

**The 2nd International Conference on MEXT Project of Integrated
Research on Chemical Synthesis**
“Molecular Functions in Complex Systems”

Noyori Conference Hall

Program

December 10 (Monday)

- 13:00-13:10 Opening Remarks: **Kazuyuki Tatsumi** (Nagoya University)
- (Chair: Kenichiro Itami, Nagoya University)*
- 13:10-13:50 **Kalman J. Szabo** (Stockholm University, Sweden)
“Catalytic C-H Functionalizations and other Reactions with Hypervalent Iodines”
- 13:50-14:30 **Shunsuke Chiba** (Nanyang Technological University, Singapore)
“Molecular Transformation for Azaheterocycle Synthesis Powered by
Single-Electron-Transfer Processes”
- 14:30-15:10 **Fumiyuki Ozawa** (Kyoto University, Japan)
“Highly Efficient Catalysts for Dehydrohalogenative Polycondensation of Aryl
Bromides to give π -Conjugated Polymers”
- 15:10-15:30 *Coffee Break*
- (Chair: Shigehiro Yamaguchi, Nagoya University)*
- 15:30-16:10 **Tamotsu Takahashi** (Hokkaido University, Japan)
“Synthesis and Reactions of Second Ring Adducts of Pentacene”
- 16:10-16:50 **Peter Skabara** (University of Strathclyde, United Kingdom)
“Complex Conjugated Architectures – from Synthesis through to Device
Applications.”
- 16:50-17:30 **Ben Zhong Tang** (Hong Kong University of Science & Technology, China)
“Aggregation-Induced Emission: Fundamentals and Applications”
- 17:30-18:30 *Poster session*
- 18:30-20:00 *Reception*

December 11 (Tuesday)

(Chair: Bernt Krebs, University of Münster)

09:30-10:10 **Oliver Einsle** (University of Freiburg, Germany)
“The Molecular Enzymology of Dinitrogen Conversion”

10:10-10:50 **Kazuyuki Tatsumi** (Nagoya University, Japan)
“Flexible Nature of Iron-Sulfide Clusters Relevant to the Active Sites of Nitrogenase”

10:50-11:10 *Coffee Break*

(Chair: Norihiro Tokitoh, Kyoto University)

11:10-11:50 **Markus Ribbe** (University of California, Irvine, U.S.A.)
“Biosynthesis of Nitrogenase FeMoco: Radical SAM-dependent Carbon Insertion”

11:50-12:30 **Jian-Ren Shen** (Okayama University, Japan)
“Mechanism of Photosynthetic Water-Splitting based on High Resolution Structure of Photosystem II”

12:30-13:45 *Lunch Break*

(Chair: Yoshinori Naruta, Kyushu University)

13:45-14:25 **Oliver Lenz** (Humboldt-Universität zu Berlin, Germany)
“A Novel Metal Cofactor with High Structural Flexibility is Involved in [NiFe]-Hydrogenase-Mediated H₂ Cycling in the Presence of O₂”

14:25-15:05 **Yoshiki Higuchi** (University of Hyogo, Japan)
“Structural Study of O₂-Tolerant [NiFe] Hydrogenase”

15:05-15:25 *Coffee Break*

(Chair: Wataru Ueda, Hokkaido University)

15:25-16:05 **Fraser Armstrong** (Oxford University, United Kingdom)
“The Chemistry of Biohydrogen: How the Iron-Sulfur Clusters of Hydrogenases Neutralise Attacking Oxygen or are Destroyed by It”

16:05-16:45 **Seiji Ogo** (Kyushu University, Japan)
“Molecular Catalysis in a Fuel Cell”

16:45-17:00 Closing Remarks: **Wataru Ueda** (Hokkaido University)