

[IL40] Heterogeneous hydroboration of alkynes using copper nitride nanocube catalyst

*Tomoo Mizugaki (Osaka University (Japan))

[IL41] Cobalt-Catalyzed Selective Multi-borylation of Unsaturated Hydrocarbons

*Shaoyong Ge (National University of Singapore (Singapore))

[IL42] Copper-Catalyzed Borylation of Dienes

*Tetsuaki Fujihara (Kyoto University (Japan))

Dec 6, 10:40 AM - 11:55 AM Room A

[IL43] Carbocatalysts in organic synthesis: the role of radicals

*Yuta Nishina (Okayama University (Japan))

[IL44] Catalytic Addition of Acylsilanes and Acyl Fluorides

*Mamoru Tobisu (Osaka University (Japan))

[IL45] Nanocatalysts for a low-carbon society: upgrading chemicals by hydrogenation

*Miho Yamauchi^{1,2} (1. Kyushu University (Japan), 2. Tohoku University (Japan))

Dec 6, 10:40 AM - 11:55 AM Room B

[IL46] Brønsted Base Catalysis for Radical-Mediated Asymmetric Reactions

*Takashi Ooi (Institute of Transformative Bio-Molecules (ITbM), Nagoya University (Japan))

[IL47] Enantioselective phase-transfer catalytic aza-Michael addition

*Hyeung-geun Park, Jaeyong Lee (Seoul National University (Korea))

[IL48] Enantioselective Catalysis by Higher Order Organosuperbase

*Masahiro Terada (Tohoku University (Japan))

Dec 6, 10:40 AM - 11:55 AM Room C

[IL49] Nano-structure control and catalytic application of metal oxide nanoparticles

*Keigo Kamata (Tokyo Institute of Technology (Japan))

[IL50] Zirconia-supported palladium catalysts for alkoxy-carbonylation of alkenes

Nao Shirakura¹, Kazuki Haruguchi¹, Haruno Murayama¹, Eiji Yamamoto¹, Akina Yoshizawa¹, Hiroto Sakomizu¹, Tetsuo Honma², *Makoto Tokunaga¹ (1. Kyushu University (Japan), 2. Japan Synchrotron Radiation Research Institute (Japan))

Dec 6, 1:15 PM - 2:05 PM Room C

[IL51] Syntheses of Complex Securinega Alkaloids and Beyond

*Sunkyoo Han (Korea Advanced Institute of Science and Technology (Korea))

[IL52] Advanced Snieckus-Fries Rearrangement in Natural Product Synthesis: Spotlight on Organosilicon Chemistry

*Rong-Jie Chein (Academia Sinica (Taiwan) (Taiwan))

Dec 6, 1:50 PM - 3:05 PM Room A

[IL53] Multimetal-Catalyzed One-Stop Chain Transfer Oligomerization of Ethylene/Propylene for Synthetic Lubricants

*Fuyuki Aida¹, Hikaru Takaya^{2,3} (1. ENEOS Corporation (Japan), 2. Teikyo University of Science (Japan), 3. Institute for Molecular Science (Japan))

[IL54] Catalysts for Forest Chemical Industry

*Masaharu Nakamura (Kyoto University (Japan))

[IL55] High selective production of FDCA with liquid phase oxidation 5-HMF

*Chanatip Samart¹, Suwadee Kongparakul¹, Thi Tuong Vi Tran², Guoqing Guan³ (1. Thammasat University (Thailand), 2. Nguyen Tat Thanh University (Viet Nam), 3. Hirosaki University (Japan))

Dec 6, 1:50 PM - 3:05 PM Room B

[IL56] Photocatalyzed Carbon-Carbon Bond Cleavage for Late-Stage Functionalizations and Upcycling of Non-Biodegradable Plastic

Chenfei Li, Adisak Thanetchaiyakup, Xin Ying Kong, Xin Zhao, *Han Sen Soo (1.Nanyang Technological University, Singapore (Singapore))

[IL57] Synthesis and characterization of hierarchical Mg-MOF-74@ZIF-8 solid adsorbent for CO₂ capture

*Boonyarach Kitiyanan^{1,2}, Bhumini Than-ardna^{1,2}, Masahiro Matsumoto³, Vissanu Meeyoo⁴ (1. The Petroleum and Petrochemical College, Chulalongkorn University, 2. Center of Excellence in Petrochemical and Materials Technology, 3. Nagase (Thailand), 4. Department of Chemical Engineering, Mahanakorn University of Technology (Thailand))

