

**Postgraduate Research Associate
in Computational Nuclear Engineering**

**Nuclear Science and Technology Division
Oak Ridge National Laboratory
Oak Ridge, Tennessee**

ORNL10-36-NSTD

Project Description:

A post-master's or postdoctoral research associate position will be available in the Nuclear Data and Criticality Safety Group of the Nuclear Science and Technology Division at the Oak Ridge National Laboratory. This position will involve the development of a continuous energy version of the SCALE Monte Carlo radiation transport code, Monaco. The project will include (1) generation of continuous energy cross sections for Monte Carlo simulation of radiation transport and (2) implementing the capability to use continuous energy neutron and gamma data in the Monaco Monte Carlo transport code.

Qualifications:

Candidates must have a Master's or Ph.D. in Engineering, Computer Science, or a closely related field. The candidate must have expertise in computer programming with FORTRAN (95 or 2003 standard) and UNIX/LINUX-based operating systems. The candidate will participate as a member of a development team and must possess the associated interpersonal and communication skills. Experience with existing criticality safety or radiation transport codes in SCALE and nuclear data processing software in AMPX is a plus. Experience with processing neutron or photon cross section evaluations; developing continuous energy neutron or gamma cross sections; developing Monte Carlo transport codes for radiation transport applications is desirable but not required.

U.S. citizenship is not required; however, it is desirable that the candidate either holds or is able to obtain a Department of Energy security clearance. 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.

Salary (\$60,000 to \$86,000 per year plus benefits) will be determined according to the education, research skills, and experience of qualified candidates.

Technical Questions:

Questions regarding the position can be directed to Sedat Goluoglu at goluoglus@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>.

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.