OMCOS-22 Daily Program

September 1, Monday

14:00 – 17:00 **Registration**

17:00 – 17:30 **Opening Ceremony**

Chair: Keiji Maruoka

17:30 – 18:15 **PL1** **Ben L. Feringa**
University of Groningen
Exploring Catalytic Space

18:30 – 20:00 **Welcome Reception**

September 2, Tuesday

Chair: Peter Kündig

8:45 – 9:30 **PL2** **Amir H. Hoveyda**
Boston College / University of Strasbourg
A Cu-Catalyzed Click Reaction that Forges Clippable Linkages

Chair: Shigeki Matsunaga

9:30 – 10:00 **IL1** **Nicolai Cramer**
EPFL
From [ ] to L*

10:00 – 10:30 **IL2** **Sungwoo Hong**
KAIST
Investigation of Catalytic Systems for Efficient Functionalization of Alkenes and Strained Bridged Rings

10:30 – 11:00 **Break**

Chair: Yoshiaki Nakao

11:00 – 11:30 **IL3** **Marco Bandini**
University of Bologna
New metal catalyzed chemical valorizations of 2D- and 3D-organic scaffolds

11:30 – 12:00 **IL4** **Tianning Diao**
New York University
ProPhos-Enabled Nickel-Catalyzed Suzuki-Miyaura Coupling of Heteroarenes for Process Synthesis

12:00 – 12:30 **IL5** **Manuel Alcarazo**
Georg August Universität Göttingen
Sulfonium Salts: An Alternative to Hypervalent I(III)-reagents

12:30 – 13:45 **Lunch**

13:45 – 15:15 **Short Oral Presentations** (See the following pages.)

15:15 – 17:15 **Poster Presentations**

PA-001 – PA-207 Odd Numbers: 15:15 – 16:15
Even Numbers: 16:15 – 17:15

Chair: Kuiling Ding

17:15 – 17:45 **IL6** **Jitendra K. Bera**

IIT Kanpur

Asking Ligands to Lend a Hand

17:45 – 18:15 **IL7** **Qiuling Song**

Fuzhou University

Design and Synthesis of Novel Chiral Organoborons

Chair: Ken Tanaka

18:15 – 19:00 **PL3** **Gregory C. Fu**

Caltech

Nucleophilic Substitution Reactions:
A Radical Alternative to S_N1 and S_N2 Reactions

September 2 Short Oral Presentations

Room A **OA1–OA6**

Chair: Masato Ohashi

13:45 – 14:00 **OA1** **Fabio Marchetti**
University of Pisa
Assembly Reactions of Small Molecular Units Driven by the Cooperativity of an Easily Available Diiron Platform

14:00 – 14:15 **OA2** **Christophe Bour**
Paris-Saclay University
The Renewed Interest in Vinyl Cations as Reactive Intermediates

14:15 – 14:30 **OA3** **Takanori Iwasaki**
Kyushu University
Stable yet Lewis-acidic anions enabling cooperative catalysis with cationic transition metal complexes

Chair: Takako Muraoka

14:30 – 14:45 **OA4** **Jun Takaya**
The University of Osaka
Exploring Photochemistry of Boron-Based Frustrated Lewis Pairs: from C–C Bond Cleavage to Alkene Upconversion

14:45 – 15:00 **OA5** **Tsuyoshi Nishikawa**
Kyoto University
Design of Vinylboron Monomers for Radical Polymerization and Side-Chain Replacement toward Overcoming Limitation in Polymer Synthesis

15:00 – 15:15 **OA6** **Yangjian Quan**
The Hong Kong University of Science and Technology
Borenium-catalyzed chain walking

Room B **OB1–OB6**

Chair: Junichiro Yamaguchi

13:45 – 14:00 **OB1** **Kyohei Yonekura**
Kwansei Gakuin University
Electron-Catalyzed Cross-Coupling Reaction of Arylzinc Reagents with Aryl Chlorides Accelerated by Cooperation of Anodic Oxidation with Photoirradiation

14:00 – 14:15 **OB2** **Gavin Chit Tsui**
The Chinese University of Hong Kong
Access to Novel Fluorinated Motifs via Transition Metal-Catalyzed Defluorinative Functionalization Strategy

14:15 – 14:30 **OB3** **Ivana Fleischer**
University of Tübingen
Making and Breaking of C–S Bonds Using Metal Catalysis

Chair: Koji Hirano

14:30 – 14:45 **OB4** **Takashi Niwa**
Kyushu University
Lewis-Acid-Promoted Cross-Coupling Reactions with Organoborons

14:45 – 15:00 **OB5** **Sung You Hong**
UNIST
Low-valent Nickel Catalyzed Cycloaddition and Reductive Coupling Reactions

15:00 – 15:15 **OB6** **Hong Geun Lee**
Seoul National University
Facilitated Transmetallation Assisted by the Cationic Pd Oxidative Addition Complexes

Room C **OC1–OC6**

Chair: Tetsuya Satoh

13:45 – 14:00 **OC1** **Mieko Arisawa**
Kyushu University
Design, Synthesis, and Biological Activity of Heavy Organoheteroatom Compounds

