



Interdisciplinary Symposium on Advanced Nano/Biosystems: Design, Fabrication, and Characterization

MATERIALS TESTING

Dear Colleagues,

The Beckman Institute for Advanced Science at the University of Illinois at Urbana-Champaign, in conjunction with the Frederick Seitz Materials Research Laboratory (MRL), is pleased to sponsor the **Interdisciplinary Symposium on Advanced Nano/Biosystems: Design, Fabrication, and Characterization**. The symposium will be held in Urbana, Illinois. September 25-27, 2013.

Interdisciplinary Symposium on Advanced Nano/Biosystems Focus

Nano/bio systems have emerged as highly interdisciplinary research areas in the last few decades, spanning physics, chemistry, biology, mechanics, and material science. Synergizing material design, device fabrication, and system characterization from the nanoscale is of fundamental interest. The **Interdisciplinary Symposium on Advanced Nano/Biosystems: Design, Fabrication, and Characterization** aims to provide a stimulating discussing forum for recent advances in material design, fabrication and characterization techniques, including experiments, theories, computations, and modeling. Specifically, the topics of interest include, but are not limited to:

- Advanced mechanical testing and material analysis techniques
- Multiscale modeling and simulation
- Evaluation and characterization of materials and structures at extreme conditions (e.g., shock/blast wave impact, high and low temperature)
- Mechanics of functional/smart/energy/bio-materials
- Self-healing materials and systems
- Design and fabrication of multifunctional nano/biomaterial system
- Bio-inspired design and fabrication of actuator/sensor/gate/switch
- Self-assembly of bio/nanomolecules and particles

The symposium will include two days of oral presentations (Sep. 25-26) and one day (Sep. 27) of hands-on simulation tutorials and laboratory demonstrations, featuring work at the Beckman Institute and the College of Engineering's Frederick Seitz Materials Research Laboratory.

Paper Submissions

Abstracts for papers should be submitted here by July 8, 2013: <https://illinois.edu/fb/sec/2595985>.

Invited Speakers (partial)

John A Rogers (UIUC); Klaus Schulten (UIUC); Peng Yin (Harvard); Horacio D. Espinosa (NU); Mark Bathe (MIT); Xiaodong Li (USC); Aleksei Aksimentiev (UIUC); M. Samy El-Shall (VCU); Xi Chen (Columbia); Narayana Aluru (UIUC); Weinong Chen (Purdue); Nikhil Koratkar (RPI); Guy Genin (WU); Jean-Pierre Leburton (UIUC)

Email symposium co-chairs:

Ilia Solov'yov and Baoxing Xu at symposium-bio-nano@mx.uillinois.edu

<http://publish.illinois.edu/advancednanobiosystems/>

BECKMAN INSTITUTE
FOR ADVANCED SCIENCE AND TECHNOLOGY