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Seminar

Materials Science & Engineering

Presents:

Dr. Jaimee Yang

**Research Professor, Materials Science and Engineering and
USTAR, University of Utah**

“Computational Materials Science – Challenges and Opportunities in Basic Energy Science”

The recent enhancement in computation power, along with the exciting new scientific frontiers, particularly in the emerging fields of nanoscience and nanomaterials, has created enormous opportunities for the development and application of computational materials sciences (CMS).

This talk will present a brief review on the capabilities of computation resources, both hardware and software, currently available to CMS researchers nationwide including those in the University of Utah. Some of the research projects carried out by the Materials Science and Engineering faculty members will be described as examples to demonstrate how we can use the CMS methods to design and optimize new materials, especially the materials with specific applications in basic energy science – from nano to bulk, from hard to soft, and from inorganic to organic and bio, from photonics to spintronics. The limitation of various theoretical approaches will also be indicated and discussed.

Wednesday September 23, 2009

4:10-5:00 p.m.

1230 WEB