[IL58] Light Promoted Isoperfluoropropylation Reactions with *i*-C₃F₇-Iodine(III) Reagent

*Chao Chen, Yaxing Wu (Tsinghua University (China))

Dec 6, 3:25 PM - 5:05 PM Room A

[IL59] Transfer Dehydrogenation of Alkanes Using PXP-Pincer Catalyst (X = B, Al, C)

*Makoto Yamashita (Nagoya University (Japan))

[IL60] C-C and C-O Bond Cleavage of α,β -Unsaturated Esters by Using a Gallane(pyridyl)iron Complex

*Takako Muraoka (Gunma University (Japan))

[IL61] Imidazo[1,5a]pyridin-3-ylidene N-Heterocyclic Carbene Ligands

*Sukwon Hong (Gwangju Institute of Science and Technology (GIST) (Korea))

[IL62] Catalytic Applications of Boron and Aluminum Cations

*Ching-Wen Chiu (National Taiwan University (Taiwan))

Dec 6, 3:25 PM - 5:05 PM Room B

[IL63] Design, Synthesis, and Application of New Organoboron Reagents

*Seung Hwan Cho (POSTECH (Korea))

[IL64] Direct Functionalization of White Phosphorus to Organophosphorus Compounds

*Wenxiong Zhang (Peking University (China))

[IL65] Organocatalysis by Mesoionic Carbenes

*Xiaoyu Yan (Renmin University of China (China))

[IL66] A Promising Step Towards Hydrate-based Gas Storage Applications

*Pramoch Rangsunvigit, Katipot Inkong¹, Kan Jeenmuang, Chakorn Viriyakul, Viphada Yodpetch, Santi Kulprathipanja (Chulalongkorn Univ. (Thailand))

Dec 6, 3:25 PM - 5:05 PM Room C

[IL67] Supported Metal Complex Catalysis for Fine Chemical Synthesis Enhanced by Functionalized Surface Environment

*Ken Motokura^{1,2}, Siming Ding^{1,2}, Kei Usui^{1,2}, Yuanyuan Kong^{1,2} (1. Yokohama National Univ., 2. Tokyo Institute of Technology (Japan))

[IL68] Efficient Organic Transformations by Nano-Structured Heterogeneous Catalysts

*Yoichi M. A. Yamada (RIKEN Center for Sustainable Resource Science (Japan))

[IL69] Enhanced Catalytic Activity of Au Nanoparticles Covered by Hydroxyapatites

*Tamao Ishida (Tokyo Metropolitan University (Japan))

[IL70] Palm Oil Epoxidation using Titanium Silicate as a Catalyst and Application for Renewable Methyl Ester Sulfonated Biosurfactant

*Suwadee Kongparakul, Thanyarat Pakaew, Chanatip Samart (Thammasat University (Thailand))

Dec7, 10:45 PM - 11:35 AM Room A

[IL71] Asymmetric Metathesis Dimerization of Vinylferrocenes: New Strategy for Preparing Enantiomerically Enriched Planar-Chiral Ferrocenes

*Masamichi Ogasawara¹ (1. Tokushima Univ. (Japan))

[IL72] Development of Azacorannulene-Based Functional Materials

*Shingo Ito¹ (1. Nanyang Technological University

(Singapore))

Dec 7, 10:45 PM - 11:35 AM Room B

[IL73] Synthesis and Catalytic Activity of Functionalized CpRh Complexes

*Ken Tanaka¹ (1. Tokyo Institute of Technology (Japan))

[IL74] Exploring Dearomative Cycloadditions: Strategies for Constructing and Restructuring Heterocycles

*Eun Jeong Yoo¹ (1. Kyung Hee University (Korea))

Oral session

Dec 4, 11:20 AM - 11:50 AM Room B

[OS1] Pt Catalyst with Atomic Interfacial Structure for Efficient Cyclohexane Dehydrogenation Reaction

*Mi Peng, Ding Ma (Peking University (China))

[OS2] Structure Analysis of Borylcopper Intermediates in Solution by low-Temperature X-ray Absorption Spectroscopy

*Yuta Uetake^{1,2}, Yu Ozawa³, Koji Kubota^{3,4}, Hajime Ito^{3,4} (1. Osaka University, 2. ICS-OTRI, Osaka University, 3. Hokkaido University, 4. WPI-ICReDD, Hokkaido University (Japan))

Dec 4, 11:20 AM - 11:50 AM Room C

[OS3] Facile synthesis of the atomically dispersed hydrotalcite oxide supported copper catalysts for the selective hydrogenation of 5-hydroxymethylfurfural into 2,5-bis(hydroxymethyl)furan

