

Opportunity Title: ORNL Dynamic Nuclear Polarization Post-Master's Research Associate

Opportunity Reference Code: ORNL17-17-ISD

Organization: Oak Ridge National Laboratory (ORNL)

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Description: The Instrument and Sources Division (ISD) invites applications from a recent Master's graduate to work on a prototype Dynamic Nuclear Polarization (DNP) system for neutron scattering. The project is focused on developing a prototype system that can polarize the nuclear spins of hydrogenous samples to facilitate Neutron Macromolecular Crystallography measurements.

The selected candidate will have a strong background in experimental physics or biophysics. The candidate will be expected to work in a team and help design and test the prototype DNP apparatus. Once the prototype is built, the candidate will participate in a research program to test the effectiveness of DNP with Neutron Macromolecular Crystallography. The candidate is expected to serve as a technical specialist in supporting the day-to-day operations of the DNP apparatus, including the cryogenic, NMR, and microwave systems.

Qualifications: Master's Degree in physics, biophysics, or a related discipline is required.

A successful candidate should have a strong background in experimental physics or biophysics. Experience with Dynamic Nuclear Polarization is preferred, but not required. The candidate should be motivated to learn new skills, be an effective communicator, and have an ability to work effectively with staff at all levels within a multi-disciplinary team.

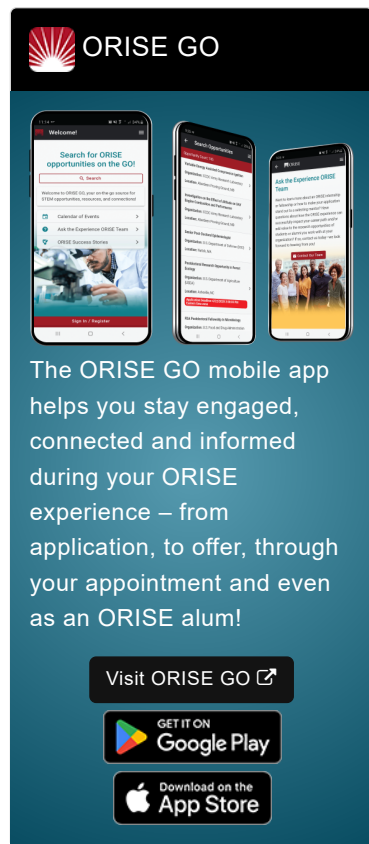
Applicants cannot have received the most recent degree more than five years prior to the date of application and must complete all degree requirements before starting their appointment.

This appointment is offered through the ORNL Postgraduate Research Participation Program and is administered by ORAU through the Oak Ridge Institute for Science and Education (ORISE).

- Eligibility Requirements**
- **Degree:** Master's Degree received within the last 60 month(s).
 - **Academic Level(s):** Post-Master's.
 - **Discipline(s):**
 - **Life Health and Medical Sciences** ([1](#))
 - **Physics** ([16](#))

Affirmation: I certify that I have completed coursework towards a degree in science, technology, engineering, mathematics, or a related field.

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