

RIKEN International Symposium on Chemistry and Materials Science
(November 5-6, Suzuki Umetaro Hall, RIKEN)

Program

November 5 (Thu)

- Chairperson: Zhaomin Hou (RIKEN)*
- 9:00 ~ 9:10 Opening Remarks **Kohei Tamao** (RIKEN ASI Director)
- 9:10 ~ 9:20 Welcome Address **Ryoji Noyori** (RIKEN President)
- Session 1 **Activation of Small Molecules***
Chairperson: Norihiro Tokitoh (Kyoto University)
- 9:20 ~ 9:55 **Douglas W. Stephan** (University of Toronto) “Frustrated Lewis Pairs: A New Approach to Reactivity and Catalysis”
- 9:55 ~ 10:30 **Tsukasa Matsuo** (RIKEN) “B–B Multiple Bond Species Stabilized by Fused-Ring Bulky Rind Groups”
- 10:30 ~ 11:05 **Philip P. Power** (University of California, Davis) “Main Group Elements as Transition Metals”
- 11:05 ~ 11:25 Break (20 min)
- Session 2 **Biomaterials***
Chairperson: Jianbo Wang (Peking University)
- 11:25 ~ 12:00 **Zhihua Gan** (Chinese Academy of Sciences) “Controlled Synthesis and Biofunctions of Biocompatible and Biodegradable Polymers”
- 12:00 ~ 12:35 **Hsiao-hua (Bruce) Yu** (RIKEN) “Organic Conductive Biomaterials: A New Direction for Functional π Materials”
- 12:35 ~ 13:50 Lunch (Hirosawa Club)
- Session 3 **Functional Molecules and Macromolecules***
Chairperson: Reizo Kato (RIKEN)
- 13:50 ~ 14:25 **Deqing Zhang** (Chinese Academy of Sciences) “New Organic Functional Molecules for Molecular Switches, Logic Gates and Sensors”
- 14:25 ~ 15:00 **Takanori Fukushima** (RIKEN) “Nanostructured Materials from π -Conjugated Building Blocks”
- 15:00 ~ 15:35 **Zichen Li** (Peking University) “Macromolecular Engineering of Poly(vinyl alcohol)”
- 15:35 ~ 15:55 Break (20 min)
- Session 4 **Materials Science***
Chairperson: Kazuyoshi Tanaka (Kyoto University)
- 15:55 ~ 16:30 **Haiqing Guo** (Peking University) “Synthesis of Fluorescent/Magnetic Micro Beads by Using Organic-Inorganic Assemblies as Structural Units”
- 16:30 ~ 17:05 **Chuanfeng Chen** (Chinese Academy of Sciences) “Novel Triptycene-Derived Hosts: Synthesis and Applications in Supramolecular Chemistry”
- 17:05 ~ 17:40 **Timothy M. Swager** (Massachusetts Institute of Technology) “Chemistry and Applications of Carbon Nanotubes”
- 18:00 ~ Banquet (Hirosawa Club)

November 6 (Fri)

Session 5

Organic Synthesis

Chairperson: Yasuhiro Uozumi (IMS, RIKEN)

9:00 ~ 9:35

Jianbo Wang (Peking University) "Pd-Catalyzed Reaction of Diazo Compounds"

9:35 ~ 10:10

Mikiko Sodeoka (RIKEN) "Enantioselective Catalysis Based on Transition Metal Enolate Chemistry"

10:10 ~ 10:45

Zhangjie Shi (Peking University) "Mechanistic Insight toward the Regioselectivity of Direct Functionalization of Indole derivatives"

10:45 ~ 11:05

Break (20 min)

Session 6

Main Group Chemistry

Chairperson: Soichiro Kyushin (Gunma University)

11:05 ~ 11:40

Shigehiro Yamaguchi (Nagoya University) "Main Group Chemistry toward New Functional π -Electron Materials"

11:40 ~ 12:15

Guy Bertrand (University of California, Riverside) "Interplay between Radicals, Carbenes, Bent-Allenenes and Main Group Chemistry"

12:15 ~ 13:30

Lunch (Hirosawa Club)

Session 7

Multiple Bonds and Organometallics

Chairperson: Takayuki Kawashima (The University of Tokyo)

13:30 ~ 14:05

Akira Sekiguchi (University of Tsukuba) "A New Type π -Bonded Compound: The Chemistry of a Silicon-Silicon Triple Bond"

14:05 ~ 14:40

Gregory H. Robinson (University of Georgia) "Carbene-Stabilization of Highly Reactive Molecules"

14:40 ~ 15:15

Zhaomin Hou (RIKEN) "Half-Sandwich Rare Earth Dialkyl Complexes Leading to Novel Polymerization Catalysts and Hydride Clusters"

15:15 ~ 15:35

Break (20 min)

Session 8

Supramolecular Chemistry and Molecular Materials

Chairperson: (Hsiao-hua (Bruce) Yu) (RIKEN)

15:35 ~ 16:10

Reizo Kato (RIKEN) "Advanced Functionality of π -Electrons in Molecular Assemblies"

16:10 ~ 16:45

Yuguo Ma (Peking University) "Supramolecular Chemistry Based on Arene-Perfluoroarene Interactions"

16:45 ~ 17:20

Robert West (University of Wisconsin) "Muon Spin Resonance: A New Spectroscopy for π -Conjugated Organometallic Compounds"

17:20

Closing Remarks

Zhaomin Hou (RIKEN)