

**Postdoctoral Research Associate in
Discrete Mathematics and High Performance Computing**

**Computer Science and Mathematics Division
Computer and Computational Sciences Directorate
Oak Ridge National Laboratory
Oak Ridge, Tennessee**

ORNL09-124-CSMD

Project Description:

The Center for Engineering Science & Advanced Research (CESAR), in conjunction with the Computational Mathematics Group, is seeking qualified candidates for research in the application of combinatorial methods and parallel computing to petascale data. The project offers the opportunity to improve the efficiency of key graph algorithms that underlie heavily-used computational kernels in scientific computing by extending selected results from structural graph theory.

The opening corresponds to a Postgraduate/Postdoctoral Associate position with competitive salary, depending on qualifications. Position also offers exceptional benefits including health/life insurance, vacation and a 403(b) retirement plan (see <http://www.ornl.gov/ORISE/edu/ornl/ornl-pdpm/benefits.htm>). This is a one year appointment, with the possibility of renewal for a second year.

ORNL is a multi-program research facility operated by UT-Battelle for the Department of Energy located near the city of Knoxville in eastern Tennessee. The area offers a mild climate, low cost of living, great opportunities for outdoor activities (e.g. hiking in the Smoky Mountains & whitewater rafting), and several exceptional public schools systems.

Qualifications:

The successful candidate is expected to have completed a Ph.D. or MSc in Computer Science, Mathematics, or a closely related field. Exceptional candidates with a Bachelor's degree may also be considered. Experience in large-scale parallel code development in at least one of C/C++/Fortran2003 is essential, and a background in discrete mathematics (especially graph theory or combinatorial scientific computing) is desirable. Strong communication skills, the ability to work in a team environment, and a high level of accountability are required.

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:

Interested candidates may contact Dr. Blair Sullivan, Oak Ridge National Laboratory, P.O. Box 2008, MS-6015, Oak Ridge, TN, 37831-6015 or send email to sullivanb@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>.

This appointment is offered through the ORNL Postgraduate 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.