

Postdoctoral Research Associate in Powder Diffraction

Materials Science & Technology Division Physical Sciences Directorate Oak Ridge National Laboratory Oak Ridge, Tennessee

ORNLO9-97-MSTD

Project Description:

This position is for a scientist with a strong background in powder diffraction analysis related to ceramics or metallurgy to support the Materials Science and Technology Division's High Temperature Materials Laboratory (HTML) User Program and to work on multidisciplinary projects at Oak Ridge National Laboratory (ORNL) as a diffraction expert/materials scientist. The Diffraction User Center at the HTML has excellent laboratory diffraction facilities in addition to frequent use of neutron powder diffraction (at the High Flux Isotope Reactor and Spallation Neutron Source) and the ORNL synchrotron beamline X14A at the National Synchrotron Light Source (NSLS) at Brookhaven National Laboratory. In the X-ray diffraction (XRD) laboratory, we have two PANalytical X'Pert Pro MPD systems with divergent and parallel-beam optics, non-ambient chambers, and fast detectors and two Scintag instruments, one with a Buehler HT furnace, the other with a closed-cycle helium cryostat. The group has a strong record of research in applications of non-ambient XRD for study of reaction pathways and kinetics of phase transformations. The postdoc will be expected to provide support for industrial, academic and other laboratory Users in the HTML User Program, in addition to developing new research efforts focused on energy-related materials in areas such as advanced fuel cells, batteries, thermoelectrics, or photovoltaics.

Qualifications:

A Ph.D. in materials science, materials engineering, physics, or chemistry is required, with extensive experience in powder diffraction analysis. Evidence of a strong publication record and collaborative research are required.

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:

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Note: Please include the requisition number and title when responding.

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> .

This appointment is offered through the ORNL Postgraduate 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.