14:00 – 14:15 **OC2** **Dmitry S. Perekalin**
Russian Academy of Sciences
Synthesis of Chiral Rhodium Catalysts for Selective C–H Activation by Cyclization of Alkynes

14:15 – 14:30 **OC3** **Simon B. Blakey**
Emory University
The Remarkable Impact of "Nitrene"-Precursor Structure on Reaction Outcome in Rh-Catalyzed Olefin Amination Reactions

Chair: Yumiko Nakajima

14:30 – 14:45 **OC4** **Sehoon Park**
Guangdong-Technion Israel Institute of Technology
Transition metal-catalyzed regiodivergent double and triple hydroelementation of pyridines

14:45 – 15:00 **OC5** **Chuan He**
SUSTech
New Adventures in Silicon-Stereogenic Silane Chemistry

15:00 – 15:15 **OC6** **Marko Hapke**
Johannes Kepler University Linz
Novel ligands and applications for thermal and photochemical cyclotrimerization reactions with 3d metals

September 3, Wednesday

Chair: A. Stephen K. Hashmi

8:45 – 9:30 **PL4** **Dawei Ma**
SIOC / SUSTech
Discovery of more powerful ligands for Cu-catalyzed arylation of nucleophiles

Chair: Ryo Shintani

9:30 – 10:00 **IL8** **Yu Zhao**
National University of Singapore
Enantioconvergent Redox-Neutral Functionalization of Alcohols via Borrowing Hydrogen Catalysis

10:00 – 10:30 **IL9** **Martin Oestreich**
Technische Universität Berlin
The Cation Shuffle

10:30 – 11:00 **Break**

Chair: Pavel Kočovský

11:00 – 11:30 **IL10** **Belén Martín-Matute**
Stockholm University
Catalytic Hydrogen and Proton Transfer Reactions for Selective Organic Synthesis

11:30 – 12:00 **IL11** **Pengfei Li**
Xi'an Jiaotong University
Amphiphilic Boron Species for Catalysis

Chair: Sukbok Chang

12:00 – 12:45 **PL5** **Alois Fürstner**
Max-Plank Institut für Kohlenforschung
A New Reactivity Paradigm: *trans*-Hydrogenation, *gem*-Hydrogenation, and *trans*-Hydrometalation of Alkynes

September 4, Thursday

Chair: Shengming Ma

8:45 – 9:30 **PL6** **Kyoko Nozaki**
The University of Tokyo
Efficient Recycling of Plastic Wastes Using Controlled-Active-Site Catalysts

Chair: Takashi Ohshima

9:30 – 10:00 **IL12** **Igor Larrosa**
University of Manchester
Mechanistic understanding-led transition metal catalyzed C-H functionalization

10:00 – 10:30 **IL13** **Christopher Uyeda**
Purdue University
Catalytic Transfer Reactions of Non-Stabilized Carbenes

10:30 – 11:00 **Break**

Chair: Makoto Yasuda

11:00 – 11:30 **IL14** **Mariola Tortosa**
Universidad Autónoma de Madrid
Catalysis to increase complexity: Stereoselective synthesis of sp^3-rich building blocks

11:30 – 12:00 **IL15** **Véronique Michelet**
Université Côte d'Azur
A Journey in Gold Catalysis Towards Diversity: from Heterocycles to Fragrances

12:00 – 12:30 **IL16** **Mamoru Tobisu**
The University of Osaka
Catalytic Reactions Involving Carbene and Atomic Carbon Equivalents

12:30 – 13:45 **Lunch**

13:45 – 15:45 **Short Oral Presentations** (See the following pages.)

15:45 – 17:45 **Poster Presentations**

PB-001 – PB-207 Odd Numbers: 15:45 – 16:45
Even Numbers: 16:45 – 17:45

Chair: Chulbom Lee

17:45 – 18:45 **OMCOS Award Ceremony & Lecture**

Josep Cornella
Max-Plank Institut für Kohlenforschung
Advancing Bismuth Redox Catalysis

19:00 – 21:00 **Banquet**

September 4 Short Oral Presentations

Room A **OA7–OA14**

Chair: Tetsuaki Fujihara

13:45 – 14:00 **OA7** **Soyoung Park**
The University of Osaka
Modular DNA Hybrid Catalysts for the Development of Tailor-Made Metalloenzymes

14:00 – 14:15 **OA8** **Kazuya Kanemoto**
Tohoku University
N-Terminal-Specific Dual Modification of Peptides via [3+2] Cycloaddition of Metalated Azomethine Ylides

14:15 – 14:30 **OA9** **Azusa Kondoh**
Tohoku University
Copper-Catalyzed 1,3-Propargyl Shift: Development of Anionic Rearrangement of *ortho*-Metalated Aryl Propargyl Ethers

14:30 – 14:45 **OA10** **Søren Kramer**
Technical University of Denmark
Photoinduced functionalization of C(sp^3)–H bonds using copper catalysis

