

## cfaed Seminar Series

**DATE:** Wednesday - July 5, 2017  
**TIME:** 11:00 AM – 12:30 PM  
**LOC:** Seminar room HEM 219 (second floor)  
 Walther-Hempel-Building, Mommsenstr. 4,  
 01069 Dresden



### GUEST SPEAKER:

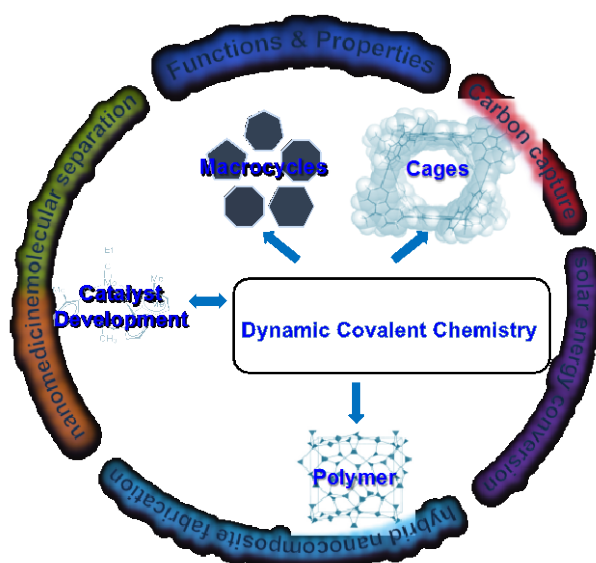
**Prof. Wei Zhang**

Department of Chemistry and Biochemistry, University of Colorado Boulder, USA

### TITLE: “Molecular Architectures and Functional Materials through Dynamic Covalent Assembly”

#### ABSTRACT:

Dynamic covalent chemistry (DC<sub>v</sub>C) has attracted tremendous research interest, particularly in the past decade, due to its great power in highly efficient construction of complex functional molecular architectures from simple small organic building blocks. This talk will focus on the recent progress in Zhang group in the design, synthesis, and property study of shape-persistent, customizable molecular cages and functional polymeric materials. These materials have shown a variety of important applications, such as molecular separation, nanoparticle synthesis, energy storage, etc. Our results illustrate how the thermodynamically controlled DC<sub>v</sub>C can be utilized to construct target-specific organic functional materials and enable their practical applications.



**BIOGRAPHY:**

2000, B.S. in Chemistry, Peking University. 2005, Ph.D. in Chemistry, University of Illinois at Urbana-Champaign (UIUC) (with Prof. Jeffrey Moore). 2006-2008, postdoc associate at MIT (with Prof. Timothy Swager). 2008-2014, Assistant Professor at the Department of Chemistry and Biochemistry at University of Colorado, Boulder. 2014-present, tenured Associate Professor.

His research is focused on utilizing dynamic covalent chemistry to develop novel organic or hybrid functional materials targeting a broad range of environmental, energy and biological applications, such as carbon capture, molecular separation, nanocomposite fabrication, energy storage, and self-healing materials. Received awards and honors include 2015 Guest Professorship at ETH Zürich, 2014 Tang Ao-Qing Guest Professorship at Jilin University, 2013 Provost's Faculty Achievement Award, 2013 Alfred P. Sloan Research Fellow, 2013 CAPA Distinguished Junior Faculty Award, 2012 3M Non-Tenured Faculty Award, 2011 National Science Foundation CAREER Award, and 2011 University New Inventor of the Year.