

**Postgraduate Internship Opportunity  
U.S. Environmental Protection Agency  
Region 5 Chicago Regional Laboratory  
Chicago, Illinois**

**Project #: EPA Region 5-CRL/RMD 2009-02**

A research project is available with the U.S. Environmental Protection Agency's (EPA) Chicago Regional Laboratory (CRL) in Chicago, Illinois.

**Project Background:** The purpose of this project is to develop methods for the analysis of industrial, agricultural, pharmaceutical and household products by LC/MS. This study may also involve the development of sample preparation techniques in order to analyze a variety of environmental matrices.

**Objectives:** Project elements will include, but not be limited to: detailed analysis of environmental samples by LC/MS, preparation of environmental samples, and preparation of visual materials for oral presentations and communications.

**Specific Tasks:** The intern will be assigned to CRL staff scientists involved in the analysis and reporting of environmental data and the planning and conducting of oral or poster presentations. Specific learning opportunities may include, but not be limited to:

- Developing or implementing extraction methods for environmental samples utilizing Accelerated Solvent Extraction, Solid Phase Extraction, liquid-liquid extraction or new technologies. Environmental samples may include soils, sludges, water, fish and industrial matrices.
- Interpreting the data which includes statistical analyses, review of quality assurance data, and preparation of tables and figures.
- Writing papers to be presented at a conference and/or to be issued as post-conference reports.
- Helping create or improve current methods and technologies.
- Assisting CRL scientists plan and implement various logistic elements regarding future projects.

**Benefits:** During this project the intern will:

- Learn about the many complex environmental analyses concerning EPA
- Increase skills in data analysis and reporting.
- Learn the many facets required to plan and implement a complex project
- Learn roles and responsibilities for working as part of a team
- Obtain professional contacts around the country
- Increase sense of professional responsibility

**Qualifications:** The applicant must have a bachelor's degree with at least one year of experience in an environmental or industrial laboratory. Students currently enrolled in a master's or doctoral program in analytical chemistry or recent graduate degree recipients are also encouraged to apply. This project requires excellent analytical, communication, and writing skills, as well as the ability to work in a team

environment. Knowledge in using analytical equipment, especially LC/MS systems and extraction technology is required. Proficient in analytical techniques especially in preparing solutions and quantitative transfer procedures is desirable. Experience with MS Word, comfort with a wide variety of office computer applications, and the ability to use presentation graphics (e.g., PowerPoint) is also preferred. Limited travel to meetings may be involved.

**Additional Information:** The internship will initially be for one year. The preferred start date is November 2, 2009.

The program is open to all qualified individuals without regard to race, sex, religion, color, age, physical or mental disability, national origin, or status as a Vietnam era or disabled veteran. U.S. citizenship or lawful permanent resident status is preferred (but can also hold an appropriate visa status, however, an H1B visa is not appropriate). **The intern does not become an EPA employee.**

The technical contact for this project is Dr. Lawrence Zintek. He can be contacted at [zintek.lawrence@epa.gov](mailto:zintek.lawrence@epa.gov).

The Internship Program for EPA is administered by the Oak Ridge Institute for Science and Education. ***Please reference Project # EPA Region 5-CRL/RMD 2009-02 when calling or writing for information.*** For additional information and application materials contact: Internship Program – EPA, Attn: Betty Bowling, MS 36, Oak Ridge Institute for Science and Education, P.O. Box 117, Oak Ridge, Tennessee 37831 Phone: (875)576-8503 FAX: (865)241-5219 e-mail: [betty.bowling@ornl.gov](mailto:betty.bowling@ornl.gov).

An application can be found at <http://www.ornl.gov/orise/edu/EPA/app-gugrgpd.pdf>.