**Neutron Scattering Instrument Scientist – Career Development Program  
Oak Ridge National Laboratory  
Oak Ridge, TN**

# Project Description:

The Neutron Sciences Directorate (NScD) at Oak Ridge National Laboratory (ORNL) (<http://www.ornl.gov>) operates the High Flux Isotope Reactor (HFIR), the United States' highest flux reactor based neutron source, and the Spallation Neutron Source (SNS), the world's most intense pulsed accelerator based neutron source. Together these facilities operate 24 instruments for neutron scattering research, each year carrying out 1000 experiments in the physical, chemical, materials, biological and medical sciences for 2000 visiting scientists. HFIR also provides unique facilities for isotope production and neutron irradiation. To learn more about Neutron Sciences at ORNL go to:[http://neutrons.ornl.gov](http://neutrons.ornl.gov/).

The Quantum Condensed Matter Division (QCMD) of ORNL operates 13 instruments for elastic and inelastic neutron scattering studies of materials. Instruments are located at both the HFIR and the SNS. The QCMD conducts research on materials with emergent properties that are manifestly quantum in origin. Some examples of current interest include superconductivity, multiferroicity, low dimensional and frustrated magnetism, orbital fluctuations and quantum criticality.

QCMD has immediate openings for neutron scattering instrument scientists for two inelastic scattering instruments: a triple axis spectrometer at the HFIR and the Hybrid Spectrometer (HYSPEC) at the SNS. These positions will be three-year, contractual appointments through the Oak Ridge Institute of Science and Education (ORISE) that are renewable for up to five years. There is a possibility that the position will be converted to permanent ORNL staff based on a review of the candidates’ performance, ongoing programmatic need, and the availability of funding at the end of the contractual period.

The successful candidates will join the research teams at the QCMD’s Triple Axis Spectroscopy or Time of Flight Spectroscopy groups. As a beam-line scientist, you will be expected to be fully engaged in all aspects of operating a successful neutron scattering instrument at a User Facility. This includes supporting the instruments and user programs as well as linking with and developing the neutron scattering user community. The candidate will be expected to actively participate in the on-going research activities of the group and will be encouraged to develop their own independent and collaborative research program that demonstrates the capabilities and drives further development of the neutron instruments.  These positions represent an excellent opportunity for postdoctoral scientists to develop their career and interact with leading scientists from around the world.

**Qualifications:**

Ph.D. in the Physical Sciences is required, and 2 to 5 years of postdoctoral experience is desirable, with evidence of outstanding potential for future important contributions to the scientific community. The candidate should be self-motivated, have good interpersonal, communication, and presentational skills, and a demonstrated ability to interact effectively with users and staff at all levels and to work within a multi-disciplinary team. A strong background in experimental hard condensed matter physics and a proven track record in neutron scattering research would be a distinct advantage. For further questions, please contact Dr. Stephen Nagler at [naglerse@ornl.gov](mailto:naglerse@ornl.gov) .

To be considered please complete an application at:

<https://www3.orau.gov/ORNL_TOppS/Mentor/PostingApplications?thePostingID=277>