

# **Scientific Program**

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Thursday December 3. 2015

09.30-10.00 **Registration & coffee**

10.00-10.15 **Welcome - Erwan Le Roux - Organizer of the Norwegian Catalysis Symposium**

*Session 1 (Chair: Erwan Le Roux)*

10.15-11.00 PL1- **Michael North** - University of York  
*25 Years of C<sub>1</sub> Catalysis*

11.00-11.20 OC1- **Wietse Smit** – University of Bergen  
*Phosphine-Based Z-Selective Ruthenium Olefin Metathesis Catalysts*

11.20-11.40 OC2 - **Coralie C. Quadri** – University of Bergen  
*Tridentate N-Heterocyclic Carbene Titanium Complexes for the Copolymerization of Carbon Dioxide and Cyclohexene Oxide*

11.40-12.00 OC3 - **Knut Tormodssønn Hylland** – University of Oslo  
*Catalysis in Practice: The Application of the Suzuki-Miyaura Reaction in the Synthesis of Ligands for Metal-Organic Frameworks*

12.00-13.30 **Lunch**

*Session 2 (Chair: Knut Børve)*

13.30-14.00 KL1 - **Giovanni Occhipinti** – University of Bergen  
*How to Teach Z Selectivity to Grubbs Catalysts*

14.00-14.20 OC4 - **Mustafa Kõmurcu** – University of Oslo  
*Oligomerization of Ethene with Ni Containing Zeolite at High Pressure*

14.20-14.40 OC5 - **Bjørnar Arstad** – SINTEF Material and Chemistry  
*Studies of SAPO-34 During and After Hydrothermal Treatment*

14.40-15.00 OC6 - **Sondre Eliasson** – University of Bergen  
*Automated Prediction of Optimized ruthenium Catalysts for Olefin Metathesis*

15.00-15:20 **Coffee break**

*Session 3 (Chair: Vidar R. Jensen)*

15.20-15.40 OC7 - **Ørjan Espeseth** – Matriks AS  
*The Development of On-Line “Tandem and Single Micro Reactor GC/MS System” Useful for Rapid Catalyst Screening*

- 15.40-15.50 FC1 - **Franziska S. Ihlefeldt** – University of Oslo  
*Gold(III)-Mediated Nucleophilic Addition to Alkenes*
- 15.50-16.00 FC2 - **Reynald Henry** – University of Oslo  
*Study of CO<sub>2</sub> Reduction by Non-Stoichiometric Cerium Oxide with Transient Response Experiments*
- 16.00-16.10 FC3 - **Maria Campanyà i Llovet** – University of Bergen  
*Synthesis of Zwitterionic and Tridentate N-Heterocyclic Carbene Lanthanide Complexes*
- 16.10-16.20 FC4 - **Katarzyna A. Łukaszuk** – University of Oslo  
*Shape-Selectivity of Offretite in the Methanol-to-Hydrocarbons Reaction*
- 16.20-16.30 FC5 - **Ljubiša Gavrilović** – Norwegian University of Science and Technology  
*Fischer-Tropsch Synthesis- Investigation of Co Catalyst by Exposure to Aerosol Particles of Potassium Salts*
- 16.30-16.40 FC6 - **Malte Nielsen** – University of Oslo  
*Kinetics of Zeolite Dealumination: Insights from H-SSZ-13*
- 16.45-17.15 *Annual meeting of NKS Katalyse (for members only)*

**17.15-19.00 Happy hour!**

**19:00- Dinner at Hotel Grand Terminus**

## Friday December 4, 2015

### Session 4 (Chair: Annette Bayer)

- 09:15-10:00 PL2 - **Andrei Y. Khodakov** - University of Lille  
*Design of Catalysts for Syngas Conversion Reactions with Enhanced Selectivity to Specific Products*
- 10.00-10.20 OC8 - **Christian Ahoba-Sam** – Telemark University College  
*Low Temperature Methanol Synthesis by a Copper Alkoxide System*
- 10.20-10.40 OC9 - **Eirik Østbye Pedersen** – Norwegian University of Science and Technology  
*Fischer-Tropsch Production of Light Olefins by Mn Promoted Co/Al<sub>2</sub>O<sub>3</sub> Catalysts*

### 10.40-11.00 Coffee break

### Session 5 (Chair: Klaus-Joachim Jens)

- 11.00-11.30 KL2 - **Rasmus Y. Brogaard** – University of Oslo  
*Ethene Oligomerization in Ni-Containing Zeolites: Theoretical Discrimination of Reaction Mechanisms*
- 11.30-11.50 OC10 - **Diego Peña** – Norwegian University of Science and Technology  
*The Effect of Copper Loading on Carbide Phase Formation in Iron Based catalysts During Fischer-Tropsch Synthesis: In-Situ X-Ray Absorption Spectroscopy and High-Resolution X-Ray Powder Diffraction Studies*
- 11.50-12.10 OC11 - **Juan S. Martínez-Espín**– University of Oslo  
*The Effects of Methanol and Dimethyl Ether as Methylating Agent During Zeolite-Catalyzed Benzene Methylation*

### 12.10-13.30 Lunch

### Session 6 (Chair: Stian Svelle)

- 13.30-14.00 KL3 - **Magnus Rønning** – Norwegian University of Science and Technology  
*Nitrogen-Doped Carbon Nanomaterials as Alternative Catalysts for the Oxygen Reduction Reaction*
- 14.00-14.20 OC12 - **Pablo del Campo** – University of Oslo  
*Influence of Post-Synthetic Treatments on Unidirectional ZSM-22 Zeolite Catalyst: Towards Improved Clean Gasoline Catalytic Process*
- 14.20-14.40 OC13 – **Evgeniy A. Redekop** – University of Oslo  
*Temporal Analysis of Products (TAP)- An Advanced Tool for Time-Resolved Kinetic Characterization of Industrially-Relevant Microporous Materials*
- 14.40-15.00 OC14 - **Georgios N. Kalantzopoulos** – University of Oslo

*Structural Characterization and Hydrothermal Stability of SAPO-34 and SAPO-37 Catalyst Materials*

**15.00-15:20 Coffee break & Check out**

*Session 7 (Chair: Giovanni Occhipinti)*

15.20-15.40 OC15 - **Daniel Rojo-Gama** – University of Oslo

*Zeolite Deactivation by Coking in the Methanol to Hydrocarbons Process*

15.40-16.00 OC16 - **P. V. Daham S. Gunawardana** – Norwegian University of Science and Technology

*Understanding Catalytic Phenomena Responsible for Metal Dusting*

16.00-16.20 OC17 - **Lukasz Mentel** – University of Oslo

*Descriptor Based Approach to Modelling Acid Catalysed Reactions on Zeotype Materials*

**16:20 Closing address**