

Neutron Scattering Postdoctoral Research Fellow

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

ORNL08-08-NSSD

Project Description:

Responsibilities include conducting research on magnetic nanoparticles using inelastic neutron scattering as a primary research tool. Secondary goals may include sample synthesis and characterization as well as numerical simulation. The successful candidate will be primarily affiliated with the Neutron Scattering Science Division.

Major duties/responsibilities: (Include an ES&H statement and an ethics and values statement)

- 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 as necessary to pursue research
- Maintains a strong commitment to the implementation and perpetuation of values and ethics
- Ensures compliance with environment, safety, health and quality program requirements.

QUALIFICATIONS REQUIRED:

ORNL is seeking a post-doctoral researcher with demonstrated expertise in condensed matter physics. Experience with neutron and/or x-ray scattering experiments, and knowledge of magnetism and/or correlated electron systems is advantageous, but not absolutely 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.

WORK DIRECTION AND INTERFACES:

Reports to Andrew Christianson. Works with other members of the Neutron Scattering Science Division, as well as other members of the funding LDRD, and collaborates with scientists at Oak Ridge National Laboratory and other neutron scattering institutions.

MEASURES OF EFFECTIVENESS: [Should be able to extract annual performance measures (or MOPS).]

- Successfully conduct research and publish research results in scientific journals.
- Establish a strong scientific program studying the dynamics of magnetic nanoparticles.

Qualifications: PhD degree required in Physics

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.

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 position title and number (ORNL08-08-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.