POSITION AVAILABLE

FOCUS Radiological Protection
DIVISION Health, Safety and Environment
TIMING Summer

Argonne National Laboratory, one of the U.S. Department of Energy’s (DOE) major research centers, is pleased to announce opportunities for college and university graduate and undergraduate students to participate in the Laboratory’s ongoing programs.

The Radiological Protection Team is devoted to protecting the worker, members of the public and the environment from potential radiation hazards and radioactive material. Our staff are concerned with the recognition, evaluation, and control of health hazards to permit the safe use and application of ionizing radiation.

Interns will learn how to provide operational health physics support that entails planning and implementing radiation protection standards and practices for work with ionizing radiation.

ABOUT THIS INTERNSHIP

The following skills will be developed as part of the internship to prevent or minimize adverse effects to onsite personnel, members of the public, and the environment:

- Learn how to evaluate radiological hazards and implement appropriate controls through the development of a written radiological work permit
- Learn to use computer applications in dosimetry, shielding, and spectrometry
- Learn to implement health physics and ALARA principles in radiological work

- Acquire knowledge and hands-on training on the use of the state-of-the-art instrumentation to perform measurement and analysis of ionizing radiation.

By developing the above skill set, interns have the opportunity to work on several projects:

- Evaluate if air sampler inlet size affects collection of particulates if the flow rate of the air sampler is constant.
- Determine the appropriate method to evaluate and assess intakes from special tritiated compounds.
- Evaluate and recommend an instrument for surveying neutron pulsed fields for accelerator facilities.
- Develop a clearance and release protocol for potentially activated materials at one of Argonne’s accelerator facilities; including the use of Canberra’s In-Situ Object Counting System (ISOCS).
- Evaluate and update the use of passive area monitoring at Argonne to improve the characterization of radiological hazards.

Students interested in this position may need additional skill sets:

- Knowledge of health physics and radiation protection theory and practice, the measurement and analysis of ionizing radiation and radioactivity, and radiation protection standards.
EDUCATIONAL PROGRAMS

- Knowledge of effects of radiation on tissues, nuclear and atomic physics, ALARA principles, and instrumentation theory.
- Proven oral and written skills to effectively communicate problems and solutions to workers and management.
- Ability to develop interpersonal relationships with various researchers and scientists.

STUDENT REQUIREMENTS

Students seeking to apply to any of the ESH internship positions should have the following qualifications:

- Currently enrolled in occupational safety and health or radiological protection related program (ABET accredited preferred) full time and seeking a degree in an occupational safety and health or radiological protection field. Master students are eligible to apply.
- Completed one year of schooling and maintain a grade point average of 3.0 on a 4.0 scale.
- Submit a completed application and two letters of recommendation.

Additionally, students seeking this opportunity should show in their application:

- A desire to learn about the broad disciplines of occupational safety and health such as occupational medicine, safety training, and safety information system, etc.
- A desire to participate in a dynamic work environment with competing deadlines and combination of desk and fieldwork.
- Their ability to be highly motivated, self-starting and seeking a future career in a safety profession.
- Ability to assist in difficult situations and keep composure and confidence.
- Excellent written and oral communication skills.
- Attention to detail and willingness to participate in documenting of reviews, walkthroughs and meetings.

TO APPLY

Please send cover letter and resume to Lisa Reed
lisareed@anl.gov

FOR MORE INFORMATION

Educational Programs
Argonne National Laboratory
www.anl.gov/education