

**Postdoctoral Research Associates in
Experimental Physicist, Magnetism and Spin-Dependent
Transport in Nanostructured Materials**

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

ORNL09-01-MSTD

Project Description:

The Low-Dimensional Material by Design Group in the Materials Sciences and Technology Division at Oak Ridge National Laboratory (ORNL) is seeking a candidate to fill a postdoctoral position for an experimental physicist studying magnetism and spin-dependent transport in nanostructured materials. The successful candidate will perform collaborative research involving the MBE growth and nanofabrication of novel nanostructures and the characterization of magnetic, electrical, and optical properties with facilities such as a spin-polarized SEM, SQUID, PPMS, etc., in the ORNL Materials Science and Technology Division. In addition, the candidate will be involved in collaboration with other group members on low-dimensional physics, and will also be responsible for upholding the environmental, health, and safety requirements for the laboratory.

Qualifications:

This position requires a Ph.D. in condensed matter physics or related field, with a strong background in research on magnetic ultrathin films and magnetic nanostructures. Experience with MBE growth, surface analytical techniques, and UHV in-situ structural and magnetic measurements are desirable. Excellent oral and written communication skills are required, and presentations and publication of scientific results in high-profile, peer-reviewed journals are expected. The applicant must have good organizational skills and must have the ability to work in a team and interact effectively with a broad range of colleagues. Demonstrated ability to communicate in English to an international scientific audience is essential. 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. Jian Shen at shenj@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.

The postdoctoral position will be offered through the Oak Ridge Institute for Science and Education (ORISE) Oak Ridge National Laboratory Postdoctoral Research Associates program <http://www.ornl.gov/orise/edu/ornl/ornl-pd/ornlpdoc.htm>. These positions is open to all qualified candidates without regard to race, color, age, religion, sex, national origin, physical or mental disability, or status as a Vietnam-era veteran or disabled veteran.