

International MOF Symposium 2013

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International Congress Center
Ostra-Ufer 2, 01067 Dresden, Germany

Please note that the time between the presentations will be used for discussion!

September 16, 2013

08:00-09:00 Registration

09:00-09:15 Introduction and welcome: Stefan Kaskel

09:15-09:40 Christian Serre (Université de Versailles, France):
Synthesis and applications of iron based Metal Organic Frameworks

09:45-10:00 Peter Behrens (Leibniz University Hannover, Germany):
Porous interpenetrated zirconium-organic frameworks (PIZOFs):
A family of robust MOFs offering chemically variable pore spaces

10:05-10:20 Koichi Tanaka (Kansai University, Japan):
Novel chiral metal-organic framework crystals for asymmetric catalysis and
enantiomer separation

10:25-10:50 Dirk De Vos (KU Leuven, Belgium):
From opportunistic MOF catalysis to performance-driven design of active sites in
stable materials

10:55-11:25 Coffee Break

11:25-11:40 Eike Brunner (University of Technology Dresden, Germany):
In Situ Solid-State NMR Spectroscopy of Adsorbed Species in Flexible and
Chiral MOFs

11:45-12:00 Kyriakos C. Stylianou (Catalan Institute of Nanotechnology, Spain):
Femtolitre chemistry assisted by microfluidic-pen lithography

12:05-12:20 An Ghysels (Ghent University, USA):
Thermodynamics of framework breathing: free energy model for flexible
porous crystals

12:25-12:40 Harald Krautscheid (University Leipzig, Germany):
Porous coordination polymers with triazolyl benzoate linkers –
crystal structures and properties

- 12:45-14:00 Lunch**
- 14:00-15:00 Poster session + Coffee**
- 15:00-15:25 Martin Schröder (University of Nottingham, UK):**
Porous metal organic materials for gas storage and selectivity
- 15:30-15:45 Olesia Kozachuk (Ruhr University Bochum, Germany), Francesc X. Llabrés i Xamena (Universidad Politécncia de Valencia, Spain):**
Mixed-valence Ru HKUST-1 analogs: Evaluation of the catalytic properties
- 15:50-16:05 Jürgen Caro (Leibniz University Hannover, Germany):**
MOF membranes: A laboratory curiosity or on the jump into the industrial practice?
- 16:10-16:25 Tahnee González Martínez (Linde AG, Germany):**
Screenings of MOF for PSA applications
- 16:30-16:45 Angela Puls (Rubotherm GmbH, Germany):**
Single- and Multi-Component Adsorption Study of Functionalized Cr-MIL-101 as a Possible Candidate for Biogas Purification
- 16:50-17:15 Petr Nachtigall (Charles University Prague, Czechia):**
Accurate *ab initio* description of adsorption on coordinatively unsaturated sites in MOFs
- 17:20 End of 1st day**
- 18:30-22:00 Dinner at Pulverturm**

September 17, 2013

- 09:00-09:25 Shuhei Furukawa (Kyoto University, Japan):**
Mesoscopic structuralization of metal-organic frameworks
- 09:30-09:45 Michael Hirscher (Max Planck Institute for Intelligent Systems, Germany):**
MOFs as quantum sieves for hydrogen isotope separation
- 09:50-10:05 Roland Fischer (Ruhr University Bochum, Germany):**
Functional Metal-Organic Framework Thin Films
- 10:10-10:25 Martín Eduardo Silvestre (Karlsruhe Institute of Technology, Germany):**
Core-Shell magnetic nanoparticle: growth of metal-organic frameworks shells on magnetic nanoparticles
- 10:30-11:00 Coffee break**
- 11:00-11:25 Krista S. Walton (Georgia Institute of Technology, USA):**
Solving MOF instability: exploring factors that impact MOF degradation in the presence of water
- 11:30-11:45 Stefan Wuttke (Ludwig Maximilians University Munich, Germany):**
Synthesis of MOF nanoparticle-supported lipid bilayers and their uptake in cancer cells

- 11:50-12:05 Marko Bertmer (University Leipzig, Germany), Andreas Pöpl (University Leipzig, Germany):**
NMR and EPR studies of small molecule adsorption in MOFs
- 12:10-12:25 Bettina V. Lotsch (Max-Planck Institute for Solid State Research, Germany):**
Exploring host-guest interactions in MOFs through solid-state NMR and new sensing concepts
- 12:30-12:55 Rahul Banerjee (National Chemical Laboratory, India):**
Porous Crystalline Frameworks with/without Metal: Hydrogen Storage, Carbon Capture and Proton Conduction
- 13:00-14:00 Lunch**
- 14:00-15:00 Poster session + Coffee**
- 15:00-15:15 Thomas Bein (Ludwig Maximilians University Munich, Germany):**
Synthesis of luminescent functionalized MOFs for chemical sensing
- 15:20-15:35 Klaus Müller-Buschbaum (University Würzburg, Germany), Hans-Jürgen Holdt (University Potsdam, Germany):**
Single Source White Light Emitting MOFs Retaining the Microporosity by In-situ Co-doping of IFP-1 with Lanthanide Ions
- 15:40-15:55 Felix Jeremias (University Düsseldorf, Germany):**
The *thermal gradient approach* as a favorable way towards polycrystalline, thick and sturdy MOF coatings
- 16:00-16:25 Susumu Kitagawa (Kyoto University, Japan):**
Evolution of functionality of porous coordination polymers/metal-organic frameworks
- 16:30 Concluding remarks: Stefan Kaskel**
- Ca. 17:00 End of conference**

We would like to thank our sponsors:

