

**Microscopy in the Classroom:  
How to Use It and How to Teach It  
Session X-90  
Tuesday, August 3, 2010  
Portland Convention Center Room B115  
A Special Conference Education Event  
Microscopy & Microanalysis 2010, Portland, OR**

Microscopy is an exciting, hands-on, active learning resource for students that can inspire a lifelong interest in science and engineering. In this half-day session, educators and outreach coordinators will present:

- curricula and pedagogy for introducing nanotechnology, nanomaterials and biotemplating concepts to students at all levels
- outreach programs that bring optical, electron and atomic force microscopes into the classroom to excite K-12 students about science and better their understanding of size and scale
- microscopy training techniques for college students with various levels of exposure to science course work

Microscope demonstrations, poster presentations, opportunities for discussion, and a drawing to give away microscopy education resource materials complete the program. Attendees can also visit the Conference Exhibition Hall to view additional microscopy instrumentation and products. There is no charge for session attendance and admission to the Exhibition Hall. Local educators, school administrators and registered conference attendees are invited to attend.

Conference information can be found on the Microscopy Society of America website, <http://www.microscopy.org/>. Specific inquiries about Session X-90 may be addressed to the organizers:

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*Please feel free to share this announcement with colleagues who may have an interest in this session.*

## Program

Our presenters will describe their philosophies and strategies for teaching and learning, and most importantly, will share their real world experience in bringing microscopy into the classroom.

**8:30-8:45am: Welcome & Introductory Remarks**

**8:45-9:00am**

**The National Nanotechnology Infrastructure Network's Education and Outreach Programs – Understanding Size and Scale**

Nancy Healy, Georgia Institute of Technology and National Nanotechnology Infrastructure Network

**9:00-9:15am**

**Microscopic Explorations Adapted for a Saturday Science Class**

Gretchen Shearer, McCrone Associates, Inc., Westmont, IL

**9:15-9:30am**

**Using the Scanning Electron Microscope for a Summer Forensics Camp**

Richard Weinkauff, Schoolcraft College, Michigan

**9:30-9:45am**

**Focus on Success: Teaching Scanning Electron Microscopy at the Community College Level**

Nickolas Butkevich, Schoolcraft College, Michigan

**9:45-10:30am**

**Coffee break: Instrumentation Demos, Discussion, Poster Presentations**

**Integration of Transmission Electron Microscopy and Extremophile Virology Research into University and K-12 Education in Maine and Kenya (poster)**

Jennifer Jamison and Karen Moulton, University of Southern Maine

**Project MICRO in Vermont: An Opportunity for Core Facility Outreach (poster)**

Janet Schwarz, University of Vermont

**10:30-10:45am**

**Incorporating Advanced Microscopy Techniques into the Undergraduate Curriculum**

Carolyn Marks, University of Richmond, VA

**10:45-11:00am: Prize Drawings & Closing Remarks, adjourn to Exhibition Floor**