

# **Computational Molecular Biophysics**

## **Biosciences Division Oak Ridge National Laboratory Oak Ridge, Tennessee**

ORNL08-01-BSD

### **Project Description:**

Immediate opportunity for graduate and postdoctoral research in computational molecular biophysics, in the new Center for Molecular Biophysics at Oak Ridge National Laboratory, Oak Ridge, Tennessee. The Center interfaces closely with the Spallation Neutron Source (SNS) and the National Leadership Supercomputing Center at Oak Ridge. The research will primarily involve the use of computer simulation in investigating the dynamical properties of biological macromolecules. Among the research fields in which the work can be performed are bioenergy (physical origin of recalcitrance to hydrolysis of lignocellulosic biomass), physical descriptions of the dynamics of biological macromolecules, enzyme reaction mechanisms using quantum mechanical techniques, neutron scattering dynamic structure factor analysis, protein structure and folding algorithms, ligand binding in cancer research and function of molecular machines.

**Qualifications: Masters and/or Ph.D degree required in Chemistry, Physics, or Computer Science.**

**Applications are invited from outstanding applicants with a good publication record in high-quality journals, a solid grounding in theoretical physics or chemistry and experience in one of the above fields.** 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.

### **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 (ORNL08-01-BSD).

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.