

Applied Scanning Electron Microscopy and Microanalysis (EDS and EBSD) Hands-on Five Week Short Course

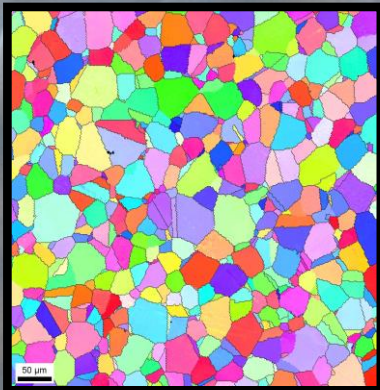
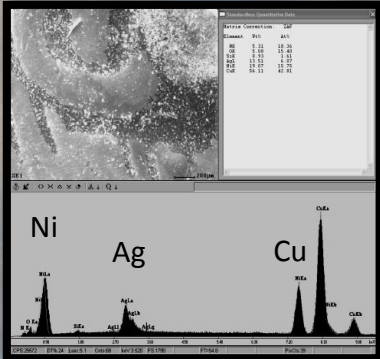
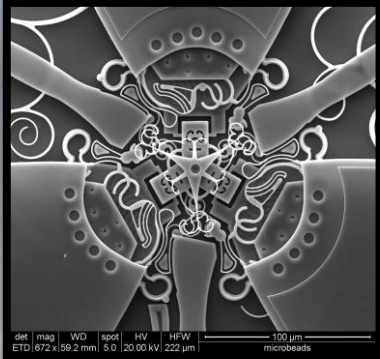
Registration is Extended !!!

SEM: June 2, 9, and 16

EDS: June 23

EBSD: June 30 2 hr lab per week

Cost: \$200 (commercial: \$500) for the whole course



Module 1. Basic SEM (\$120 university; commercial \$300): This is a practical short course in Scanning Electron Microscopy. The focus of the course will be on providing an applied understanding of basic electron microscopy theory, while training students on the use of the FEI Quanta 600 in the Micron Microscopy Suite. NOTE: If you want to use the Focused Ion Beam, this experience is pre-requisite. Consists of **three (3) 1-hour long lectures scheduled on Mondays of each week and three (3) 2-hour labs TBD over a three week period.** Users will be allowed to reserve the SEM on their own and operate it independently after completing this module.

After completion, students will have the option of learning special analysis techniques such as EDS elemental mapping and EBSD (Electron Backscattered Diffraction).

Module 2. EDS Analysis (\$40 university; \$100 commercial): Students who have been trained on operating the SEM would be introduced to the principles of X-ray microanalysis and will be trained on operating the EDAX Genesis system for elemental quantification and mapping. Consists of one (1) 1-hour lecture and one (1) 2-hour lab

Module 3. EBSD Analysis (\$40 university; \$100 commercial): Electron backscatter diffraction analysis allows for texture and grain structure studies on thin films and polished surfaces. This module will provide fundamental concepts of EBSD and training on basic operation and data analysis using the EDAX OIM system. Consists of one (1) 1-hour lecture and one (1) 2-hour lab

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