

The Neutron Sciences Directorate at Oak Ridge National Laboratory (ORNL) invites applications for an Instrument Development Scientist. With the world's highest flux reactor-based neutron source (the High Flux Isotope Reactor) and the world's most intense pulsed accelerator-based neutron source (the Spallation Neutron Source), ORNL has become the world's foremost center for neutron science. Research at these facilities will encompass the physical, chemical, materials, biological, and medical sciences and will provide opportunities for up to 2000 researchers each year from industry, research facilities, and universities all over the world. To learn more about Neutron Sciences at ORNL go to:

<http://neutrons.ornl.gov>.

Major Duties/Responsibilities:

Position has responsibility for the conception, planning, execution, and reporting of research and development projects in the area of neutron instrument development with emphasis on neutron optics and polarization.

Serve as lead scientist on research projects centered on research and development of prototype devices and instruments; inventing innovative approaches for new applications of neutron scattering; and development of novel techniques working with neutron beams.

Anticipated focus areas include the development of helium-3 polarizers and analyzers, applications of spin-echo encoding of the momentum transfer, phase space transformers, neutron focusing mirrors and lenses, multichannel collimators, neutron guides, as well as developing new instrument concepts for long-pulse neutron spallation sources.

Other key activities may include aiding in the transition from successful instrument prototypes to full implementation and developing deployment strategies for new techniques and forming instrument development collaborations with other neutron scattering facilities.

Additional duties include supporting the ORNL, Neutron Facilities Development Division, and the Instrument Development Group's research agenda which include NFDD projects and technical R&D programs. As well as ensuring and maintaining ES&H awareness and operational discipline that maintains outstanding safety performance within the group and upholding all ORNL ethics and values policies.

Qualifications Required:

Requires a Ph.D. in physics, optics, materials science, or a closely related science or engineering discipline. Five to ten (5-10) years experience working with scientific instrumentation and/or neutron or x-ray scattering is critically important. Also requires excellent written and oral presentation skills. Experience in leading and developing technical programs would be an asset.

Measures of Effectiveness:

Carefully and accurately performs work towards completing research goals.

Performs work in a safe and careful manner.

Successfully helps to create an environment in which individuals within the group can meet NScD/ORNL environmental, safety, health, and quality requirements: and successful enforcement of these requirements.

Successfully reports and represents responsible activities to the Instrument Development Group members.

How to Apply:

Qualified applicants must apply online at* <http://jobs.ornl.gov>*

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This position will remain open for a minimum of 5 days after which it will close when a qualified candidate is identified and/or hired.

We accept Word(.doc, .docx), Excel (.xls, .xlsx), PowerPoint(.pdf), Rich Text Format (rtf), WordPerfect (.wpd), HTML (.htm, .html) and text files (.txt) text files (.txt) up tp 1MB in size.

Resumes from third party vendors will not be accepted; these resumes will be deleted and the candidates submitted will not be considered for employment.

If you have trouble applying for a position, please email ORNLRecruiting@ornl.gov.

UT--Battelle is recognized by our employees and the community as an inclusive environment where diversity is valued and individuals and teams are inspired to contribute fully to the organization's success. ORNL is an equal opportunity employer.