University of Missouri Electron Microscopy Core proudly presents

“Nanoscale Imaging and Analysis”

June 10-14th, 2013

Room W116 Veterinary Medicine Building &
MU Electron Microscopy Core Facility

Students receive 6+ hours of hands-on training

Day 1 - Lecture  The first day will be an intensive introduction (8 hours) to theory related to analytical transmission electron microscopy (AEM) and the analytical spectroscopic methods available on the new FEI F30 Twin TEM/STEM.

Day 2 - Lab  “TEM basics: Operation, Alignments and High Resolution Imaging”
   The second day students will get 3 hours to learn, perform and operate hands on alignments ending their session with the ability to image atoms at high resolution.

Day 3 - Lab  “STEM basics: Alignment, High Angle Annular Dark Field Imaging and X-ray Energy Dispersive Spectroscopy”
   The third day students will get 3 hours to learn, perform and operate hands on STEM alignments, high angle dark field imaging (HAADF, Fischione), ending their session with the ability to collect X-ray energy dispersive spectra (EDS, Oxford) for elemental localization and identification.

   The fourth day students will get 3 hours to learn, perform and operate hands on imaging using the energy-filter (EFTEM, Gatan GIF Quantum) and set-up and run electron energy loss spectroscopy (EELS).

Day 5 - Lab  “General Practice”
   The fifth day students will get 1.5 hours to practice what they have learned on their own personal specimens.

Registration: $700 by June 7th, 2013

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