



**Postdoctoral Research Associate
in Nanofabrication Research**

**Center for Nanophase Materials Sciences
Oak Ridge National Laboratory
Oak Ridge, Tennessee**

ORNL08-49-CNMS

Project Description:

The Center for Nanophase Materials Sciences (CNMS) at Oak Ridge National Laboratory (ORNL) is seeking to fill a postdoctoral position in the Nanofabrication Research Laboratory. The program involves active research projects focused on the development of nanoscale chemical and biological patterning techniques and their application to understanding self-assembly, biological recognition processes, and molecular transport. The CNMS (<http://cnms.ornl.gov/>) is a collaborative nanoscience user research facility established by the Office of Science, U.S. Department of Energy. The CNMS has a diverse spectrum of nanoscience research activities including a nanofabrication facility; laboratory-based research on macromolecular materials, catalysts, functional nanomaterials, and magnetism and transport; characterization with electron microscopes, scanning probes, and x-ray diffraction and scattering; and theory, modeling, and simulation.

Duties: The candidate will develop and implement new techniques for patterning chemical and biological moieties with nanoscale resolution using electron beam, scanning probe, stamping technologies and self-assembly processes. The candidate will evaluate existing techniques and develop new techniques to quantitatively evaluate the efficacy of chosen techniques and assess the functional behavior of patterned surfaces and nanostructures as interfaces for soft/biological materials.

Qualifications:

Ph.D. (within last 4 years) in chemical, biomedical engineering, materials science, chemistry, biophysics or a related field. The ideal candidate will have hands-on experience with a broad range of nano- and microfabrication techniques with an emphasis on electron beam, ion beam, or scanning probe lithography. A familiarity with chemical and biological systems is essential.

Additional Information:

- Center for Nanophase Materials Sciences at <http://cnms.ornl.gov/>
- Questions regarding the position can be directed to Scott Retterer at rettererst@ornl.gov.

How to Apply:

Qualified applicants may apply online at https://www2.ornl.gov/ORNL_POST/. All

applicants will need to register before they can begin the online application. For complete instructions, on how to apply, please see the instructions at <http://www.ornl.gov/orise/edu/ornl/ornl-pdpm/application.htm>. When corresponding to ORNL regarding this position, please reference the position title and number. Applications will be accepted until March 1, 2008 or until the position is filled.

This appointment is offered through the ORNL Postdoctoral Research Associates Program and is administered by Oak Ridge Associated Universities (ORAU). This appointment is open to all qualified U.S. and non-U.S. citizens without regard to race, color, age, religion, sex, national origin, physical or mental disability, or status as a Vietnam-era veteran or disabled veteran.