

Einladung zum Vortrag von

Dr. Jia Min Chin
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**„Mixing Work and Play – Metal-Organic Framework
Functionalized Materials and Beyond”**

This talk addresses some of my group's research highlights on MOFs and other functional materials, whereby we take a quirky, curiosity-driven approach to structure and derive novel applications for MOF materials, dry liquids and polymer films. I will discuss coordination modulation of MOFs to tune crystal morphology so as to produce micro and nanoparticles as well as strategies to produce MOF grass, microflower and micro-mushroom structures for imparting omniphobicity to a surface. I will also explore ways to hierarchically structure MOF composites, and to create non-close-packed pore arrays in a one-step manner. Fabrication of complex microstructures for surface functionalization often requires lithographic techniques and specialized equipment. My group has shown that by exploiting interfacial chemistry, simple bench-top techniques can create typically difficult-to-access microstructures, and show that this approach is applicable to a variety of materials.

References:

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- [3] Chin, J. M.*; Reithofer, M. R.; Tan, T. Y. T.; Menon, A. G.; Chen, E. Y.; Chow, C. A.; Hor, T. S. A.; Xu, J.* "Supergluing MOF Liquid Marbles" *Chem. Commun.* **2013**, 49, 493.
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- [6] Yang, J.; Tan, H. Y.; Low, Q. X.; Binks, B. P.* and **Chin, J. M.*** "Capture by Dry Alkanolamines and an Efficient Microwave Regeneration Process", *J. Mater. Chem. A*, **2015**, 3, 6440

Freitag, 24.03.2017, 14:00 Uhr
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