*Po-Wen Chung (Institute of Chemistry, Academia Sinica (Taiwan))

[OS4] Supported Pd-catalyzed selective acceptorless dehydrogenative aromatization to primary anilines from NH₃ via concerted catalysis and adsorption control

*Takafumi Yatabe^{1,2}, Hui Li¹, Satoshi Takayama¹, Kazuya Yamaguchi¹ (1. The University of Tokyo (Japan), 2. JST, PRESTO (Japan))

Dec 4, 11:20 AM - 11:50 AM Room C

[OS5] Synthesis of N-Unprotected Ketimines from Ketones and Ammonia Using Porous Aluminosilicate

*Shintaro Shibata¹, Yoichi Masui², Naoki Narukawa³, Takuya Shiroshta³, Haruhiko Miya³, Rintaro Sato³, Shunta Tokutake³, Yoshiki Tanaka³, Makoto Onaka³ (1. Research Foundation ITSUU Laboratory, 2. The University of Tokyo, 3. Tokyo University of Agriculture (Japan))

[OS6] RhRu Bimetallic Catalyst for Acetoxylation of Arenes

*Shingo Hasegawa, Ken Motokura (Yokohama National University (Japan))

Dec 5, 3:25 PM - 3:55 PM Room C

[OS7] Cationic Rhodium(I)-Catalyzed Asymmetric Cyclohydroformylation of 1,6-Enynes with Formaldehyde

*Tsumoru Morimoto, Erin Hayashi, Naoto Akiyama, Kiyomi Kakiuchi, Tsuyoshi Kawai (Nara Institute of Science and Technology (Japan))

[OS8] Photoredox and Electrochemical Catalysis for the Selective Bioconjugation

*Chien-Wei Chiang (Soochow University (Taiwan))

Dec 6, 2:05 PM - 3:05 PM Room C

[OS9] Mesoporous carbon platelets supported metal catalysts for biodiesel fuel upgrading and ammonia synthesis

*Shih-yuan Chen¹, Li-Yu Wang², Takehisa Mochizuki¹, Chia-min Yang² (1. National Institute of Advanced Industrial Science and Technology (AIST) (Japan), 2. Department of Chemistry, National Tsing Hua University (Taiwan))

[OS10] Sustainability – Cycle for Biodiesel Waste and Clean Hydrogen Production

*Chia-Ying Chiang (National Taiwan University of Science and Technology (Taiwan))

[OS11] Depolymerization of Polyesters via Titanium-Catalyzed Aminolysis

*Yohei Ogiwara, Kotohiro Nomura (Tokyo Metropolitan University (Japan))

[OS12] Ru(0)-catalyzed alternating addition polymerization giving conjugated polyenes

*Sayori Kiyota, Masafumi Hirano (Tokyo University of Agriculture and Technology (Japan))

Young Oral session

Dec 4, 3:55 PM - 4:45 PM Room C

[YO1] Reverse water-gas shift-oriented Ni/SiO₂ catalyst derived from the dissolution of Ni²⁺ confined in silicalite-1

*Jedy Prameswari, Chia-Hong Chen, Yu-Chuan Lin (National Cheng Kung University (Taiwan))

[YO2] Cobalt-Catalyzed Divergent Cycloadditions of Alkynes with Conjugated Dienes

*Yusuke Tomita, Naoto Haraguchi, Sayori Kiyota, Nobuyuki Komine, Masafumi Hirano (Tokyo University of Agriculture and Technology (Japan))

[YO3] Dehydrogenative coupling of hydrosilanes Using Gold Nanoparticles Deposited on Fibrillated Citric Acid-modified Cellulose

*Butsaratip Suwattananuruk¹, Yuta Uetake^{1,2}, Hidehiro Sakurai^{1,2} (1. Osaka University (Japan), 2. ICS-OTRI, Osaka University (Japan))

[YO4] Ir-Catalyzed transformations initiated by C–H activation using sulfur-containing substrates

*Haru Marumo, Takahiro Iwaki, Mamoru Ito, Takanori Shibata (Waseda University (Japan))

[YO5] Blue Light-Driven C–C Bond Formation from Thioanisole Derivatives: α -Thioalkyl Radicals Generation via Electron-Donor-Acceptor Complexes and Titanium Dioxide

*Pijush Kanti Roy^{1,2}, Yutaka Hitomi¹ (1. Doshisha University (Japan), 2. Mawlana Bhashani Science and Technology University (Bangladesh))

