

Postdoctoral Research Associate for Neutron Diffraction on HB-3A Four-Circle Diffractometer Instrument

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

ORNLO9-82-NSSD

Project Description:

Responsibilities include conducting independent research using neutron diffraction as a primary research tool, mainly on the HFIR HB-3A Four-Circle Diffractometer, but also on other instruments at SNS and HFIR. Works with other members in the Neutron Scattering Science Division and collaborates with scientists in Divisions of Oak Ridge National Laboratory.

Major Duties/Responsibilities:

Conceives and conducts independent and collaborative neutron scattering experiments at HFIR and SNS, with emphasis on crystallography and magnetic crystal structures.

- Participates in crystal growth experiments using solvothermal, flux growth, counter diffusion, and other methods as required.
- Presents research results at scientific meetings and publishes research results in scientific journals.
- Assists with the operation of the HB-3A Four-Circle Diffractometer instrument at HFIR.
- Maintains a strong commitment to the implementation and perpetuation of values and ethics.
- Ensures compliance with environment, safety, health and quality program requirements.

Qualifications:

Candidates with a recent Ph.D. in Physics, Chemistry, Materials Science, or related fields will be considered. Demonstrated expertise in the area of diffraction studies of condensed matter magnetism and/or small-molecule crystallography. Experience and knowledge with data acquisition systems and data analysis for single-crystal neutron diffraction are desirable. Strong written and oral communication skills and the desire to work in a team environment on scientifically challenging problems are required. Reports to the lead instrument scientist of HB-3A Four-Circle Diffractometer.

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:

Contact Dr. Bryan Chakoumakos at chakoumakobc@ornl.gov. Please reference the position title and number when corresponding about this position.

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>. When applying for this position, please reference the position title and number.

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.