Nano/Bio Interface Center

Nano/Bio Interface Center Symposium:

Local Probes at the Frontiers of Energy Systems and Biotechnology

October 26 & 27, 2010

Don Eigler

The Small Frontier

Since the early days of scanning tunneling microscopy and atomic force microscopy, a large family of probes have been developed that access properties with ever increasing complexity and relevance. This symposium will highlight recent advances that forward fundamental underpinning of critical interactions in energy systems and molecular and cellular biology with contributions from the foremost leaders in the field.

Invited speakers include:

Ozgur Sahin, Columbia University
Probing Nanomechanics of Biological Systems on the Microsecond Timescale

Dennis Discher, University of Pennsylvania
AFM as an Essential Tool in Cell and Molecular Biology Studies

Lukas Novotny, University of Rochester
From Near Field Optics to Optical Antennae

Arvind Raman, Purdue University
Multi-harmonic dynamic AFM for mapping the local material properties of live cells and viruses in liquid environments

Dawn Bonnell, University of Pennsylvania
What Local Probes of Dielectric Function Reveal About Energy Transfer

David Ginger, University of Washington
Time-Resolved Electrostatic Force Microscopy on Organic Solar Cells

Sergei Kalinin, Oak Ridge National Lab
Probing reversible and irreversible electrochemistry in nanoscale volumes: batteries, fuel cells, and memristors

Marija Drndic, University of Pennsylvania
Imaging of Nanocrystals with Correlated Scanning Probe and Transmission Electron Microscopy

Details:

Oct. 26, 2011: 4:00 pm to 7:00 pm
Wu & Chen Auditorium, Levine Hall
University of Pennsylvania
3330 Walnut St. Philadelphia, PA

Oct. 27, 2011: 8:30 am to 6:30 pm
Irving Auditorium
University of Pennsylvania
3401 Spruce St. Philadelphia, PA

Contact: Hong-Mei Li
nbicasst@seas.upenn.edu

For more information, and to register, please go to:
www.nanotech.upenn.edu/events.html

Interactive posters sessions will provide a platform for extensive discussion. Participants are encouraged to submit posters, which will be eligible for inclusion in the NBIC poster competition.