

Postdoctoral Research Associates in SANS and Neutron Reflectometry Data Reduction and Analysis

Neutron Scattering Science Division Oak Ridge National Laboratory Oak Ridge, Tennessee

ORNL10-02-NSSD

Project Description:

The Neutron Scattering Sciences Division (NSSD) of Oak Ridge National Laboratory (ORNL) (<http://www.ornl.gov>) operates two of the brightest neutron sources in the world, the Spallation Neutron Source (SNS) and the High Flux Isotope Reactor (HFIR), for basic and applied research in a broad array of disciplines including physics, chemistry, materials science and biology. SNS and HFIR are home to a group of scientists and a suite of instruments dedicated to the study of large-scale structures. In addition to the General Purpose SANS and the Bio-SANS at the HFIR, this endeavor includes the Extended Q-range SANS, the Liquids Reflectometer and the Magnetism Reflectometer of the SNS.

NSSD has immediate openings for postdoctoral research associates to become active participants in the development and deployment of the next generation of data reduction and analysis software at these flagship neutron scattering facilities. Postdoctoral research associates involved in this project will work with the instrument scientists to develop data reduction and analysis software that will enable world-class science at SNS and HFIR. Successful applicants will be encouraged to develop their own independent and collaborative research during the second year of the effort, enabled by the reduction and analysis software developed. The post represents an excellent opportunity for a young postdoctoral scientist to develop his/her expertise, broaden his/her experience and interact with leading scientists from around the world.

Qualifications:

A Ph.D. completed within the last 5 years in physics, or physical chemistry is required. Previous experience in either neutron or X-ray scattering, either using small-angle or reflectometry methods, is required. Software development experience is also required, with a preference being given to those with experience with C, C++, or other high-level languages. Graphical user interface development is also desirable. The candidate should be self-motivated, have good interpersonal, communication and presentational skills and demonstrated ability to interact effectively with staff at all levels within a multi-disciplinary team.

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

Technical Questions: (please respond with the requisition number)

- Dr. William Heller, Center for Structural Molecular Biology, Oak Ridge National Laboratory, P.O. Box 2008, Oak Ridge, TN 37831, and hellerwt@ornl.gov.

- Dr. Mark Hagen, Neutron Scattering Sciences Division, Oak Ridge National Laboratory, P.O. Box 2008, Oak Ridge, TN 37831, and hagenme@ornl.gov.

How to Apply:

Qualified applicants must 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>.

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.