

Postdoctoral Research Fellow in Neutron Scattering – ARCS

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

ORNL08–32–NSSD

Project Description:

Responsibilities include conducting research using neutron scattering as a primary research tool, which will promote and support the use of the wide Angular-Range Chopper Spectrometer (ARCS) at the Spallation Neutron Source. Possible areas of research include correlated electron materials, electron-phonon coupled systems or superconductivity. The successful candidate will be affiliated with the Neutron Scattering Science Division and collaborate with other Oak Ridge National Laboratory or external groups.

Major Duties/Responsibilities:

- Participate in and conduct independent and collaborative neutron scattering experiments at SNS and HFIR.
- Travel to other neutron sources to execute neutron scattering experiments and analyze the experimental data.
- Publish research results in scientific journals.
- Participate in synthesis and characterization of samples and/or analysis of model simulations as necessary to pursue research.
- Maintain a strong commitment to the implementation and perpetuation of values and ethics.
- Ensure compliance with environment, safety, health and quality program requirements.

Qualifications:

ORNL is seeking a postdoctoral researcher with demonstrated expertise in condensed matter physics. Experience with neutron and/or x-ray scattering experiments, and knowledge of magnetism, superconductivity, phonons or correlated electrons is advantageous, but not required. Candidates with a recent Ph.D. in Physics, Chemistry, Materials Science, or related fields will be considered. Strong written and oral communication skills and the desire to work in a team environment on scientifically challenging problems are required. The successful candidate will conduct independent research at the Oak Ridge National Laboratory, and make use of the Spallation Neutron Source, the High Flux Isotope Reactor and other neutron scattering facilities around the world. 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.

Additional Information:

- Wide Angular-Range Chopper Spectrometer (ARCS)
(http://neutrons.ornl.gov/instrument_systems/beamline_18_arcs/)

- Reports to Doug Abernathy. Works with other members of the Neutron Scattering Science Division and collaborates with scientists at Oak Ridge National Laboratory and other institutions.

(http://neutrons.ornl.gov/instrument_systems/beamline_18_arcs/contact.shtml)

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 applying for this position, please reference the number ORNL08-32-NSSD.

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.