### Thursday / June 30th

<table>
<thead>
<tr>
<th>Time</th>
<th>Location A (5F, meeting room)</th>
<th>Location B (4F, seminar room B,C)</th>
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</thead>
<tbody>
<tr>
<td>8:30-</td>
<td>Registration (in front of meeting room at 5th floor)</td>
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<tr>
<td>9:25-9:30</td>
<td>Opening ceremony</td>
<td>Chair: Prof. Atsushi Fukuoka</td>
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<tr>
<td>9:30-9:40</td>
<td>PL-1 Prof. Xinhe Bao</td>
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<tr>
<td>10:20-10:40</td>
<td>Coffee break</td>
<td>Chair: Prof. Friedrike Jentoft, Prof. Kenichi Shimizu</td>
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<tr>
<td>10:40-11:10</td>
<td>IL-1 Prof. Ichiro Yamanaka</td>
<td>OB-01 Dr. Ryoichi Otomo</td>
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<tr>
<td>11:10-11:30</td>
<td>OA-01 Dr. Kohtsuke Mori</td>
<td>OB-02 Dr. Asep Bayu</td>
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<tr>
<td>11:30-11:50</td>
<td>OA-02 Prof. Shengjun Huang</td>
<td>IL-2 Prof. Stuart Taylor</td>
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<tr>
<td>11:50-13:30</td>
<td>Lunch</td>
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<tr>
<td>13:30-14:20</td>
<td>PL-2 Prof. Koichi Eguchi</td>
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<tr>
<td>14:40-15:00</td>
<td>OA-03 Dr. Atthapon Srifa</td>
<td>IL-3 Dr. Evgeny Pidko</td>
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<td>15:00-15:20</td>
<td>OA-04 Dr. Toshiyuki Yokoi</td>
<td>OB-03 Dr. Sho Yamaguchi</td>
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<td>15:20-15:40</td>
<td>OA-05 Dr. Osamu Tomita</td>
<td>OB-04 Dr. Ken Motokura</td>
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<td>15:40-16:00</td>
<td>OA-06 Dr. Tomohiro Higashi</td>
<td>IL-4 Dr. Shinji Inagaki</td>
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<tr>
<td>16:30-18:00</td>
<td>Poster Session (2F, Science Plaza)</td>
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<tr>
<td>18:20-</td>
<td>Banquet (1F, Popula)</td>
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### Friday / July 1st

<table>
<thead>
<tr>
<th>Time</th>
<th>Location A (5F, meeting room)</th>
<th>Location B (4F, seminar room B,C)</th>
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<tbody>
<tr>
<td>9:00-9:50</td>
<td>PL-3 Prof. Bert F. Sels</td>
<td>Chair: Prof. Jorge Beltramini</td>
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<tr>
<td>9:50-10:10</td>
<td>Coffee break</td>
<td>Chair: Dr. Ewa Kowalska, Dr. Atsushi Takagaki</td>
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<tr>
<td>10:10-10:40</td>
<td>IL-5 Dr. Roberto Rinaldi</td>
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<tr>
<td>10:40-11:00</td>
<td>OA-07 Prof. Jorge Beltramini</td>
<td>IL-6 Dr. Yoshihide Watanabe</td>
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<td>11:10-11:40</td>
<td>IL-7 Dr. Carsten Sievers</td>
<td>OB-05 Dr. Yasuharu Kanda</td>
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<td>11:40-12:10</td>
<td>IL-8 Prof. Friederike C. Jentoft</td>
<td>OB-06 Prof. Naonobu Katada</td>
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<tr>
<td>12:10-13:40</td>
<td>Lunch</td>
<td>OB-07 Dr. Zen Maeno</td>
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<td>13:40-14:00</td>
<td>OA-08 Dr. Abhijit Shrotri</td>
<td>IL-9 Dr. Jens S. Hummelshej</td>
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<tr>
<td>14:00-14:20</td>
<td>Cancelled</td>
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<td>14:20-14:40</td>
<td>OA-10 Dr. Rodiansono</td>
<td>OB-08 Dr. Akira Nakayama</td>
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<td>14:40-15:00</td>
<td>OA-11 Dr. Sarwat Iqbal</td>
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<td>15:00-15:20</td>
<td>OA-12 Dr. Atsushi Takagaki</td>
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<tr>
<td>15:20-15:40</td>
<td>OA-13 Dr. Tasuku Komanoya</td>
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<tr>
<td>15:40-</td>
<td>Closing remarks</td>
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Oral program

