

Green & Sustainable Chemistry for Next Generation

The 5th GCOE International Symposium “Catalysis as the Basis for the Innovation in Materials Science” The 1st International Symposium of Graduate School of Chemical Sciences and Engineering

[Date] **February 21 (Tue) – 22 (Wed) 2012**

[Venue] **Conference Hall, Hokkaido University, Sapporo, Japan**

Organizers Chair: Prof. Norio Miyaura Co-Chair: Prof. Noboru Kitamura

Plenary lectures

Prof. Akira Suzuki (Hokkaido University, Japan)

2010 Nobel Laureate in Chemistry

“Cross-Coupling Reactions of Organoboranes: An Easy Way for Carbon-Carbon Bonding”

Prof. Makoto Misono (University of Tokyo, Japan)

“Positive Green Chemistry: Energy and Materials Strategy for the 21st Century”

Prof. Shie-Ming Peng (National Taiwan University, Taiwan)

“Nanoelectronics: Molecular Metal Wires and Related Molecular Materials”

Keynote lectures

Prof. Jianbo Wang (Peking University, China)

“Cross-Coupling Reactions Involving Migratory Insertion of Metal Carbene”

Prof. Yoshihito Watanabe (Nagoya University, Japan)

“Molecular Design of Metalloenzymes: Three Approaches”

Prof. Can Li (Chinese Academy of Sciences, China)

“Homogeneous Catalysis in Heterogeneous Nanoreactors”

Prof. Kazuhito Hashimoto (University of Tokyo, Japan)

“Visible Light Photocatalysts Based on Interfacial Charge Transfer and Multi-Electron Oxygen Reduction Catalyst”

Invited lectures

Prof. Teck Peng Loh (Nanyang Technological University, Singapore)

“Metal-Catalyzed C-H Bond Functionalization”

Prof. Sukbok Chang (KAIST, Korea)

“Catalytic C-H Bond Activation of Heteroarenes for C-C and C-N Bond Formation”

Prof. Hiroaki Suga (University of Tokyo, Japan)

“One-Pot Synthesis of Natural Product-Like Compounds by Complex Biocatalysts”

Director Dr. Taek Soon Lee (Lawrence Berkeley National Laboratory, USA)

“Microbial Production of Terpene-Based Advanced Biofuels”

Prof. Alexander Katz (University of California, Berkeley, USA)

“Enhancing Heterogeneous Catalysis via Design of Organic-Inorganic Interfaces”

Prof. Jaeyoung Lee (GIST, Korea)

“Beyond the State of the Art of Electrocatalyst in Direct Formic Acid Fuel Cells”

Prof. Nobuo Tanaka (Nagoya University, Japan)

“Advanced Electron Microscopic Study of Catalytic Materials”

Prof. Richard Dronskowski (RWTH Aachen University, Germany)

“Computational Chemistry of Energy-Relevant Materials”

Prof. Keiji Tanino (Hokkaido University, Japan)

“Asymmetric Total Synthesis of Solanoelepin A”

Prof. Tsuyoshi Ohkuma (Hokkaido University, Japan)

“Asymmetric Cyanation Catalyzed by Ru-Li Combined Systems”

Prof. Hideaki Oikawa (Hokkaido University, Japan)

“Organic Synthesis Learned from Nature”

Prof. Toyoji Kakuchi (Hokkaido University, Japan)

“Organocatalyst Mediated Group Transfer Polymerization”

Prof. Wataru Ueda (Hokkaido University, Japan)

“Advances in Solid-State Catalysts Based on Complex Metal Oxide Materials”

Prof. Takao Masuda (Hokkaido University, Japan)

“Partial-Oxidative Conversion of Lignocellulose over Iron-Oxide Catalysts”

Prof. Kei Murakoshi (Hokkaido University, Japan)

“Plasmon-Induced Photoexcitation of Molecules for Effective Reactions”

Prof. Kiyotaka Asakura (Hokkaido University, Japan)

“Direct Observation of Metal-Support Interaction Observed in R and K Spaces”

Organizing Committee

**Prof. Hiroki Habazaki, Prof. Koichiro Ishimori,
Prof. Masamichi Ogasawara, Prof. Masatoshi Osawa,
Prof. Masaya Sawamura, Prof. Seiichi Taguchi**

Publication Office

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