

Postdoctoral Research Associate for Process Analysis

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

ORNLO9-52-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 and implementing into computer programs solution algorithms that solve coupled constitutive equations for advanced materials applications, including materials processing. The phenomena considered under study would be thermodynamics, phase changes, and/or stress-analysis.

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/ODE, developing solution algorithms to solve nonlinear systems of equations, and computer implementation of solution algorithms, i.e., source code writing (FORTRAN90 and/or C). A strong background in 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. 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/. 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.