



Faggruppe for katalyse



Norsk Kjemisk Selskap

NORWEGIAN CATALYSIS SYMPOSIUM 2017

DET 21. LANDSMØTE I KJEMI

OCTOBER 16TH – 17TH 2018

NORWEGIAN TRADE FAIR - LILLESTRØM

Catalysis Division of the Norwegian Chemical Society – Tuesday October 16th

- 09.15 – 12.00 Plenary sessions – General chemistry
- 12.00 – 14.00 Lunch and visit to the laboratory exhibitions
- 14.00 - 15.00 Poster session – Catalysis, Inorganic Chemistry, Macromolecules
- 15.00 - 15.40 **Invited speaker** – Dr. Moniek Tromp, Faculty of Science and Engineering, Materials Chemistry — Zernike Institute for Advanced Materials, University of Groningen, The Netherlands
Probing Active Species in Catalysis – Application of Advanced X-ray Techniques
- 15.40 - 16.00 **Catalysis 1** - Ole Håvik Bjørkedal, Norwegian University of Science and Technology, *One-step sol-gel synthesis of Cu/Ordered Mesoporous Alumina Powders*
- 16.00 - 16.20 **Catalysis 2** - Elisa Borfecchia, University of Oslo - *Methane to methanol conversion over Cu-zeolites – the XAS view*
- 16.20 - 16.40 Break
- 16.40 - 17.00 **Catalysis 3** – Christian Ahoba-Sam, University of South-Eastern Norway, *Low temperature methanol synthesis catalyzed by Copper nanoparticles and alkoxide system*
- 17.00 - 17.20 **Catalysis 4** – Zhixin Yu, University of Stavanger, *Bimetallic Ni-Fe hydrotalcite-derived catalysts for dry reforming of methane*
- 17.20 - 17.40 **Catalysis 5** – Kristian Stangeland, *University of Stavanger, Mesoporous spinel manganese-cobalt oxide catalysts for CO₂ hydrogenation to methanol*
- 17.40 - 18.10 **Catalysis 10** – Hilde J. Venvik, Norwegian University of Science and Technology, *iCSI – industrial Catalysis Science and Innovation – a Centre for Research-based Innovation (SFI)*
- 18.30 Aperitif in hotel lobby
- 19.00 Conference dinner

Catalysis Division of the Norwegian Chemical Society – Wednesday October 17th

- 08.30 – 12.00 Plenary sessions – General chemistry
- 12.00 – 14.00 Lunch and visit to the laboratory exhibitions
- 14.00 - 14.40 **Invited speaker** – Dr. Jerome Canivet, Chargé de recherche CNRS, ING Team IRCELYON, France
From Homogeneous to Heterogeneous catalysis: Use of Microporous Solids as Macroligands
- 14.40 - 15.00 **Catalysis 7** – Emil Sebastian Gutterød, University of Oslo - CO_2 Hydrogenation over Functionalized UiO Zr-MOFs
- 15.00 - 15.20 **Catalysis 8** – Andrea Lazzarini, University of Oslo, *Operando* characterization of Pd-functionalized UiO-67 for CO_2 hydrogenation reaction
- 15.20 - 15.40 **Catalysis 9** – Evgeniy A. Redekop, University of Oslo, *Adsorption, diffusion, and methylation of light alkenes in AFI zeotypes: insights from pulse-response TAP measurements*
- 15.40 - 16.10 Break
- 16.10 - 16.30 **Catalysis 6** - Marie Døvre Strømsheim, Norwegian University of Science and Technology - *The CO-induced surface reconstruction on Co(11-20) - a combined theoretical and experimental investigation*
- 16.30 - 16.50 **Catalysis 11** - Muhammad Zubair, Norwegian University of Science and Technology, *Facile synthesis approach for core-shell TiO_2 -CdS nanoparticles for enhanced photocatalytic H_2 generation from water*
- 16.50 - 17.10 **Catalysis 12** - Eirik Mydske Thoresen, University of Oslo, *Photocatalytic MOFs for CO_2 reduction*
- 17.10 - 17.30 **Catalysis 13** - Gurpreet Kaur, University of Oslo, *Effects of synthesis conditions on the properties and defectivity of metal-organic framework UiO-67*
- Closing remarks*

Catalysis Division of the Norwegian Chemical Society

Poster program – Tuesday October 16th, 14.00 – 15.00

Poster 1 – Karoline Kvande, University of Oslo, *Selective Oxidation of Methane to Methanol Over Cu-loaded SAPO-34 Catalysts*

Poster 2 – Bjørn Gading Solemsli, University of Oslo, *Investigation of the effect of different activation conditions on the catalytic activity of Pt-functionalized UiO-67*

Poster 3 – Irene Pinilla-Herrero, University of Oslo, *Influence of the pressure and the reaction flow regime on the conversion of methanol to aromatics*

Poster 4 – Giuseppe Rotunno, University of Oslo, *The use of UiO-type MOFs in gas phase Soai reactions*

Poster 5 – Carlo Buono, University of Oslo, *A DFT study on the reaction mechanism of methane to methanol direct conversion via Cu-exchanged chabazite catalyst*

Poster 6 – Maria Kalyva, University of Oslo, *Bimetallic CuPt and CuPd nanoparticles prepared by Microwave Synthesis for CO₂ conversion to useful fuels*

Poster 7 – Georgios N. Kalantzopoulos, University of Oslo, *Real-time regeneration of a working zeolite monitored via operando space-resolved X-Ray diffraction*

Poster 8 – Mustafa Kømurcu, University of Oslo, *Ethene dimerization with metal-organic framework (MOF) functionalized with Ni(II) and bipyridine*

Poster 9 – Cristiano Glessi, University of Oslo, *Synthesis and characterization of gold(I) NHC complexes suitable as FEBID precursors*

Poster 10 – Christopher W. Affolter, University of Oslo, *Production of high surface area zirconium oxides through thermal metamorphosis of metal organic frameworks*

Poster 11 – Julie Héron, University of Oslo, *Magnetic properties of [NpO₂(dpc)₂]²⁻ in solid and in solution*

Poster 12 – Isabelle Gerz, University of Oslo, *Biomimetic copper complexes for incorporation into MOFs*

Poster 13 – Simen P. Følknør, University of Bergen, *A Niobia-Supported Iridium-Based Catalyst for Deoxygenation of Lignin-Derived Model Compounds*