Dec 5, 3:55 PM - 4:45 PM Room C

[YO6] Decarbonylation of Diaryl 1,2-Diketones via Oxidative Addition Enabled by a Multifunctional

Au–Pd Alloy Nanoparticle Catalyst

*Takehiro Matsuyama, Takafumi Yatabe, Tomohiro Yabe, Kazuya Yamaguchi (The University of Tokyo (Japan))

[YO7] Selective synthesis of azobenzenes through dehydrogenative aromatization catalyzed by supported Au–Pd alloy nanoparticles

*Wei-Chen Lin, Takafumi Yatabe, Tomohiro Yabe, Kazuya Yamaguchi (The University of Tokyo (Japan))

[YO8] Bi-functional catalysis of $[\text{Nb}_6\text{O}_{19}]^{8-}$ -modified Au/ Al_2O_3

*Shoji Fukuda¹, Soichi Kikkawa¹, Ryo Takahata², Kosuke Suzuki^{3,4}, Kazuya Yamaguchi³, Toshiharu Teranishi², Seiji Yamazoe^{1,4} (1. Tokyo Metropolitan University, 2. Kyoto University, 3. Tokyo University, 4. PRESTO (Japan))

[YO9] Reductive Amination of Carboxylic Acids over a Heterogeneous Pt–Mo Catalyst under Mild Conditions

*Katsumasa Sakoda, Sho Yamaguchi, Takato Mitsudome, Tomoo Mizugaki (Osaka University (Japan))

[YO10] Single-Ta-substituted Lindqvist-type hexaniobate cluster as base catalyst for highly selective CO_2 fixation reaction

*Vorakit Chudatemiya, Mio Tsukada, Hiroki Nagakari, Soichi Kikkawa, Naoki Nakatani, Seiji Yamazoe (Tokyo Metropolitan University (Japan))

Poster Presentations

Dec. 4 4:30 PM - 6:10 PM

[P-01] NiH-catalyzed Markovnikov-selective hydroboration of terminal alkynes

*Jeongwoo Lee, Seoyoung Jeong, Gunha Kim, Sungyou Hong (Ulsan National Institute of Science and Technology (Korea))

[P-02] Nickel-catalyzed reductive dicarbofunctionalization of enynes

*Ji Hwan Jeon, Sung You Hong (Ulsan National Institute of Science and Technology (Korea))

[P-03] Dehydrogenative benzylic $\text{C}(\text{sp}^3)\text{--H}$ selective silylation catalyzed by supported Ni nanospecies

*Qing Yu, Takafumi Yatabe, Takehiro Matsuyama, Tomohiro Yabe, Kazuya Yamaguchi (The University of Tokyo (Japan))

[P-04] Synthesis of (Adamantylimido)niobium(V) Complexes Containing Chelate Anilide-Pyridine Ligands and their Catalysis Application

*Kosuke Morishima, Kotohiro Nomura (Tokyo Metropolitan Univ. (Japan))

[P-05] Synthesis of Biobased Aliphatic Polyesters Containing Chiral Diol Segment by Acyclic Diene Metathesis Polymerization and Subsequent Hydrogenation

*Kanoko Isami, Kotohiro Nomura (Tokyo Metropolitan Univ. (Japan))

[P-06] Synthesis of Conjugated Bottlebrush Polymers Containing All Trans-Poly(fluorene-2,7-vinylene) Side Chains

*Hiroki Chino, Daisuke Shimoyama, Kotohiro Nomura (Tokyo Metropolitan Univ. (Japan))

[P-07] Upcycling of Polyesters by Combined Transesterification and Acyclic Diene Metathesis (ADMET) Polymerization

*Asahi Tanaka, Yohei Ogiwara, Kotohiro Nomura (Tokyo Metropolitan Univ. (Japan))

[P-08] Ring Closing Metathesis (RCM) of Nonconjugated Dienes by (Arylimido)vanadium(V)-Alkylidene Catalysts Supported by NHC Ligand

*Moe Unoki, Kotohiro Nomura (Tokyo Metropolitan Univ. (Japan))

[P-09] Oxidative Homocoupling Reaction of Dimethyl Phthalate over Metal Oxide Supported Au Catalysts

*Kosei Arata¹, Akihiro Nakayama¹, Toru Murayama^{1,2}, Tetsuya Shimada¹, Shinsuke Takagi¹, Tamao Ishida¹ (1. Tokyo Metropolitan Univ. (Japan), 2. Yantai Univ. (China))

