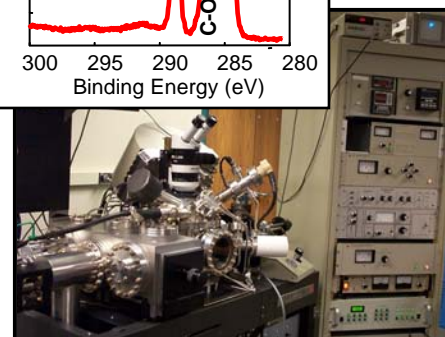
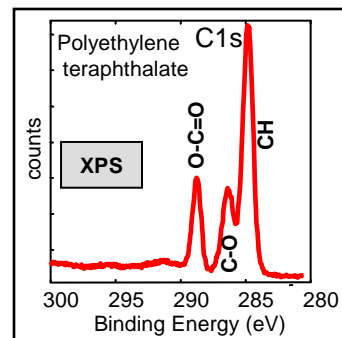


## Special Symposium: Nanoscale Materials Characterization

**Abstracts Deadline**  
**January 28<sup>th</sup>, 2011**

Most technological research includes advanced characterization at the nanoscale. This symposium targets a wide range of characterization techniques including microscopy, scattering, spectroscopy/spectrometry, nanomechanical and other tools, along with specimen preparation methods and handling. It is essential that this burgeoning knowledge base be transparently presented to the broadest technical community. This event promotes the rapid education, dissemination, and commercialization of new characterization techniques into industries based in both physical and life sciences. It seeks to introduce general technique types to newcomers, report pioneering methods, and drill down into new physical understandings, all the while addressing applications useful to industrial engineers and technicians.

Advances in characterization include not only far-field probes (e.g., beams of electrons, ions, neutrons or photons) and near-field probes (indentors, nanotips, fibers and nanotubes), but also a growing intellectual component whereby data are manipulated, analyzed, rendered and simulated to yield meaningful information. As some tools and methods have become more common and practical, certain misunderstandings and misinterpretations also have crept into the lexicon. Besides an element of "methods training" to promote the insightful application of characterization tools in nanotechnology R&D, this symposium will emphasize projects utilizing a spectrum of complementary techniques.



### Topics & Application Areas

- Direct space imaging methods
- Indirect space methods & spectroscopy
- Polymer phase transition & kinetics
- Nanocomposites morphology & structure
- Thin-film structure
- Characterizing nanocatalysis surfaces
- Micro/nano electronic devices
- Liquid suspensions/melts
- Other

