

# International Symposium on Metal- Organic Frameworks

September 20 – 21

Technical University Dresden  
Bergstraße 66, 01069 Dresden, Hörsaal 1

**September 20, 2011:**

**09.00-09.10** Introduction: Prof. Dr. Stefan Kaskel, Dresden

Chair: Prof. Dr. Stefan Kaskel

**09.10-09.35** Prof. Dr. Susumu Kitagawa, Kyoto  
Evolution of Functionality of Porous Coordination Polymers/Metal-Organic Frameworks

**09.40-09.55** Prof. Dr. Adelheid Godt, Bielefeld  
Prof. Dr. Michael Wark, Bochum  
Prof. Dr. Peter Behrens, Hannover  
Tailoring the interior of Zr-MOFs via linker design and postsynthetic modification

**10.00-10.15** Prof. Dr. Klaus Müller- Buschbaum, Würzburg  
MOF Based Sorption Sensors by Rare Earth Luminescence

**10.20-10.35** Dr. Igor Baburin, Dresden  
Dr. Stefano Leoni, Dresden  
Computational engineering of MOFs: from understanding structures to optimizing properties

**10.40-11.10** **Coffee Break**

**11.10-11.35** Prof. Dr. Matthew Rosseinsky, Liverpool  
Sorption and Structure in biologically- derived MOF materials

**11.40-11.55** Dr. Stefan Wuttke, München  
Prof. Dr. Adelheid Godt, Bielefeld  
Prof. Dr. Thomas Bein, München  
Oriented growth of functionalized mesoporous MOF crystal layers

**12.00-12.15** Prof. Dr. Roland A. Fischer, Bochum  
Prof. Dr. Christof Wöll, Karlsruhe  
Prof. Dr. Florian Mertens, Freiberg  
Controlled SBU Approach, SURMOFS, and MOF Based Gas Chromatography

**12.20-12.35**            **Michael Sartor, Hamburg**  
**Prof. Dr. Michael Fröba, Hamburg**  
A New Metal-Organic Framework Linked by Struts Derived from the Chiral Pool

**12.40-13.55**            **Lunch Break**

Chair: Prof. Dr. Roland Fischer

**13.55-14.20**            **Prof. Dr. Paul Wright, St. Andrews**  
Structural studies of novel responsive metal-organic frameworks

**14.25-14.40**            **Dr. Michael Hirscher, Stuttgart**  
**Julia Teufel, Stuttgart**  
The Nature of Hydrogen Adsorption in MOFs

**14.45-15.00**            **Julia Teufel, Stuttgart**  
Investigations of gas adsorption in MOFs applying Thermal Desorption Spectroscopy

**15.05-15.20**            **Prof. Dr. Hans-Jürgen Holdt, Golm**  
Control of pore size and functionality in an isorecticular series of microporous metal-organic frameworks based on in situ formation of 2-substituted imidazolate-4-amide-5-imidate

**15.25-15.55**            **Coffee Break**

**15.55-16.20**            **Prof. Dr. Seth M. Cohen, La Jolla**  
Postsynthetic Methods for Functionalizing MOFs

**16.25-16.40**            **Prof. Dr. Harald Krautscheid, Leipzig**  
**Prof. Dr.-Ing. Reiner Staudt, Offenburg**  
**Prof. Dr. Roger Gläser, Leipzig**  
Copper-containing MOFs with substituted triazolyl benzoate linkers: synthesis, structure and properties in adsorption and catalysis

**16.45-17.00**            **Sabine Opelt, Stuttgart**  
Long-term stability and reusability of [Pd(2-pymo)<sub>2</sub>]<sub>n</sub> as hydrogenation catalyst

**17.05-17.20**            **Prof. Dr. Christof Janiak, Düsseldorf**  
MOFs for Heat Transformations

**17.25**                    **Postersession+ Dinner**

## September 21, 2011

Chair: Prof. Dr. Peter Behrens

- 09.00-09.25**            **Prof. Dr. Russell Morris, St. Andrews**  
Multirate delivery of multiple therapeutic agents using MOFs
- 09.30-09.45**            **Dr. Andreas Mavrantakis, Berlin**  
Computational modeling of O<sub>2</sub> adsorption in MFU-1
- 09.50-10.05**            **Dr. Eleni Moushi, Cyprus**  
Multidimensional Coordination Polymers Based on High Nuclearity Manganese Clusters
- 10.10-10.25**            **Dr. Marko Bertmer, Leipzig**  
Structural Changes to Cu<sub>3</sub>(btc)<sub>2</sub> due to Incorporation of Small Molecules as Studied by <sup>1</sup>H and <sup>13</sup>C solid-state NMR
- 10.30-11.00**            **Coffee Break**
- 11.00-11.25**            **Prof. Dr. Randall Q. Snurr, Evanston**  
Rapid Screening of Metal – Organic Frameworks using Molecular Modeling
- 11.30-11.45**            **Prof. Dr. Joachim Sauer, Berlin**  
Ab initio predictions of adsorption and reactions in metal organic frameworks - successes and limits
- 11.50-12.05**            **Prof. Dr. Gotthard Seifert, Berlin**  
**Prof. Dr. Thomas Heine, Bremen**  
**Dr. Michael Hirscher, Stuttgart**  
Systematic study of Hydrogen adsorption in MOFs: theory and Experiments
- 12.10-12.25**            **Dr. Rochus Schmid, Bochum**  
Guest Molecule Mobility in Metal Organic Frameworks: Towards an Atomistic Understanding via Combining Accurate Simulations and NMR Measurements
- 12.30-13.45**            **Lunch Break**

Chair: Prof. Dr. Randall Snurr

- 13.45-14.10**            **Dr. Patricia Horcajada, Versaille**  
Porous iron carboxylates as new drug nanocarriers
- 14.15-14.30**            **Dr. Michael Wiebcke, Hannover**  
Size-Controlled Synthesis of ZIF-8 Crystals on Multiple Length Scales:  
Investigations into the Mechanisms of Nucleation and Crystal Growth
- 14.35-14.50**            **Prof. Dr. Klaus Huber, Paderborn**  
Formation of MOF Nano-Particles – a Light, X-ray and Neutron  
Scattering Study
- 14.55-15.10**            **Witri Wahyu Lestari**  
Synthesis of Zn<sup>2+</sup>-, Cd<sup>2+</sup>- and Pb<sup>2+</sup>-Based Metal–Organic  
Frameworks with Functionalised Biphenyl Linkers
- 15.15-16.00**            **Coffee Break**
- 16.00-16.25**            **Prof. Dr. Freek Kapteijn, Delft**  
Flexibility of MOFs: Headache or blessing?
- 16.30-16.45**            **Prof. Dr. Eike Brunner, Dresden**  
NMR spectroscopy and Computer Simulations on the flexible Metal-  
Organic Framework DUT-8(Ni)
- 16.50-17.05**            **Prof. Dr. Florian Mertens, Freiberg**  
**Alexander Münch, Freiberg**  
MOF Based Capillary Gas Chromatography
- 17.10-17.25**            **Christian Lieder, Stuttgart**  
**Prof. Dr. Stefan Kaskel, Dresden**  
**Prof. Dr. Elias Klemm, Stuttgart**  
**Prof. Dr. Frank Glorius, Münster**  
Enantioselective Separation using Chiral MOFs
- 17.30**                    **Prezels + Beer**