[P-10] Tuning the selectivity of catalytic nitrile hydrogenation with phase-controlled Co nanoparticles prepared by hydrosilane-assisted method

*He Jiang¹, Dian Deng¹, Yusuke Kita², Keigo Kamata¹, Michikazu Hara¹ (1. Tokyo Institute of Technology (Japan), 2. Osaka Metropolitan Univ. (Japan))

[P-11] C2-Functionalized Indole catalyzed by chiral aluminum cation catalyst

*Chu-Chiao Wen¹, Chao-An Liu¹, Ching-Pei Hsu², Ching-Wen Chiu¹ (1. National Taiwan Univ. (Taiwan), 2. Massachusetts Institute of Technology (United States of America))

[P-12] Asymmetric Catalysis of Chiral Germylene and Stannylenes

*Hsuan-Wen Fu¹, Rong-Jie Chein², Ching-Wen Chiu¹ (1. National Taiwan Univ., 2. Academia Sinica (Taiwan))

[P-13] Cooperative Catalysis between Au Nanoparticles and Metal Oxides for Rapid C–B Bond Formation

*Kaoru Imoto¹, Hiroki Miura^{1,2}, Anchalee Junkaew³, Masahiro Ehara⁴, Tetsuya Shishido^{1,2} (1. Tokyo Metropolitan Univ. (Japan), 2. Research Center for Hydrogen Energy-Based Society (Japan), 3. National Nanotechnology Center (Thailand), 4. Institute for Molecular Science (Japan))

[P-14] Interfacial design of supported Pt nanoparticles by basic metal oxide clusters for N-formylation reaction

*Yutaro Matsunaga¹, Soichi Kikkawa¹, Seiji Yamazoe¹ (1. Tokyo Metropolitan Univ. (Japan))

[P-15] Size dependence of base catalytic properties in niobium oxide clusters

*Hiroki Nagakari, Soichi Kikkawa, Naoki Nakatani, Seiji Yamazoe (Tokyo Metropolitan Univ. (Japan))

[P-16] Facile Alkane Dehydrogenation by using Pincer Ruthenium Complexes Bearing an Adamant-2-ylidene based PCP-pincer Ligand

*Naoto Uno, Makoto Yamashita, Ryo Nakano (Nagoya Univ., Tokai National Higher Education and Research System (Japan))

[P-17] Mechanism of a mixed potential-driven catalytic reduction of CO₂

*Yuta Katane¹, Yuma Okamoto¹, Junji Nakamura², Kotaro Takeyasu¹ (1. Tsukuba Univ., 2. Kyushu Univ. (Japan))

[P-18] Metastable Iron Carbide Catalyst for Selective Hydrogenation of α,β -Unsaturated Aldehydes

*Yuki Otsu, Tomoya Kusakawa, Tomohiro Tsuda, Sho Yamaguchi, Takato Mitsudome, Tomoo Mizugaki (Osaka Univ. (Japan))

[P-19] Photocatalytic Deconstructive Aliphatic Carbon–Carbon Bond Cleavage and Functionalization of Unactivated Alcohols

*Adisak Thanetchaiyakup¹, Philip, Leetiong Mark Tan¹, Xin Zhao¹, Xue-Wei Liu¹, Balamurugan Ramalingam², Han Sen Soo¹ (1. Nanyang Technological Univ., 2. Agency for Science, Technology and Research (A*STAR) (Singapore))

[P-20] Pd(II)-Catalyzed Azine-Assisted Enantioselective Oxidative C–H/C–H Cross-Coupling
Fei Cao¹, Jianfeng Hu¹, Yong Yang², *Hao Zhang¹ (1. Inner Mongolia Univ., 2. State Key Laboratory of Coal Conversion, Institute of Coal Chemistry, Chinese Academy of Sciences, (China))

[P-21] Oxygen Electrocatalyst Derived from Amine Functionalized Metal-Organic Frameworks

*Duc-Viet Nguyen, Ravi Nivetha, Ngoc-Diem Huynh, Dac-Ngan Thi Thai, Seung Hyun Hur (Univ. of Ulsan (Korea))

[P-22] Catalytic conversion of CO₂ to light hydrocarbons by using iron carbides derived from g-C₃N₄ with iron nitrate

*Pei-Tung Chou, Yu-Chuan Lin (National Cheng Kung Univ. (Taiwan))

[P-23] Selective Oxidation of Methane to Light Oxygenates over Metal-Supported Catalysts Assisted by the Dielectric Barrier Discharge Plasma

