

**Postdoctoral Research Associate for  
Process Analysis for Energy Storage Materials**

**Materials Processing Group  
Materials Science & Technology Division  
Physical Sciences Directorate  
Oak Ridge National Laboratory  
Oak Ridge, Tennessee  
ORNL09-53-MSTD**

**Project Description:**

The Materials Processing Group in the Materials Science and Technology Division at Oak Ridge National Laboratory is seeking a post-doctoral research associate staff to work on developing computer models for the analysis of advanced energy storage materials. The phenomena considered under study would include electrochemistry, phase changes, energy transport, and/or stress-analysis. The candidate is expected to work in a team environment interacting with external collaborators, such as industry and university participants.

**Qualifications:**

The successful candidate is expected to have completed their Ph.D. studies in Mechanical Engineering, Materials Science, Physics, or a related field. The candidate must have a strong experience in numerical discretization of PDE, developing solution algorithms to solve nonlinear systems of equations, and computer implementation of solution algorithms using FORTRAN90 and/or C. A strong background in electrochemistry and numerical analysis, PDE solvers, linear algebra, finite elements and/or finite volumes is desirable. 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 Adrian Sabau at [sabaua@ornl.gov](mailto:sabaua@ornl.gov). Please reference the position title and number when corresponding about this position.

**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/ornl-pdpm/application.htm>. When applying for this position, please reference the position title and number.

This appointment is offered through the ORNL Postdoctoral Research Associates Program and is administered by Oak Ridge Associated Universities (ORAU). This appointment 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.