

**Mini-workshop on
*Scanning Probe Microscopies in the DOE
Nanoscale Science Research Centers***

Thursday, Dec. 2, 2004

7:00 – 8:30 p.m.

Hynes Auditorium, Room 207

MRS Fall Meeting

immediately following the presentation on

“Materials Research Support at the Department of Energy” by Dr. Robert Gottschall

Workshop Goal: To involve the user community in identifying and prioritizing Scanning Probe Microscopy capabilities for users of DOE's new nanoscale science user facilities.

Each of the 5 new Nanoscale Science Research Centers (NSRCs) being built by the Department of Energy as national user facilities will incorporate Scanning Probe Microscopy (SPM), a key enabling technology for nanoscale science. To enable potential users of the NSRCs to participate in planning for this cross-cutting and rapidly evolving area, the Center for Nanophase Materials Sciences at Oak Ridge National Laboratory, in cooperation with the other NSRCs, has organized an evening mini-workshop during the 2004 Fall MRS Meeting in Boston. This workshop will be a forum for the SPM user community to provide input to identify and prioritize SPM needs for the NSRC user programs and to develop a strategy for meeting these needs.

The venue of the MRS Fall Meeting will bring together much of the national SPM community through their participation in a week-long symposium focused on scanning probes, and a special Thursday afternoon Panel Discussion on "Future SPM Challenges and Opportunities" that will provide a useful starting point for the evening workshop.

The evening workshop will begin with a brief presentation by a representative from each of the five NSRCs, outlining their current plans and philosophy for implementing scanning probe microscopies for users. The remainder of the session will be in the format of a "town hall" meeting to gather and discuss suggestions, comments, and requests from the user community. Written suggestions may also be submitted either during the workshop or in advance using the form at <http://www.cnms.ornl.gov/spmsug04.doc>. The output of this mini-workshop will be collected in a document that DOE and the NSRCs can use to define a coordinated SPM strategy.

Workshop Agenda

- 7:00 **Opening Remarks** by workshop organizer
 Art Baddorf, Oak Ridge National Laboratory
- 7:05-7:45 **Current SPM Plans at the NSRCs**
 Mike Nastasi, Center for Integrated Nanotechnologies (SNL/LANL)
 Stephen Streiffer, Center for Nanoscale Materials (ANL)
 Frank Ogletree, Molecular Foundry (LBNL)
 Robert Hwang, Center for Functional Nanomaterials (BNL)
 Ward Plummer, Center for Nanophase Materials Sciences (ORNL)
- 7:45-8:30 **Town Hall Discussion-** User Needs and Implementation Strategies