*You-Cheng Lini, Kun-Jie Huang, Yu-Chuan Lin (National Cheng Kung Univ. (Taiwan))

[P-24] Mixed-Ligands gives functional groups facilitate Fe redox transformations form composite material toward Efficient Electrochemical Oxygen

Evolution

*Dac-Ngan Thi Thai, Ngoc-Diem Huynh, Duc-Viet Nguyen, Seung-Hyun Hur (Univ. of Ulsan (Korea))

[P-25] Synthesis of Sequenced-Controlled Oligosulfates

*Min Pyeong Kim, Swatilekha Kayal, Sung You Hong (Ulsan National Institute of Science and Technology (Korea))

[P-26] Heterogeneous electrocatalyst supported by two-dimensional material for efficient and stable water oxidation

*Ngoc-Diem Huynh, Dac-Ngan Thi Tha, Duc-Viet Nguyen, Seung-Hyun Hur (Univ. of Ulsan (Korea))

[P-27] Computational estimation of the quantum tunneling effect crossover temperature of hydrogen at graphene

*Yoyo Hinuma¹, Kohsuke Mori² (1. AIST, 2. Osaka Univ. (Japan))

[P-28] Photocatalytic Roles of Vacancy Sites on Monoclinic and Tetragonal Zirconium Oxides for CO₂ Reduction

*Ayana Omata, Keisuke Hara, Kaori Niki, Yasuo Izumi (Chiba Univ. (Japan))

[P-29] CO₂ Direct Air Capture Using ZIF-8, Mg-MOF-74, and Mg-MOF-74@ZIF-8

*Bhumini Thanardna^{1,2}, Masahiro Matsumoto³, Vissanu Meeyoo⁴, Boonyarach Kitiyanan^{1,2} (1. The Petroleum and Petrochemical College, Chulalongkorn Univ., 2. Center of Excellence in Petrochemical and Materials Technology, 3. Nagase (Thailand) Co.,Ltd., 4. Department of Chemical Engineering, Mahanakorn University of Technology (Thailand))

[P-30] Synthesis of visible light responsive nanocarbon and investigation of radical mechanism in the carbon-carbon coupling reaction

*Md Razu Ahmed, Yuta Nishina (Okayama Univ. (Japan))

[P-31] Total synthesis of (-)-platensimycin by internal H-bond mediated intramolecular Diels-Alder reaction

*Hyo-Mi Kim, Cheon-Gyu Cho (Hanyang University

(Korea))

[P-32] Coupling of Heteroarene and Arenol via Nickel-catalyzed C-H/C-OH Activation

*Ting-Husan Wang¹, Chen-Hsun Hung¹, Tiow-Gan Ong^{1,2} (1. Academia Sinica, 2. National Taiwan Univ. (Taiwan))

[P-33] Electrochemical Reduction of Carbon Dioxide in Methanol with KOH and CsOH supporting salts at Cu/Sn-modified Graphene/Carbon electrode

*Kenta Kikuchi¹, Mai Furukawa¹, Ikki Tateishi², Hideyuki Katsumata¹, Satoshi Kaneco¹ (1. Mie Univ. (Japan), 2. Global Environmental Center for Education & Research, Mie Univ. (Japan))

[P-34] Catalytic Application of Iridium Complexes Bearing Functional α,γ' -Bipyridonate Ligand for Acceptorless Dehydrogenative Reactions

*Tatsuhiko Kuwaba, Yuzuki Tanaka, Yuto Yasumura, Takuya Shimbayashi, Ken-ichi Fujita (Kyoto Univ. (Japan))

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[P-35] Co-conversion of Methane and Nitrogen over Supported MoC_x Catalysts

*Jia-Ying Sie, I-Ting Kao, Yu-Chuan Lin (National Cheng Kung Univ. (Taiwan))

[P-36] Synthesis of Fluorinated Schiff Bases Derived from 2,4-Dihydroxybenzaldehyde in Aqueous Media

*Maria Esther Moreno, David Morales (Autonomous University of Mexico (Mexico))

[P-37] Double alkyl-alkyl bond construction across alkenes enabled by nickel electron-shuttle catalysis

*Changqing Rao (Univ. of Science and Technology of China (China))

[P-38] Tandem C₃-selective Stille Cross-Coupling/IMDA Cascade of 3,5-Dibromo-2-pyrones for Natural Product Synthesis

*Junseok Lee, Kyuhyun Shim, Thameem ul ansari, Cheongyu Cho (Hanyang university (Korea))

