

The Department of Chemistry and Biochemistry

Seminar Series

Presents a Seminar Titled:

“Nanoscience’s Role in Addressing our World’s Energy Challenges”



Presented By

Dr. James Dickerson

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The Center for Functional Nanomaterials (CFN) at Brookhaven National Laboratory in the United States provides state-of-the-art capabilities for the fabrication and study of nanoscale materials, with an emphasis on atomic-level tailoring to achieve desired properties and functions. The CFN is a science-based user facility, simultaneously developing strong scientific programs while offering broad access to its capabilities and collaboration through an active user program. The overarching scientific theme of the CFN is the development and understanding of nanoscale materials that address the Nations’ challenges in energy security, consistent with the Department of Energy mission. The CFN is one of five Nanoscale Science Research Centers ([NSRCs](#)) funded by the Office of Science of the United States Department of Energy. The CFN supports Brookhaven’s goal of leadership in the development of advanced materials and processes for selected energy applications.

In my presentation, I will highlight the role that the CFN, through its scientific staff and this scientific user community, is playing in addressing the world’s energy challenges. I will focus on several trajectories of research that are being executed at CFN, including work on photovoltaics, novel nanostructured materials for catalysis, soft and biological materials, and our state-of-the-art electron microscopy and proximal probe microscopy facilities. Also in this presentation, I will highlight my group’s nanoscience research activities in the electrophoretic deposition of colloidal magnetic nanomaterials for various fundamental physics explorations and potential device applications.

Friday, December 6, 2013 at 3:00 p.m. in OCNPS 100