## The MSA Certification Board: Practices and Visions 2010

John P. Petrali

Chair, MSA Certification Board Microscopy Society of America, 12100 Sunset Hills Rd., Reston, VA 20190

john.p.petrali@us.army.mil USAMRICD, Aberdeen Proving Ground, MD 21010-5400

The Microscopy Society of America (MSA) is the world's largest professional association of microscopists. The society presently provides the only forum for certification of technologists in the disciplines of biological transmission electron microscopy in the Americas. The certification program was initiated in 1978 to establish standards of technical skills required for ensuring proficiency in biological microscopy practices that could be recognized as leading to national certifications.

The program is administered by the MSA Certification Board whose members are appointed by the chairperson and approved by the Council of the Society. The board's charter is to develop appropriate parameters and practices that include fair and impartial review of applicant academic records and related references, formulate written and practical examinations for testing, and provide a professional forum for dialogue between the candidate, board members, and the society. Since its inception, the board has certified 2,047 microscopists who now have the MSA-approved acronym "CEMT" appended to their names to recognize their established professional expertise as Certified Electron Microscopy Technologists.

The board is active in promoting the importance and value of certification. Much attention is given to relaxing the notion by employers who believe that certification is not a critical requirement in their management practices for career advancement, job opportunities, change of venue, and upward mobility. To change this perception, the board and its chairman are very vocal in extolling the virtues of certification to management groups, human resources departments, and prospective candidates. The usefulness of certification is typically exemplified by the conferee's newly recognized professional expertise and how senior personnel and managers respond to the conferee's newly acquired value to their institution's mission.



Figure 1: John Petrali mentoring a candidate for TEM certification.

Recently, the success of the MSA certification program has prompted interest by people in materials science to develop similar certification standards. Because the MSA Certification Board continually searches for mechanisms to encourage multidisciplined traffic in the certification process, the board has embarked on a mission to prepare itself for certifications of materials technologists by inviting leading investigators and teachers of materials disciplines to function directly as MSA Certification Board members. In addition, the board has prepared a questionnaire for distribution to selected materials personnel for immediate feedback on the value of certification within their discipline. The result will eventually be one MSA Certification Board, certifying both biomedical and materials technologists.

For more information concerning certification, please refer to the MSA Website http://www.microscopy.org.

June 6 - 18, 201 LEHIGH MICROSCOPY SCHOOL Lehigh University, Bethlehem, PA, USA **MAIN COURSES** SCANNING ELECTRON MICROSCOPY AND X-RAY MICROANALYSIS INTRODUCTION TO SEM AND EDS FOR THE NEW OPERATOR June 7-11 ADVANCED COURSES SCANNING PROBE MICROSCOPY: QUANTITATIVE X-RAY From Fundamentals to Advanced Applications MICROANALYSIS: Problem Solving using EDS and WDS Techniques June 14-17 June 14-18 PROBLEM SOLVING WITH SEM. X-RAY MICROANALYSIS, AND ELECTRON SCANNING TRANSMISSION ELECTRON MICROSCOPY: From Fundamentals to BACKSCATTER PATTERNS lune 14-18 Advanced Applications lune 14-17 FOCUSED ION BEAM (FIB): Instrumentation and Applications June 14-17 For more information, contact: Sharon Coe | 610.758.5133 | sharon.coe@lehigh.edu **40 YEARS OF EXCELLENCE** 



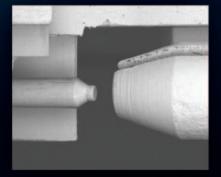
- Reorient Samples for Milling (TRUE In Situ Rotation)
- **Atom Probe & TEM Tomography Samples**
- In Situ Lift-Out TEM Preparation
- **Manipulate Nanowires**
- **Move Nanoparticles**
- **Optimal Presentation for EDX Analysis**



Easy In Situ Lift-Out with Closed Loop Feedback and AutoProbe™ Software



Grid Attach or Short-Cut™



Easy In Situ Tip Exchange in Minutes Without Breaking Vacuum