[P-39] Asymmetric Total Synthesis of (-)-Ervatamine via Late-stage Directed Indolization

*Qin-Yang Chen, Cheon-Gyu Cho (Hanyang Univ. (Korea))

[P-40] Synthesis of phosphatidylinositol hexamannoside by Pd-catalyzed hydroalkoxylation

*Yoonjung Lee, Young Ho Rhee (Pohang University of Science and Technology (Korea))

[P-41] Self-assembly and Emission properties of Benzo[e]pyrene Dicarboxylic Acid in Solution and Solid States

*Svetlana Em¹, Katsuaki Iwasa¹, Maiki Nishimoto¹, Yumi Yakiyama^{1,2}, Hidehiro Sakurai^{1,2} (1. Graduate School of Engineering, Osaka Univ., 2. ICS-OTRI, Osaka Univ. (Japan))

[P-42] Chemodivergent Cross Dehydrogenative Coupling of Alkenes with Alkenyl Acetate via C–H Activation

*Logeswaran Ravichandran, Jegannathan Masilamni (Indian Institute of Technology Madras (India))

[P-43] One Pot Synthesis of Benzo[c]phenanthridine Alkaloids from 7-Azabenzonornbornadienes and Aryl Nitrones

*Aravanidan Narasingan, Jegannathan Masilamani (Indian Institute of Technology Madras (India))

[P-44] Pd-Catalyzed Suzuki-Miyaura Coupling of 2-Chloroazlenes

*Hyuga Saito, Jun Sudo, Tetsuya Yamamoto (Tokyo Denki Univ. (Japan))

[P-45] Formation of isoprene from 3-methyl-1,3-butanediol over a combined system of CeO₂ and W/SiO₂

*Ryo Kobayashi, Enggah Kurniawan, Yasuhiro Yamada, Satoshi Sato (Chiba Univ. (Japan))

[P-46] Highly stereoselective synthesis of 6-Deoxy-β-D-mannopyranosyl nucleosides

*Donghoon Park, Youngho Rhee (POSTECH (Korea))

[P-47] Bimetallic-organic framework (bMOF) for photocatalytic reduction of carbon dioxide and antibacterial activity

*Shivaraju Harikaranahalli Puttaiah, Divya Vinod (JSS Academy of Higher Education and Research (India))

[P-48] Novel Ti/rGO@ZnCr LDH derived mixed metal oxide for sustainable generation of ammonia using atmospheric nitrogen

*Divya Vinod^{1,2}, Shivaaju Harikaranahalli Puttaiah¹ (1. JSS Academy of Higher Education & Research (India), 2. Center for Water, Food and Energy, GREENS trust (India))

[P-49] Canceled

[P-50] Metal-organic framework-supported palladium(II) single-site for the hydroformylation of styrene with formic acid

*Ming-Rou Wu¹, Jyun-Yi Yeh^{1,2}, Chia-Wen Wu¹ (1. National Taiwan Univ., 2. Academia Sinica (Taiwan))

[P-51] Iridium Complexes Bearing New Functional Ligands: Synthesis and Application as Catalysts for Dehydrogenative Transformation of Alcoholic Substrates

*Kaito Kubota, Ken-ichi Fujita (Kyoto Univ. (Japan))

[P-52] Preparation of isocyanide monolayers with basic functional group on gold surface aiming for catalytic application

*Tomohiro Ichii, Kenji Hara (Tokyo University of Technology (Japan))

[P-53] 1,2-Addition reactions using paradacycle complexes with pyridine carboxylates as ligands

*Yuki Izumiya¹, Tetsuya Yamamoto¹ (1. Tokyo Denki University (Japan))

[P-54] Immobilization of metal complexes on periodic mesoporous organosilica and its catalytic application

*Kanna Saitou¹, Saya Inagaki¹, Kohei Fuchibe², Junji Ichikawa³, Kenji Hara¹ (1. Tokyo University of Technology, 2. University of Tsukuba, 3. Sagami Chemical Research Institute (Japan))

[P-55] Evaluation of MXene Ti₂C₃ as Adsorbent in Dispersive Solid Phase Extraction Prior to the Determination of Amitrole by HPLC

*Hirono Iida, Mai Furukawa, Ikki Tateishi, Hideyuki Katsumata, Satoshi Kaneco (Mie Univ. (Japan))

[P-56] Decarboxylative silylation of redox-active esters by supported Au catalysts

