

3rd International Symposium of the Catalysis Research Center

Frontiers in Heterogeneous Catalysis

22-23 October 2010

Lecture Hall 26411

TU München, Department of Chemistry, Lichtenbergstr. 4, 85748 Garching, Germany

Friday, 22 October 2010

8:30 Registration

9:00 Welcome

Session 1: Modelling in Reactor Engineering

9:10 Elias Klemm, Universität Stuttgart, Germany
Heterogeneously catalysed selective oxidations inside the explosion regime using micro reactors

10:10 Joris Thybaut, Ghent University, Belgium
Catalytic Reaction Engineering - Single-Event MicroKinetics (SEMK)

11:10 Coffee Break

Session 2: Catalyst Characterization

11:30 Jeffrey T. Miller, Argonne National Laboratory, USA
X-Ray Spectroscopy in Catalysis Research: Application to Au Catalysts

12:30 Lunch Break

Session 3: Biomass Conversion

14:00 Franck Dumeignil, Université Lille 1, France
Next Generation Biorefineries & Catalysis

15:00 Regina Palkovits, MPI für Kohlenforschung, Germany
Catalyst development for the efficient utilization of conventional and renewable feedstocks

16:00 Coffee Break

Session 4: From Mechanistic Understanding to Catalyst Design

16:30 Friederike Jentoft, University of Oklahoma, Norman, USA
Acid and bifunctional catalysts for hydrocarbon activation and conversion

17:30 Emiel J.M. Hensen, Eindhoven University of Technology, The Netherlands
From mechanistic insight towards rational design of heterogeneous catalysts

18:30 End

19:30 Conference Dinner

Saturday, 23 October 2010

Session 5: Photochemistry and Novel catalytic systems

- 9:00 Valérie Keller-Spitzer, Université Louis Pasteur Strasbourg, France
Photocatalysis as a clean process for environment and energy: advantages and limitations
- 10:00 Hermenegildo García, Universidad Politécnica de Valencia, Spain
Metal Organic Frameworks as Heterogeneous Catalysts for Organic Reactions
- 11:00 Coffee Break

Session 6: Novel catalytic systems

- 11:30 Christopher W. Jones, Georgia Institute of Technology, USA
Heterogenized M-Salen Catalysts for Enantioselective Reactions: Catalyst Design, Structure-Reactivity Trends, and Deactivation Pathways
- 12:30 Javier Pérez-Ramírez, ETH Zürich, Switzerland
Catalyst development for Cl₂ production via HCl oxidation: from fundamentals to implementation
- 13:30 Lunch Break

Session 7: Catalyst Design

- 14:30 Laura Prati, Università degli Studi di Milano, Italy
Gold based catalysts for liquid phase oxidation
- 15:30 Ive Hermans, ETH Zürich, Switzerland
Catalytic Activation of Peroxides
- 16:30 End