PL: 45 min presentation, 5 min discussion
IL: 25 min presentation, 5 min discussion
OA, OB: 15 min presentation, 5 min discussion

June 30 / Room A

9:25 - 9:30 Opening ceremony

9:30 - 10:20 Chair: Prof. Atsushi Fukuoka

9:30 - 10:20 PL-1 Prof. Xinhe Bao
Direct conversion of C1 molecules to high value chemicals

10:20 - 10:40 Coffee break

10:40 - 11:50 Chair: Prof. Friedrike Jentoft, Prof. Kenichi Shimizu

10:40 - 11:10 IL-1 Prof. Ichiro Yamanaka
Development of new catalysts for dehydrogenative conversion of methane to higher hydrocarbons

11:10 - 11:30 OA-01 Dr. Kohsuke Mori
Development of Nano-Catalysts for Efficient Hydrogen Production from Energy Storage Materials

11:30 - 11:50 OA-02 Prof. Shengjun Huang
Toward a Flexible Post-Synthesis of Hierarchical MFI Zeolites

11:50 - 13:30 Lunch

13:30 - 14:20 Chair: Prof. Bunsho Ohtani

13:30 - 14:20 PL-2 Prof. Koichi Eguchi
Ammonia as an energy carrier and related catalysis

14:20 - 14:40 Coffee break

14:40 - 16:00 Chair: Prof. Ichiro Yamanaka, Dr. Ewa Kowalska

14:40 - 15:00 OA-03 Dr. Atthapon Srifa
CO₂-free hydrogen production via ammonia decomposition over molybdenum nitride-based catalysts

15:00 - 15:20 OA-04 Dr. Toshiyuki Yokoi
Direct conversion Methane to Methanol over Zeolite catalyst / H₂O₂ system

15:20 - 15:40 OA-05 Dr. Osamu Tomita
Manganese-substituted-polyoxometalate as an Effective Shuttle Redox Mediator in Z-scheme Water Splitting into H₂ and O₂ under Visible Light
15:40 - 16:00  **OA-06 Dr. Tomohiro Higashi**
Overall Water Splitting by Photoelectrochemical Cell Composed of La$_5$Ti$_2$(Cu,Ag) S$_5$O$_7$
Photocathode and BaTaO$_2$N Photoanode under Simulated Sunlight

**June 30 / Room B**

10:40 - 11:50  *Chair: Dr. Carsten Sievers, Dr. Ken Motokura*

10:40 - 11:00  **OB-01 Dr. Ryoichi Otomo**
Modification of Acidic/Basic Properties of Sn-Beta with Cations as Catalyst for Baeyer-Villiger Oxidation with H$_2$O$_2$

11:00 - 11:20  **OB-02 Dr. Asep Bayu**
Preparation of Sn-$\beta$-Zeolite via Immobilization of Sn/ChCl Complexes as a Highly Active Solid Catalyst for Glucose-Fructose Isomerization Reactions

11:20 - 11:50  **IL-2 Prof. Stuart Taylor**
Catalytic selective oxidation of biobutanol using supported metal nanoparticles

11:50 - 13:30  Lunch

14:40 - 16:30  *Chair: Prof. Bert F. Sels, Dr. Atsushi Takagaki*

14:40 - 15:10  **IL-3 Dr. Evgeny Pidko**
Rational design of catalytic processes for CO$_2$ valorization: from theory to devices

15:10 - 15:30  **OB-03 Dr. Sho Yamaguchi**
Tin-catalyzed cascade synthesis of five-membered lactones using biomass-derived sugars as carbon nucleophiles

15:30 - 15:50  **OB-04 Dr. Ken Motokura**
Rh Complex and Tertiary Amine Immobilized on a Same SiO$_2$ Surface: Heterogeneous Double-Activation Catalysis and Estimation of Active Site Distance Using a Probe Molecule

15:50 - 16:00  Break

16:00 - 16:30  **IL-4 Dr. Shinji Inagaki**
Mesoporous organosilica chelating ligand for heterogeneous metal complex catalysis

**July 1 / Room A**

9:00 - 9:50  *Chair: Prof. Jorge Beltramini*

9:00 - 9:50  **PL-3 Prof. Bert F. Sels**
The role of heterogeneous catalysis in liquid phase processing of lignocellulose

9:50 - 10:10  Coffee break
10:10 - 12:10 Chair: Dr. Evgeny A. Pidko, Dr. Kohsuke Mori

10:10 - 10:40 **IL-5 Dr. Roberto Rinaldi**
What is the best way to start lignin conversion strategies: From lignocellulose or pulping (lignin) waste?

