

## **Postdoctoral Research Associates in Density Functional Theory**

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

**ORNLO9-04-MSTD**

### **Project Description:**

Position will involve the development of approximations of density functional theory to be used in model systems and compared with Quantum Monte Carlo results. Additional research in applications of DFT-related methods to novel materials problems is expected.

### **Qualifications:**

This position requires a Ph.D. in DFT or Quantum Chemistry Methods, Solid State Physics, Chemistry, or Materials Science. A solid understanding of the fundamentals of density functional theory is required. Experience with electron correlation, techniques that utilize exact exchange, and many body methods would be useful. Computer skills are required, as well as good communication skills. 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. Fernando A. Reboredo at [reboredofa@ornl.gov](mailto:reboredofa@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/ORNLPD/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.