Advanced Instrumental Techniques and Software Algorithms in EPMA Workshop  
Center for Advanced Materials Characterization in Oregon (CAMCOR) Presents  

Focus on both instrumental methods and software algorithms for improving accuracy in EPMA in a variety of difficult samples, conditions and geometries. Hands on workshop to explore new ideas for extending EPMA for advanced and intermediate users.

September 11, 12, 13 (Tuesday, Wednesday, Thursday), 2007  
University of Oregon, Eugene, Oregon

Preliminary Program

Morning 1:  
9:00 AM John Donovan (University of Oregon):  
Volatile elements, beam sensitivity, Trace sensitivity, accuracy (spectral overlaps/blank corrections)

10:00 – 10:30  Coffee break

10:30 AM Paul Carpenter (Washington University, St. Louis):  
Instrument Calibration, PHA, Deadtime, Standards (accuracy/precision), MACs, matrix corrections

Afternoon 1:  
Discussion and Hands On Empirical Testing on EPMA instruments

Morning 2:  
9:00 AM Dale Newbury (National Institute of Standards & Technology):  
Update on Silicon Drift Detector Hardware and Software Processing (Lispix)

10:00 – 10:30  Coffee break

10:30 AM Ed Vicenzi (Smithsonian Institution)  
Keenan-Kotula multivariate methods in Compass for x-ray spectrum imaging phase analysis

Afternoon 2:  
Discussion and Hands On Empirical Testing on EPMA instruments

Morning 3  
9:00 AM John Fournelle (University of Wisconsin, Madison):  
Peak shift in silicates, Secondary fluorescence (examples from penepma/penelope)

10:00 – 10:30  Coffee break

10:30 AM Mike Jercinovic (University of Massachusetts):  
Analysis of Trace Elements in Complex Samples (e.g., U, Pb, Th in monazite)

Afternoon 3:  
Discussion and Hands On Empirical Testing on EPMA/SEM instruments

For more information contact:  
John Donovan, donovan@uoregon.edu, 541-346-4632