10:40 - 11:00 **OA-07 Prof. Jorge Beltramini**
Effect of synthesis conditions, promoter and support on the catalytic hydrodeoxygenation of model lignin compounds over supported MoS$_2$ based catalysts

11:00 - 11:10 Break

11:10 - 11:40 **IL-7 Dr. Carsten Sievers**
Ceria-based catalysts for hydrodeoxygenation of bio-oils and selective oxidation of methane

11:40 - 12:10 **IL-8 Prof. Friederike C. Jentoft**
Heterogeneously catalyzed single-step conversion of glycols to olefins

12:10 - 13:40 Lunch

13:40 - 15:40 Chair: Prof. Shengjun Huang, Dr. Roberto Rinaldi

13:40 - 14:00 **OA-08 Dr. Abhijit Shrotri**
Conversion of lignocellulosic biomass to monomeric sugars in a high-pressure slurry flow reactor with oxygenated carbon catalyst

14:00 - 14:20 Cancelled

14:20 - 14:40 **OA-10 Dr. Rodiansono**
Highly Selective Hydrogenation of Furfural over Novel Ni-In Alloy Supported on Aluminium Hydroxide

14:40 - 15:00 **OA-11 Dr. Sarwat Iqbal**
The conversion of levulinic acid into γ-valerolactone using Cu-ZrO$_2$ catalysts

15:00 - 15:20 **OA-12 Dr. Atsushi Takagaki**
Kinetic analysis of cyclodehydration of 1,4-diols over a layered niobium molybdate solid acid

15:20 - 15:40 **OA-13 Dr. Tasuku Komanoya**
One-pot conversion of glycerol to lactic acid over Pt nanoparticles-TiO$_2$ combined catalysts

15:40 - Closing remarks
July 1 / Room B

10:40 - 12:10 Chair: Prof. Yuichi Kamiya, Dr. Junko N. Kondo

10:40 - 11:10 **IL-6 Dr. Yoshihide Watanabe**
New aspect of metal-support interaction unraveled by atomic-scale analysis

11:10 - 11:30 **OB-05 Dr. Yasuharu Kanda**
Low temperature synthesis of noble metal phosphides catalysts using triphenylphosphine as a phosphorus source

11:30 - 11:50 **OB-06 Prof. Naonobu Katada**
Methane as methylating agent on Co/MFI zeolite catalyst

11:50 - 12:10 **OB-07 Dr. Zen Maeno**
Highly Efficient Depolymerization of Polyethers with Carboxylic Acid Derivatives to Glycol Diesters Using Heterogeneous Montmorillonite Catalyst

12:10 -13:40 Lunch

13:40 - 14:30 Chair: Prof. Mayumi Nishida

13:40 - 14:10 **IL-9 Dr. Jens S. Hummelshøj**
Catalysis data warehouse

14:10 - 14:30 **OB-08 Dr. Akira Nakayama**
First-Principles Simulations of Catalytic Reactions at the Water/CeO$_2$(111) Interface: Role of the Acid-Base Sites
Poster program

P-01  **Weiwei Yang**  
Preparation of highly stable supported Ni catalysts and their catalytic performance in carbon dioxide reforming of methane

P-02  **Mayumi Nishida**  
Reverse Water Gas Shift Reaction Using SILP Catalyst

P-03  **Yuththaphan Phongboonchoo**  
Ce-Mg promoted copper-based catalysts for hydrogen production via methanol steam reforming

P-04  **Qiuyi Yuan**  
A PTRF-XAFS Investigation of the Structure of the Pt Monolayer Prepared by Surface Limited Redox Reaction

P-05  **Kenta Kobayashi**  
Facet-selective Deposition of Metal Particles on Decahedral-shaped Titania Photocatalyst Particles

P-06  **Daiki Kido**  
Ultrafast XAFS Studies of WO$_3$ during the Photoexcited Process

