

Postdoctoral Research Associate in Subcellular Processes of Mercury Transformation

**Environmental Sciences Division
Oak Ridge National Laboratory
Oak Ridge, Tennessee**

ORNL10-60-ESD

Project Description:

Postdoctoral position to contribute to our Research Sciences Program focused on subcellular processes of mercury transformation. Applications are sought from highly creative and motivated individuals who will join an interdisciplinary team of scientists working to understand the biochemistry of mercury transformation in microbes including methylation, demethylation and reduction of mercury. An interdisciplinary approach combining molecular biology, protein biochemistry, structural biology and computational simulation is applied to investigate the transcriptional regulation of genes in bacterial mercury resistance, enzymatic cleavage of organomercurials, enzymatic reduction of mercuric mercury and the molecular basis of mercury methylation.

Qualifications:

A Ph.D. completed within the last five years or sooner to be completed in Biochemistry, Microbiology, Cell Biology or a related field is required. The ideal candidate should have hands on experience in protein expression, purification, protein analytical techniques, enzyme kinetics and modern molecular biology techniques including cloning in bacterial systems, isolation of plasmid and genomic DNA, plasmid vector construction, PCR and site-directed mutagenesis. 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:

Questions regarding the position can be directed to Liyuan Liang, liangl@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.