

# "Challenges at the Frontier of Chemical Sciences"

**Date: 13 (Friday) -14 (Saturday) June, 2014**

**Venue: <Oral Session> Suzuki Hall  
<Poster Session> Entrance Hall, Foyer, Seminar Rooms  
Frontier Research in Applied Sciences Building, Faculty of Engineering,  
Hokkaido University, Sapporo, Japan**

## Day 1: Friday, 13 June, 2014

10:00 Opening Remarks

### SESSION 1

- 10:20 **Plenary Lecture 1**  
**Professor Robert H. Grubbs**  
(California Institute of Technology, USA)  
"Discovery and Applications of Selective Olefin Metathesis Catalysts"
- 11:20 **Keynote Lecture 1**  
**Professor Masatake Haruta**  
(Tokyo Metropolitan University, Japan)  
"Novel Catalysis by Gold Clusters"
- 12:05 – Lunch Break –
- 13:30 **Invited Lecture 1**  
**Professor Kenichiro Itami** (Nagoya University, Japan)  
"C-H Coupling for Advanced Biology and Materials"
- 13:55 **Invited Lecture 2**  
**Professor Hyunjoo Lee** (KAIST, Korea)  
"Structure Modification of Platinum Deposited on Supports for Electrocatalytic Reactions"
- 14:20 – Coffee Break –
- 14:40 **Invited Lecture 3**  
**Professor Kenji Hara** (Hokkaido University, Japan)  
"High-Density Monolayer of Metal Complex as a Novel Challenge in Heterogeneous Catalysis"
- 15:05 **Young Lecture 1**  
**Professor Tomohiro Seki** (Hokkaido University, Japan)  
"Static and Dynamic Control of Polymorphic Luminescent Gold(I) Isocyanide Complexes"

### POSTER SESSION

- 15:20 Poster Parade  
16:10 Poster Presentation  
18:10 Session Ends  
19:00 – Banquet – (@Sapporo Aspen Hotel)

**Chair:** Professor Takeshi Ohkuma (Hokkaido University)

### Organizing Committee:

Professor Hajime Ito (Hokkaido University)  
Professor Shin Mukai (Hokkaido University)  
Professor Yasuchika Hasegawa (Hokkaido University)  
Professor Kiyoharu Tadanaga (Hokkaido University)  
Professor Toshifumi Satoh (Hokkaido University)  
Professor Manabu Tokeshi (Hokkaido University)  
Professor Keiji Tanino (Hokkaido University)  
Professor Tetsuya Taketsugu (Hokkaido University)  
Professor Koichiro Ishimori (Hokkaido University)  
Professor Atsushi Fukuoka (Hokkaido University)

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The Graduate School of Chemical Sciences and Engineering, Hokkaido University  
Hokkaido University "Ambitious Leader's Program"  
The Suginome Memorial Foundation  
Hokkaido Branch, The Society of Chemical Engineers, Japan

## Day 2: Saturday, 14 June, 2014

### SESSION 2

- 09:00 **Plenary Lecture 2**  
**Professor Paul O'Brien** (The University of Manchester, UK)  
"Some Thoughts on Delivering Materials for Photovoltaic Solar Cells"
- 10:00 **Keynote Lecture 2**  
**Professor Hideo Hosono** (Tokyo Institute of Technology, Japan)  
"Transparent Oxide Electronics"
- 10:40 – Coffee Break –
- 11:00 **Invited Lecture 4**  
**Professor Luisa De Cola** (University of Strasbourg, France)  
"Dynamic and Hybrid Materials. Properties and Applications"
- 11:25 **Invited Lecture 5**  
**Professor Masako Kato** (Hokkaido University, Japan)  
"Construction of Photochemical Hydrogen Evolution Systems Based on the Effective Utilization of 3d Metals"
- 11:50 **Invited Lecture 6**  
**Professor Takao Tsuneda** (University of Yamanashi, Japan)  
"Present and Future Status of Quantum Chemistry"
- 12:15 **Young Lecture 2**  
**Professor Takashi Yanase** (Hokkaido University, Japan)  
"Fabrication of MoS<sub>2</sub> Large-Area Thin Films by Chemical Vapor Deposition and Their Ionic Liquid-Gated FET Characteristics"
- 12:30 – Lunch Break –

### SESSION 3

- 14:00 **Plenary Lecture 3**  
**Professor A. Dieter Schlüter** (ETH Zürich, Switzerland)  
"Synthetic Two-Dimensional Polymers"
- 15:00 **Keynote Lecture 3**  
**Professor Yasuyuki Shimohigashi** (Kyushu University, Japan)  
"Molecular Tools and Chemistry in Cell Receptor Research"
- 15:40 – Coffee Break –
- 16:00 **Invited Lecture 7**  
**Professor Kazuyasu Sakaguchi** (Hokkaido University, Japan)  
"Tetramer Formation of Tumor Suppressor Protein p53: Mutation, Evolution and Application"
- 16:25 **Invited Lecture 8**  
**Professor Shinsuke Sando** (The University of Tokyo, Japan)  
"In situ Biomolecular Analysis by On-Cell Supramolecular Chemistry"
- 16:50 **Invited Lecture 9**  
**Professor Kazuma Mawatari** (The University of Tokyo, Japan)  
"Novel Integrated Analytical Devices by Micro/Extended-Nano Fluidic Technology"
- 17:15 **Young Lecture 3**  
**Professor Yougen Chen** (Hokkaido University, Japan)  
"Novel Group Transfer Polymerization of Acrylic Monomers Using Boron Catalyst"
- 17:30 Closing Remarks