P-07  **Kunlei Wang**  
Influence of Platinum-loading Amount on Photocatalytic Activity of Titania Particles Prepared from Evonik P25

P-08  **Haruna Hori**  
Kinetic Study on Two-electron Transfer in Photocatalytic Oxidative Decomposition of Organic Compounds by Hydrothermally Prepared Bismuth Tungstate

P-09  **Zhishun Wei**  
Noble Metal-modified Octahedral Anatase Titania Particles with Enhanced Photocatalytic Activity for Decomposition of Chemical and Microbiological Pollutants

P-10  **Sayaka Misu**  
Low temperature synthesis of reduced titanium oxide Ti$_2$O$_3$ by the reduction of TiO$_2$ with TiH$_2$

P-11  **Hiroko Ariga**  
Direct measurements of oxygen vacancy in TiO$_2$ single crystal

P-12  **Hassan Nageh**  
Synthesis and Solid-state Structure of π-Stacked Poly(dibenzofulvene)

P-13  **Hiroki Nakata**  
Synthesis of Titanacyclopentene by Using 1,2-Dibromoethane as New C2 Source

P-14  **Yue Wang**  
Chirality Induction to a Star-shaped Polyfluorene Derivative Using Circularly Polarized Light
Akihiro Kimura
Synthesis and Performance of Polyurethane-Based Catalyst for Direct Borylation of Aromatic Compounds

Masayoshi Bando
Construction of Novel Carbon Skeleton from Titanacyclopentadiene

Nobuhiro Ishito
Synthesis of Ru-immobilized bipyridine containing periodic mesoporous organosilica and application for selective oxidation of alkanes

Shuhei Yasuda
Role of water vapor in the selective oxidation of methacrolein over 12-molybdophospholic acid catalyst

Ken-ichi Shimizu
Reductive transformations of CO₂, carboxylic acids and amides into chemicals

Hiromi Matsuhashi
Synthesis of Mayenite (C12A7) with High Surface Area and Application to Base Catalyzed Reto–Aldol Reaction of Diacetone Alcohol

Md. Ayub Ali
Development of Efficient Catalytic Processes for Synthesis of Imides and Amides Utilizing Nb₂O₅ Catalysts

Yusuke Kita
Lewis Acid-catalyzed Amide Bond Cleavage reaction

Takashi Toyao
Conversion of Amides to Esters by Utilizing a Reusable CeO₂ Catalyst

Nobutaka Yamanaka
Chemoselective hydrogenation of unsaturated nitro compounds to unsaturated amines by Ni-Sn alloy catalysts

Sondomoyee Konika Moromi
Acceptorless Dehydrogenation Reactions Catalyzed by Supported Pt Catalysts

Natsumi Hasegawa
Cracking reaction of heavy oil catalyzed by TiO₂-ZrO₂ complexes under superheated steam condition

Satoshi Suganuma
Influence of acidic properties of solid catalysts on dehydration of glycerol

Haruka Yokoyama
Dehydration of sorbitol to isosorbide over *BEA zeolite
Ting-cih Kang
Hydrogen Peroxide-Assisted Liquid Phase Oxidation of 5-Hydroxymethylfurfural (HMF) in Aqueous System

Jose L. Contreras Mora
Evaluation and Characterization of Carbon-Supported Nobel Metals for the Hydrodeoxygenation (HDO) of Acetic Acid

Daolai Sun
Vapor-phase lactonization of levulinic acid into angelicalactones

Satoshi Seki
Unusual loading-dependence of Au nanoparticle size in the O₂ plasma preparation method

Taichi Shirobe
A Mixed-Solvent Approach to Delaminate Lamellar Precursors of MWW-type Molecular Sieves

Michiko Kitagawa
HCl removal from a vapor phase using MgO prepared by short-time thermal decomposition of Mg(OH)₂

Naoki Nakatani
Geometry and electronic structures of iron-sulfur clusters: A theoretical study on the basis of density matrix renormalization group

Ray Miyazaki
Mechanism of ethylene oxidation by Pt catalyst supported on mesoporous silica: a theoretical study

Jun-ya Hasegawa
Coupling Reaction of CO₂ and Epoxide for Cyclic Carbonate Synthesis by Bifunctional Porphyrin Catalysts: a Theoretical Study

K-jiro Watanabe
Theoretical study of the reaction pathway via intersystem crossing: CO and H₂ binding reaction to molybdenocene