

# UniCat Colloquium

Please note updates of events on [www.unicat.tu-berlin.de](http://www.unicat.tu-berlin.de)

Lecturer:

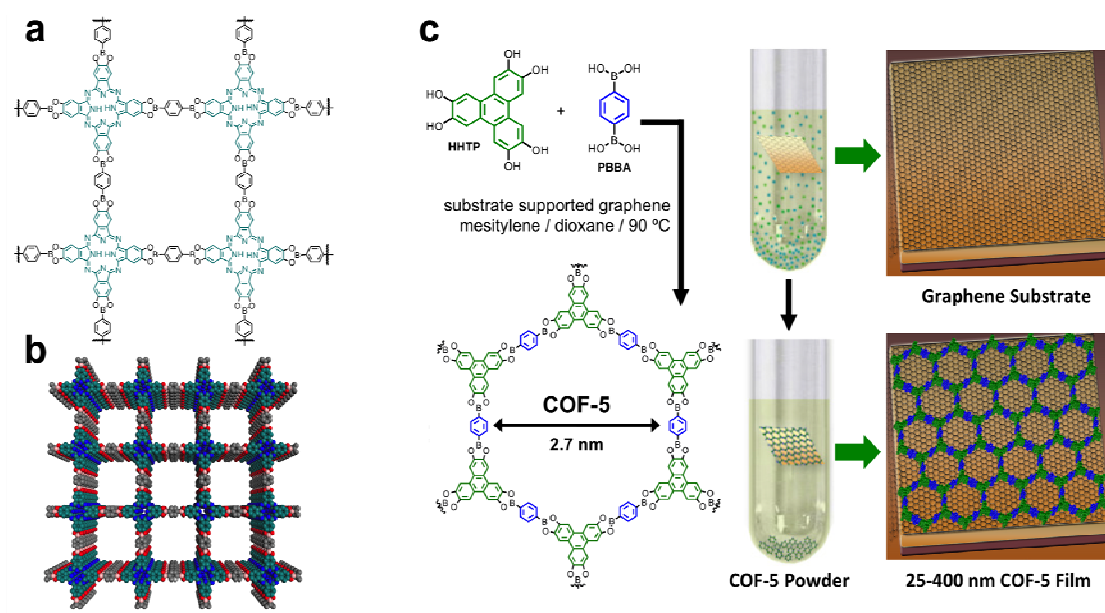
**Prof. William Dichtel**, Baker Laboratory, Department of Chemistry and Chemical Biology, Cornell University, Ithaca, NY, USA

Title:

**Bottom-up Synthesis of Structurally Precise Organic Materials**

Abstract:

The continuing development of organic semiconductors will bring about efficient solar cells, flexible displays, ubiquitous radio frequency identification (RFID) tags, improved lighting technologies, and more sensitive chemical sensors. Organic materials are inexpensive and offer the promise of tuning device properties through rational design and chemical synthesis. Simply controlling their chemical structure is not sufficient, as molecular or polymer films must achieve long-range overlap of their molecular orbitals to transport charge efficiently. The organization of complementary organic semiconductors into covalent organic frameworks (COFs) that have two-dimensional layered morphologies ideal for photovoltaic performance will be discussed. I will also present progress towards the bottom-up synthesis of narrow strips of carbon known as graphene nanoribbons.



Date: **Wednesday, October 24<sup>th</sup>, 2012 5:15 pm**

Location: **TU Berlin, Department of Chemistry  
Straße des 17. Juni 115, 10623 Berlin  
Building C, Lecture Hall C 264**

Organiser: **Prof. Arne Thomas (TUB)**

Coffee and tea will be served thirty minutes prior to the lecture start.

**Guests are cordially invited to attend!**

Prof. Dr. Matthias Driess, Chair of the Cluster of Excellence UniCat