

Postdoctoral Research Associate in Computational Materials Theory

Material Science and Technology Division Oak Ridge National Laboratory Oak Ridge, Tennessee

ORNL10-32-MSTD

Project Description:

The Materials Theory Group in the Materials Science and Technology Division at Oak Ridge National Laboratory has an opening for a post-doctoral research position. The position will involve first principles based calculations of nanoscale structures in materials, including the determination of both optimal structures and physical mechanism leading to nanocluster formation. A strong background with density functional electronic structure methods is mandatory. Of particular interest is specific experience with structure and defect formation / evolution under extreme conditions, and with calculation of material strength of structural materials using *ab initio* techniques.

The position will involve the application of first principles methods and atomistic simulation techniques to study the structure of nanostructured clusters and their formation and stability in metallic matrices. The successful candidate will have the opportunity to interact with experimentalists throughout the Division and across the laboratory.

Qualifications:

A Ph.D. in theoretical condensed matter physics or materials physics completed within the past three years is required. Appointment is for a full-time one-year position, with potential for renewal, dependent on performance and funding availability. 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 Chong Long Fu at fucl@ornl.gov. Please include the requisition number and title when corresponding.

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>.

In addition, applicants may e-mail a resume and a list of three references to: Dr. C. L. Fu, fucl@ornl.gov, Materials Science and Technology Division, P.O. Box 2008, Oak Ridge National Laboratory, Oak Ridge, TN 37831-6114. Email is preferred over postal mail submissions. We will begin reviewing submission immediately and will continue to do so until the position is filled. The desired start date is no later than June 2010. *Please note the online application must be completed in addition to emailing your resume and reference list.*

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.