



ADVANCED ENERGY™
Research and Technology Center
AT STONY BROOK UNIVERSITY

AEC COMMUNITY LUNCH & LEARN SEMINARS

Date: February 9, 2016
Time: 11:30am
Location: Advanced Energy Center, Rm 104

“Non-Conventional Applications of the Dual-BeamSEM/ FIB System”

By
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The scanning electron microscope/ focused ion beam (SEM/ FIB) tool is widely used in microelectronics to expose a cross-section of a circuit defect, which usually lies in a buried layer of the chip. This operation of the SEM/ FIB is easy to visualize if we think of the tool as a submicron precision milling machine (FIB) with high-resolution imaging (SEM) capabilities. Another popular use of the SEM/ FIB system is to prepare electron-transparent samples for transmission electron microscopy.

However, in this talk, my interest is to present some non-conventional applications of the SEM/ FIB tool, such as cutting and imaging cross-sections of Saharan Desert ants' hairs and milling 3D profiles with a solid-state nanobatteries and the fabrication of plasmonic electrodes as transparent electrical contacts for organic photovoltaics.

The SEM/ FIB tool, hosted at the Center for Functional Nanomaterials (CFN) at Brookhaven National Laboratory, and CFN staff's expertise are available, at no cost, to scientist from universities, industry, and national laboratories worldwide. Access to CFN facilities is granted through a peer-reviewed proposal system. For more information, please visit <https://www.bnl.gov/cfn/>.

“Brief lunch will be provided during the talk”

MORE ARE COMING SOON!!

“Hydrogen Fuel Cells” by Dr. Stoyan Bliznakov
“Applications of Confocal Raman Microspectrometry and Atomic Force Microscopy”
by Dr. Gordon Taylor



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