Chair: Hiroto Yoshida

14:45 – 15:00 **OA11** **Yusuke Masuda**
Hokkaido University
Pt/photoredox Dual-catalytic Reductive Allylation of Ketones and Imines

15:00 – 15:15 **OA12** **Maria González Esguevillas**
Pfizer Inc.
Ibuzatrelvir End-Game Journey: Optimization and Synthesis. From Discovery to Early Campaigns

15:15 – 15:30 **OA13** **Hiroyuki Nakamura**

Institute of Science Tokyo

Methylene Insertion into Nitrogen-Heteroatom σ-Bonds of 1,2-Azoles via a Zinc Carbenoid: An Alternative Tool for Skeletal Editing

15:30 – 15:45 **OA14** **Shun Suginome**

The University of Tokyo

Catalytic Reduction of Dinitrogen into Borylamines via Hydroboration

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Room B **OB7–OB14**

Chair: Jung Min Joo

13:45 – 14:00 **OB7** **Yasushi Nishihara**

Okayama University

Palladium-Catalyzed Decarbonylative Halogenation of Carboxylic Acid Derivatives

14:00 – 14:15 **OB8** **Ikuya Fujii**

The University of Osaka

Nickel-Catalyzed Construction of Silaindanes via Sequential C–H Activating 1,5-Nickel Migration and C–Si Activating 1,4-Nickel Migration

14:15 – 14:30 **OB9** **Takuya Suga**

Kanazawa University

Formation of Alkyl Radicals Through Low-Valent Titanium-Mediated Hydroxy and Ether C–O Bond Cleavage

14:30 – 14:45 **OB10** **Andreu Tortajada**

University of Fribourg

Tailoring Sodium Organometallic Reagents for Catalytic Reactions

Chair: Naoki Ishida

14:45 – 15:00 **OB11** **Ciro Romano**

University of Manchester

Constructing complex, sp^3-enriched molecular architectures by SmI_2 catalysis

15:00 – 15:15 **OB12** **Alex C. Bissember**

University of Tasmania

Taming Transient Intermediates in Metal-Catalyzed Cross-Couplings

15:15 – 15:30 **OB13** **Martin Kotora**

Charles University

Combination of Skeletal Editing and Catalytic [2+2+2] Cyclotrimerization as a Route to Racemic and Chiral Helicenes

15:30 – 15:45 **OB14** **Qin Yin**

Shenzhen University of Advanced Technology

Dynamic Kinetic Resolution-Based Asymmetric Hydrogenation of N-heteroaromatics

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Room C **OC7–OC14**

Chair: Yasuyuki Ura

13:45 – 14:00 **OC7** **Anna Kajetanowicz**

University of Warsaw

Olefin metathesis: a sustainable methodology for synthesis of valuable compounds with industrial potential

14:00 – 14:15 **OC8** **Ken Kamikawa**

Osaka Metropolitan University

Enantioselective Synthesis of Chiral Ferrocenyl Aminoalcohols: Simultaneous Induction of Multiple Types of Chirality via the Rhodium-Catalyzed Asymmetric Ring-Opening Strategy

14:15 – 14:30 **OC9** **Hong Zhang**

Xiamen University

Strained Metallacycles: Synthesis, Reactivities, and Application

14:30 – 14:45 **OC10** **Koji Kubota**

Hokkaido University

Piezoelectrically-modulated organometallic catalyst

Chair: Takahiro Nishimura

14:45 – 15:00 **OC11** **Laurean Ilies**

RIKEN

Efficient and Selective Catalytic C–H Activation Using SpiroBipyridine Ligands

15:00 – 15:15 **OC12** **Yoichiro Kuninobu**

Kyushu University

Host-Guest Interaction-Controlled Site-Selective C–H Borylation

15:15 – 15:30 **OC13** **Xiaoming Wang**

SIOC

Dinuclear Metallic Catalyst

15:30 – 15:45 **OC14** **Tatsuya Uchida**

Kyushu University

Preparation of Enantiomeric Pure H/D Isotopically Chiral Molecule via Asymmetric C–H Selective Amination

September 5, Friday

Chair: Fumitoshi Kakiuchi

8:45 – 9:15 **IL17** **Sarah Yunmi Lee**
KAIST
Cu-Catalyzed Radical Cross-Coupling Reactions Enabled by Cyclopropenimine-Based Ligands

9:15 – 9:45 **IL18** **Christof Sparr**
University of Basel
Stereoselective Formation and Opening of Aromatic Rings

9:45 – 10:15 **IL19** **Masayuki Wasa**
UF Scripps Biomedical Research
Late-Stage C–H Functionalization Enabled by Cooperative Catalysis

10:15 – 10:45 **Break**

Chair: Yoshiaki Nishibayashi

10:45 – 11:15 **IL20** **Seung Hwan Cho**
POSTECH
1,1-Diborylalkane: A Versatile Reagent for Selective Bond Formation

11:15 – 12:00 **PL7** **Zhaomin Hou**
RIKEN
Innovations in Organometallic Chemistry: From N_2 Activation to Self-Healing Polymers

12:00 – 12:30 **Closing Remarks**