*Kaede Ameyama¹, Hiroki Miura^{1,2}, Tetsuya Shishido^{1,2} (1. Tokyo Metropolitan Univ., 2. Research Center for Hydrogen Energy-based Society, Tokyo Metropolitan Univ. (Japan))

[P-57] Deposition of highly dispersed gold nanoparticles onto metal phosphates by deposition-precipitation with aqueous ammonia

*Hidenori Nishio¹, Hiroki Miura^{1,2,3}, Keigo Kamata⁴, Tetsuya Shishido^{1,2,3} (1. Tokyo Metropolitan Univ., 2. Research Center for Hydrogen Energy-Based Society, Tokyo Metropolitan Univ. (Japan), 3. Elements Strategy Initiative for Catalysts & Batteries, Kyoto Univ., 4. Laboratory for Materials and Structures, Institute of Innovative Research, Tokyo Institute of Technology (Japan))

[P-58] Reductive Cross-Coupling of C(sp³)-O Electrophiles and Carbonyl Compounds by Supported Au Catalysts

*Yuki Yasui¹, Hiroki Miura^{1,2}, Tetsuya Shishido^{1,2} (1. Tokyo Metropolitan Univ., 2. Research Center for Hydrogen Energy-based Society, Tokyo Metropolitan Univ.)

[P-59] Chemical Recycling, Upcycling of Polyesters by Transesterification Using Homogeneous Titanium Catalysts

*Yuriko Ohki, Yohei Ogiwara, Kotohiro Nomura (Tokyo Metropolitan Univ. (Japan))

[P-60] Silica-supported dual metal complex catalyst for low-temperature N-allylation using allyl alcohol

*Shunichi Sakai¹, Siming Ding², Masayuki Nambo¹, Shingo Hasegawa¹, Ken Motokura^{1,2} (1. Yokohama National Univ., 2. Tokyo Institute of Technology (Japan))

[P-61] Construction of benzo[c]chromen-1-ol backbone through enantio- and regioselective [2 + 2 + 2] cycloaddition of 1,7-enynes

*King Hung Nigel Tang, Taichi Kishi, Takanori Shibata (Waseda Univ. (Japan))

[P-62] Selective Synthesis of m-Phenylenediamine Derivatives Catalyzed by Au/CeO₂ through Oxidative

Dehydrogenative Aromatization

*Heizo Kimura, Takafumi Yatabe, Daisuke Takei, Kazuya Yamaguchi (The University of Tokyo (Japan))

[P-63] Pd-Catalyzed Regioselective Asymmetric Addition of 1, 2, 4-Triazole to Alkoxyallenes

*Seungsoo Moon, Seok Hyeon Jang, Young Ho Rhee (Pohang University of Science and Technology (Korea))

[P-64] Exploration and Mechanism of Hydrosilylation Catalysis of Silica-Immobilized Cyclic Carbonate and Urea

*Kosuke Soga¹, Shingo Hasegawa¹, Keisuke Nakamura², Kei Usui², Yuichi Manaka³, Ken Motokura^{1,2} (1. Yokohama National Univ., 2. Tokyo Institute of Technology, 3. National Institute of Advanced Industrial Science and Technology (Japan))

[P-65] Reductive Benzylolation for Benzenes Using Aroyl Chlorides and Triethylsilane Catalyzed by Aluminosilicate-Stabilized Silyl Cations on Montmorillonite

*Yoshiki Tanaka¹, Shintaro Shibata², Yoichi Masui³, Kimiko Hashimoto¹, Makoto Onaka¹ (1. Tokyo University of Agriculture, 2. Research Foundation ITSUU Laboratory, 3. The University of Tokyo (Japan))

[P-66] Direct Hydrogenation of Furfural to Tetrahydrofurfuryl Alcohol over a Hydrotalcite-Supported Nickel Carbide Nanoparticle Catalyst

*Taiki Kawakami, Sho Yamaguchi, Takato Mitsudome, Tomoo Mizugaki (Osaka Univ. (Japan))

[P-67] Ru-catalyzed regioselective olefin migration of cyclic allylic N,O-acetals

*Gihyung Jang, Kyeongdeok Seo, Young Ho Rhee (Pohang University of Science and Technology (Korea))

[P-68] Aerobic α -oxygenation of amides using an N-hydroxyphthalimide and supported Pd hybrid catalyst

*Sora Wakabayashi, Takafumi Yatabe, Nobuki Hachimura, Daisuke Takei, Tomohiro Yabe, Kazuya Yamaguchi (The University of Tokyo (Japan))