

*11<sup>th</sup> Workshop of the IRTG Diffusion in Porous Materials*

DFG Priority Program 1362  
*Porous Metal-Organic Frameworks*

March, 22 - 23, 2010

Topical Workshop for PhD students

**Adsorption and Diffusion in MOFs**

Institut für Nichtklassische Chemie e.V. and Universität Leipzig

**Room:** Wislicenus-Hörsaal der Fakultät für Chemie und Mineralogie,  
Johannisallee 29, Leipzig, Germany

**March 22, 2010 presentations:**

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| 09:00 – 09:10 | Introduction (Prof. Dr. R. Gläser)  |
| 09:10 – 09:55 | PD Dr. R Staudt, INC:<br>Possibilities and Limits for the Determination of Adsorption Data –<br>Pure Gases and Gas Mixtures |
| 09:55 – 10:40 | Dr. M. Thommes, Quantachrome:<br>Analysis of Adsorption Data  |
| 10:40 – 11:10 | Coffee break  |
| 11:10 – 11:55 | Dr. J. Gascon, TU Delft:<br>Metal-Organic Frameworks: Separation and Catalysis  |
| 11:55 – 12:55 | Lunch break   |
| 12:55 – 15:30 | Exercises:<br>Characterization of MOF by Adsorption,<br>Equilibrium measurements (Pure Gas and Mixed Gas Adsorption)        |
| 15:30 – 16:00 | Coffee break  |

16:00 – 18:00 Exercises:  
Equilibrium measurements (Pure Gas and Mixed Gas Adsorption),  
Breakthrough Measurement (Adsorption in a fixed bed)

**March 23, 2010 presentations:**

09:00 – 09:45 Prof. Dr.-Ing. E. Klemm, University of Stuttgart:  
Catalysis and Diffusion in MOFs

09:45 – 10:15 Dr. C. Chmelik, University of Leipzig (to be confirmed):  
Introduction to Diffusion Studies in MOFs by IR-Microscopy

10:15 – 10:45 Coffee break

10:45 – 11:15 PD Dr. F. Stallmach, University of Leipzig:  
NMR Diffusion Studies in MOFs – Introduction and experiments

11:15 – 12:00 PD Dr. F. Stallmach, University of Leipzig:  
Analysis of NMR Diffusion Measurements

12:00 – 13:00 Lunch break

13:00 – 15:30 Exercises:  
Characterization of adsorbates in MOF by IR and NMR

15:30 – 16:00 Coffee break

16:00 – 18:00 Exercises:  
Diffusion studies by PFG NMR, IR Microscopy and Interference  
Microscopy