

PROGRAMME

Tuesday, September 1st, 2015

Venue: Institute of Inorganic Chemistry, Landoltweg 1, Room 202, 52056 Aachen

10:00 Welcome

Prof. Dr. Jun Okuda
Spokesman SeleCa, RWTH Aachen University

Prof. Dr. Rudolf Mathar
Vice-Rector for Research and Structure
RWTH Aachen University

Chair: Daniel Hack, M.Sc.

10:10 Plenary Lecture

Prof. Dr. Parisa Mehrkhodavandi, University of British Columbia
Chiral Indium and Zinc Catalysts for the Living and Immortal Polymerization of Cyclic Esters

10:55 Julian Kleemann, M.Sc. RWTH Aachen University
Polymetallic Catalysts for the Copolymerization of Cyclohexene Oxide with CO₂: Metalla-Crown Ethers as Ligands for Rare Earth Metals

11:10 Dr. Michael Tauchert, RWTH Aachen University
Synthesis and Properties of Palladium Complexes Featuring Diphosphinoborane Ligands

11:30 – 11:50 Coffee Break

Chair: Sebastian Guski, M.Sc.

11:50 Prof. Dr. Takashi Hayashi, Osaka University
Construction of a Biohybrid Catalyst Using an Apo-Form of a Hemoprotein

12:20 Daniel Sauer, M.Sc. RWTH Aachen University
β-Barrel Protein as Scaffold for Biohybrid Catalysis: Activation of C-C Triple Bonds

12:35 Alexander Grimm, M.Sc. RWTH Aachen University
Protein Engineering of FhuA and Nitrobindin for Hybrid Catalysts

12:50 Dr. Tobias Beck, RWTH Aachen University
Superstructured Protein-Based Nanomaterials

13:10 – 14:30 Lunch Break

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Chair: Steffen Mader, M.Sc.

14:30 Prof. Dr. Markus Albrecht, RWTH Aachen University
A Highly Specific Luminescent Lanthanide(III) Receptor for anions – Is Selectivity just an Illusion?

15:00 Ass. Prof. Dr. Kazuhiro Takenaka, Osaka University
Catalytic Cyclative Haloacetoxylation Based on Palladium Enolate Umpolung

15:20 Makoto Sako, M.Sc. Osaka University
Vanadium(V)-Catalyzed Enantioselective C-C Bond Formation Reactions

15:35 Rebekka Bohmann, M.Sc. RWTH Aachen University
Rhodium-Catalyzed Direct Coupling of Aromatic Benzothioamides with Alkenes

15:50 – 16:10 Coffee Break

Chair: Kai Rohmann, M.Sc.

16:10 Prof. Dr. Shinobu Itoh, Osaka University
Direct Hydroxylation of Benzene to Phenol using Hydrogen Peroxide Catalyzed by Nickel Complexes Supported by Pyridylalkylamine Ligands

16:40 Tsukasa Abe, M.Sc. Osaka University
Geometric Control of Cu(I)/O₂-Reactivity by Using a Series of Cyclic-Diamine Ligands

16:55 Dipl.-Ing. Sanel Suljic, FZ Jülich
Multi-Copper Oxidases in Organic Synthesis

17:10 Kaname Shibata, M.Sc. Osaka University
The Alkylation of C-H Bonds in Aromatic Amides with α,β-Unsaturated Lactones of Dihydrofurans Catalyzed by Rhodium Complexes via a Bidentate-Chelation Assistance

18:00 Dinner at "Elisenbrunnen"

Wednesday, September 2nd, 2015

Venue: Institute of Inorganic Chemistry, Landoltweg 1, Room 202, 52056 Aachen

Chair: Hannah Baars, M.Sc.

09:30 **Plenary Lecture**
Prof. Dr. Sensuke Ogoshi, Osaka University
Transformation of Tetrafluoroethylene via Transition Metal Intermediates

10:15 Haruka Nishiyama, M.Sc. Osaka University
Synthesis and Transformation of Tungsten Alkylidyne Complexes Bearing Sulfur- and Oxygen-containing Tetradentate Ligand

10:30 Michael J. Lopez, M.Sc. Osaka University
Hydroalkylation of Alkynes via C(SP³)-H Bond Activation of 2,6-Dimethyl-N-Heterocycles by Cationic Alkylhafnium Complexes with Tridentate Nitrogen-Based Ligands

10:45 Prof. Dr. Masahiro Miura, Osaka University
Rhodium-Catalyzed Annulative Coupling of Arylated Heteroarenes with Alkynes

11:15 Jendrik Wülbbern, M.Sc. RWTH Aachen University
Hydrogenation of CO₂ – Experiment vs. DFT

11:30 – 11:50 Coffee Break

Chair: Lena Meißner, M.Sc.

11:50 Prof. Dr. Jochen Büchs, RWTH Aachen University
Online Monitoring of Fermentation Processes via Non-Invasive Low-Field NMR

12:20 Hiroyuki Ohashi, M.Sc. Osaka University
Novel L-Galactosyltransferase activity: A Key to the Elucidation of Plant Cell Wall Biosynthesis

12:35 Phan Nguyen Thuy An, M.Sc. Osaka University
Metabolomic Profiling of Drosophila melanogaster Metamorphosis

12:50 – 14:10 Lunch Break

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12:50 – 14:10 Lunch Break

Chair: Julien Engel, M.Sc.

14:10 Prof. Dr. Iris Oppel, RWTH Aachen University
Supramolecular Coordination Compounds and their Application in Catalysis

14:40 Christian Göb, M.Sc. RWTH Aachen University
A New Synthesized Ligand Class, its First Coordination Compounds and Possible Applications

14:55 Prof. Dr. Yoshito Tobe, Osaka University
Reversal of Supramolecular Chirality at Solid-Liquid Interface via two Competing Induction Mechanisms

15:25 Kohei Iritani, M.Sc. Osaka University
Construction of Two-Dimensional Cyclic Array of Zinc Porphyrin Derivative and Binding of Fullerene

15:40 – 16:00 Coffee Break

Chair: Manja Henze, M.Sc.

16:00 Prof. Dr. Eiichiro Fukusaki, Osaka University
*Metabolomic Approach for Improving Ethanol Stress Tolerance in *Saccharomyces cerevisiae**

16:30 Yudai Dempo, M.Sc. Osaka University
Stable Isotope-Assisted Analysis for Cyanobacterial TCA Cycle by Integrating Multiple Analytical Systems

16:45 Risa Harada, M.Sc. Osaka University
Metabolomics-Based Investigation of Component Changes in Soy Sauce Fermentation

17:00 Prof. Dr. Lars Blank, RWTH Aachen University
Whole-cell Biocatalysis for the Production of Valuable Molecules from Renewable Resources

17:30 Prof. Dr. Kazuhito Fujiyama, Osaka University
Characterization and Application of Plant Glycosyltransferase for Plant Secondary Metabolite Engineering

18:00 Closing Remarks

Prof. Dr. Kazushi Mashima

18:30 Dinner