Postdoctoral Research Associate in Ultrafast Optical Spectroscopy and Nanoscale Imaging

Chemical Sciences Division Physical Sciences Directorate Oak Ridge National Laboratory Oak Ridge, Tennessee

ORNL09-77-CSD

Project Description:

The Chemical Science Division (CSD) at Oak Ridge National Laboratory (ORNL) is seeking candidates to fill a postdoctoral research associate position in the area of ultrafast linear and nonlinear optical spectroscopy and imaging. The successful candidate will carry out research focused on nanoscale imaging with contrast provided by the second harmonic generation and sum frequency generation processes. In addition, ultrafast probing of surfaces using single nanoparticle emission spectroscopy and transient absorption will be undertaken to study chemical transformations. The successful candidate will join a dynamic multidisciplinary research team with expertise in several branches of optical and mass spectroscopy. Further details may be found at:

http://www.ornl.gov/sci/csd/Research_areas/lscm_group.html

Qualifications:

This position requires a Ph.D. in Chemistry, Physics, Materials Science, or a closely related discipline. Experience with ultrafast tunable lasers and spectroscopy is required. Experience in scanning probe microscopy, particularly metal tip-enhanced methods, is highly desirable. The successful candidate should be highly motivated, safety conscious, and have superior laboratory skills. Excellent oral and written communication skills are required, and a track record of presentations and publication of scientific results in peer-reviewed journals is expected. Applicants must have the ability to work in a team and interact effectively with a broad range of colleagues. Demonstrated ability to communicate in English to an international scientific audience is essential.

Applicants cannot have received the most recent degree more than five years prior to the date of application appointment and must complete all degree requirements before starting their appointment.

Technical Question:

Questions regarding the position can be directed to Dr. Robert Shaw (<u>shawrw@ornl.gov</u>). (Please provide the requisition number and title on correspondence.)

How to Apply:

Qualified applicants may apply online at https://www2.orau.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.orau.gov/orise/edu/ornl/orni-pdpm/application.htm. When applying for this position, please reference the position title and number.

NOTE: Applications will be accepted until June 30, 2009 or until the position is filled.

This appointment is offered through the ORNL Postgraduate Research Participation Program and is administered by the Oak Ridge Institute for Science and Education (ORISE). The program 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.