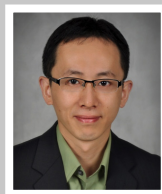


DESIGN AND FABRICATION OF WELL-ORGANIZED NANOMATERIALS FOR ENERGY APPLICATIONS

January 27, 2017 at 12:30pm

Engineering Building 2, Rm W122

Nanomaterials exhibit exceptional intrinsic properties. To extend those exotic properties to macro-scale, controlled synthesis and assembly are usually required. For energy-related applications, such as battery and supercapacitors, nanomaterials with well-organized structure not only provide appealing performance but also help to fundamentally understand the structure-property relationship. This presentation is to tackle the challenges of designing soft templates for nanomaterials fabrication. Particularly, we will discuss the polymer and metal-organic frameworks (MOFs) template derived nanomaterials for secondary battery electrodes, oxygen evolution reaction catalysts and supercapacitors.



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SPEAKER BIO

Yu Zhu is an assistant professor in the Department of Polymer Science at The University of Akron. He earned his Ph.D. in Physical Chemistry at the University of Cologne, Germany in 2007. After his post-doctoral training in Prof. James Tour's group at Rice University, Dr. Zhu joined the Department of Polymer Science at The University of Akron in 2012. His research interests focus on the controlled synthesis and assembly of organic electronic materials and nanomaterials, including conjugated small molecules and polymers, 2D materials, and metal organic frameworks. His research group is dedicated to advance the understanding of structure-property relationship of those materials, particularly in the area of energy storage and organic electronics. He is a recipient of ACS PRF Doctoral New Investigator Award and NSF CAREER Award. His research in UA has been funded by NSF, DOE, DOD and Ohio Federal Research Networks.

Contact Professor Jiming Bao at jbao@uh.edu if you would like to arrange for a time to meet with Dr. Zhu.

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