



Microscopy on the Nanotechnology Frontier

Wednesday January 21, 2009

Babbio 122; Time: 11am

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The Center for NanoPhase Materials Science at Oak Ridge National Laboratory is one of the five Nanoscience centers set up by the United States Department of Energy (USDOE). Electron microscopy is a vital technique for nanoscience. This talk will describe the EM capabilities available to users of CNMS, and the steps needed to access these facilities, and I will discuss in more detail some current projects of interest – the challenge of achieving high resolution imaging in liquids, examining why the fact that we can see an object does not mean that we can reliably measure its size, and the use of light ion beams for imaging and analysis.

David Joy holds joint appointments as a Distinguished Professor in the Materials Science and Engineering Department at The University of Tennessee and as a Distinguished Scientist at Oak Ridge National Laboratory. His current interests include understanding electron and ion interactions with solids and nanoscale metrology and lithography. He has published nine books and over 400 papers in the field of electron microscopy, and is currently Editor in Chief of SCANNING.