

Minutes of the 16th Nordic Symposium on Catalysis – NSC2014

The 16th Nordic Symposium on Catalysis was organized on the University campus in Oslo during June 15th -17th 2014. The Nordic Symposium on Catalysis is organized biannually and circulates among the Nordic countries. The symposia are organized within the framework of the Nordic Catalysis Society (www.nordic-catalysis.org). This symposium series constitutes a unique meeting ground for researchers within all aspects of catalysis in the Nordic countries. The organization committee had chosen “From fundamentals to industrial application” as the theme for the 16th symposium.

About 190 participants had registered for the symposium, which is close to the number of participants at the 15th symposium organized in Åland in 2012. The scientific committee received around 170 abstracts. 44 of these were chosen for regular oral presentations, whereas the authors not awarded oral presentations were given the opportunity to present their work as posters. Moreover, there were four plenary lectures and four Nordic keynote lectures.



About 190 people attended the 16th Nordic Symposium on Catalysis (photo: Reynald Henry, UiO).

Attendants at the symposium enjoyed the very high scientific level of the four invited plenary lecturers. Prof. Johannes Lercher (Technische Universität München) discussed the reactivity of acidic zeolites and other catalysts in his presentation "Acid-base catalysis in constraints – A general principle for catalysis?". In 2014, we have celebrated the 150th anniversary of the discovery of the Law of Mass Action in Oslo. Prof. Bjørn Pedersen (University of Oslo) gave a

popular scientific account of the lives and careers of the two Norwegian scientists Cato M. Guldberg and Peter Waage who made the discovery. Prof. Matthias Beller (Leibniz-Institut für Katalyse e.V. an der Universität Rostock) compared the use of homogeneous and heterogeneous catalysts and wished to spur discussion with the somewhat provocatively entitled presentation: "Selective Organic Synthesis with Homogeneous and Heterogeneous Catalysts: Which one is better?". Dr. Christoph Gürtler (Bayer MaterialScience AG) explained how not only scientific challenges, but also business aspects contribute to Bayer's efforts towards the development of commercial utilization of CO₂ as raw material for chemical products, such as sustainable polyurethane for *e.g.* mattresses.



Plenary speakers, from left to right: Prof. Matthias Beller, Prof. Johannes Lercher, Prof. Bjørn Pedersen, Dr. Christoph Gürtler (photos: Reynald Henry, UiO).

It has become tradition that four representatives of the Nordic countries are given the opportunity to present their work as Nordic keynote lecturers. The tradition was upheld at the 16th symposium by Dr. Esa Toukoniitty, Helsinki Metropolia University of Applied Sciences ("Towards understanding of enantioselective hydrogenation over chiral modified Pt"); Assoc. Prof. Hanna Härelind, Competence Centre for Catalysis, Department of Chemical and Biological Engineering, Chalmers University of Technology ("Aspects of reducing agent, active sites and reaction mechanisms for lean NO_x reduction over silver-alumina catalysts"); Assistant Prof. Christian Danvad Damsgaard, Department of Physics, Technical University of Denmark ("Adding the environmental TEM to the in situ toolbox for catalyst characterization"); Prof. Vincent G.H. Eijsink, Department of Chemistry, Biotechnology and Food Science, Norwegian University of Life Sciences ("Lytic polysaccharide monooxygenases - novel enzymes for improved biomass processing").

A poster award was kindly sponsored by two journals published by the Royal Society of Chemistry - Green Chemistry and Catalysis Science & Technology. The winner of the Green Chemistry award was Aron Dombovari from the Microelectronics and Materials Physics

Laboratories, Department of Electrical Engineering, University of Oulu, for the poster entitled: "Photocatalytic processing of algae". The jury praised the poster for being eye catching and well presented. The winner of the Catalysis Science and Technology award was Jacob O. Abildstrøm from the Department of Chemistry at the Technical University of Denmark, for the poster entitled: "Investigation of mesoporous TS-1 for the catalytic formation of N-oxides". The jury found the poster to be well presented, straightforward, readable, balanced and informative.

The proceedings of the symposium will be published as a special issue in Topics in Catalysis. More information about the program of the symposium, and photographs, can be found on the symposium website: www.mn.uio.no/kjemi/english/research/groups/catalysis/events/nsc2014/

The symposium was kindly sponsored by the Research Council of Norway via the GASSMAKS program, the Department of Chemistry and the Center for Materials Science and Nanotechnology at UiO, the Catalysis Section of the Norwegian Chemical Society, and World Scientific and Imperial College Press. Several suppliers of instruments and scientific equipment exhibited their products at the symposium; Matriks; Houm; Nerliens Meszansky; Flow-Teknikk; Heco Laboratorietstyr; Teknolab; Process Partner; Dotmatics; Hiden Analytical.

On behalf of the local organization committee, I wish to thank the symposium sponsors, exhibitors, all the members of the organization committee and the scientific committee, as well as all the students of the Catalysis group at UiO for their contributions towards organization and execution of the symposium.

Stian Svelle
Leader of the local organizing committee
16th Nordic Symposium on Catalysis

PS – the 17th Nordic Symposium on Catalysis will be organized in Lund, Sweden, June 14th-16th 2016.