

**Postdoctoral Research Associate in High-Resolution  
Scanning Transmission Electron Microscopy and  
Spectroscopy of Oxide Interfaces and Nanowires**

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

**ORNLO9-126-MSTD**

**Project Description:**

The Materials Science and Technology Division at Oak Ridge National Laboratory (ORNL) is seeking a candidate to fill a postdoctoral position in the field of high-resolution scanning transmission electron microscopy (STEM) and electron energy loss spectroscopy of oxide interfaces and nanowires. This program takes advantage of ORNL's suite of advanced electron microscopes, including five aberration-corrected instruments.

This position provides an opportunity to join an experienced team working in a highly collaborative environment on projects ranging from heterogeneous catalysis to oxide materials to semiconductors. Interactions with theoretical researchers are anticipated on a daily basis.

**Qualifications:**

This position requires a Ph.D. in Materials Science, Physics, or related field, with an emphasis on advanced TEM or STEM. Knowledge of oxide crystal chemistry is a plus. Excellent oral and written communication skills are required, and presentations and publication of scientific results in peer-reviewed journals are expected. The applicant must have the ability to work in a team and interact effectively with a broad range of colleagues. 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.

The successful applicant must demonstrate experience in electron microscope operation, preferably aberration-corrected microscopes, as well as skills in analysis and interpretation of microscopic and spectroscopic data.

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

**Technical Questions:**

Questions regarding the position can be directed to Drs. Albina Y. Borisevich, [albinab@ornl.gov](mailto:albinab@ornl.gov), Stephen J. Pennycook, [pennycooksj@ornl.gov](mailto:pennycooksj@ornl.gov), and Sergei V. Kalinin, [sergei2@ornl.gov](mailto:sergei2@ornl.gov).

**How to Apply:**

Qualified applicants may apply online at [https://www2.ornl.gov/ORNL\\_POST/](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/orni-pdpm/application.htm>. When applying for this position, please reference the position title and number.

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