Chemistry - Assistant Professor (Analytical Chemistry)

Saint Mary's University

Location: Nova Scotia
Date posted: 2013-01-20

2-year Limited Term Position in Analytical Chemistry

The Department of Chemistry at Saint Mary's University, Halifax, Nova Scotia, invites applications for a full-time, 2-year limited term position in Analytical Chemistry at the rank of Assistant Professor to commence July 1st, 2013 and end on June 30, 2015. The successful candidate will possess a M.Sc., preferably a Ph.D., and the field of expertise should be in Analytical Chemistry or a closely related field. Postdoctoral or industrial experience would be considered as an asset. The incumbent will have a demonstrated commitment to excellence in teaching and a good record of research contribution.

Primary teaching responsibilities will include undergraduate classroom and lab instruction in the areas of Analytical Chemistry and General Chemistry. There will also be opportunities for the successful candidate to engage in independent or collaborative research in his/her field.

The Department of Chemistry offers a nationally-accredited Bachelor of Science (B.Sc.) degree program in Chemistry (Major and Honours). Undergraduate students are actively involved in faculty research and graduate students are enrolled in the Masters of Science (M.Sc.) in Applied Science Program. As well, the Department is home to the Atlantic Centre for Green Chemistry with a number of faculty members active in Green Chemistry research. Faculty members in the Department have access to advanced instrumentation, including a new 300 MHz NMR, LC-PDA/ESI-MS, GC-FID/MS, ICP-MS, TGA-MS, GFAAS, SEM/EDX, DSC, FT-IR, single crystal X-ray diffractometer, various spectrophotometers, and potentiostats (CV, ASV, etc.), all with excellent technical support. All laboratories and research spaces in the Department have been recently rebuilt as part of a major renovation of the Science Building.

Saint Mary's University is located in the historic port city of Halifax, Nova Scotia, a vibrant, urban community of over 350,000 people. Halifax is a major educational centre for Atlantic Canada and is home to five universities. It is conveniently located close to recreational areas and to other major urban centres in Canada and the Northeastern United States. For information about the University and the Faculty of Science, please see our website at http://science.smu.ca/.

Although candidates of all nationalities are encouraged to apply, priority will be given to Canadian citizens and permanent residents (all applicants should clearly indicate their status as a Canadian citizen or permanent resident). Saint Mary's University is committed to the principles of employment equity.

The deadline for submitting an application is April 1st, 2013. Complete applications including: (i) a current curriculum vitae including a list of publications; (ii) a statement of teaching philosophy and any evidence of teaching effectiveness; and (iii) the names and contact information (email and full mailing address) of three referees should be sent directly to the address below. Applicants are also encouraged to submit their applications electronically as single files in.pdf format in addition to mailing paper copies. Please submit electronic applications directly to chemistry@smu.ca.

Chair, Search Committee
Department of Chemistry
Saint Mary's University
923 Robie Street
Halifax, Nova Scotia
B3H 3C3
CANADA
Lab Technician / Environmental Chemist  
FMC Corporation, Mississauga, Ontario

The Company  
FMC is an S&P 500, diversified chemical company serving agricultural, industrial, and consumer markets for more than a century. As a global leader using advanced technologies and customer-focused research and development, FMC provides innovative and cost-effective solutions to food, agriculture, pharmaceutical, specialty, and related industries.

FMC Corporation is committed to providing employees with ample opportunities to contribute, lead and be recognized as innovators, to look beyond barriers to provide solutions, to be challenged in what they do and to love doing it. FMC is an S&P 500, diversified chemical company serving agricultural, industrial and consumer markets globally for more than a century. As a global leader utilizing advanced technologies and customer-focused research and development, FMC provides innovative and cost-effective solutions to food, agriculture, pharmaceutical, specialty and related industries.

The Role  
Use your environmental analysis lab skills to play a significant role in growing our business, with an opportunity to develop new solutions on a bench scale that will be applied to field scale projects to ultimately help the environment. As Lab Technician / Environmental Chemist you’ll be providing commercial treatability studies for our customers to prove out our current technologies on their contaminants and site conditions, and researching and developing new products for soil and groundwater treatment.

Some of your specific responsibilities will be to:

• Select the best sample preparation and analytical protocol to ensure highly accurate/precise test results using the latest EPA recommended procedures.
• Prepare and handle all initial soil/water samples to minimize loss of pollutant from vaporization.
• Develop effective methods (column studies, extraction, purge & trap, etc) to ensure that all pollutant is analyzed, using lab techniques that provide consistent and accurate analytical results.
• Use knowledge of oxidation and reduction chemistry, soil chemistry, sample characteristics, and analytical methods to design meaningful and accurate test protocols and data.
• Identify novel activation methods and oxidizer combinations to improve oxidation effectiveness and reduce the cost of treating different soils and contaminants.
• Develop novel product formulations to effectively treat contaminants.

The Requirements  
To be a good fit for this opportunity you will have:

• A bachelor’s degree in organic or bio-organic chemistry with an environmental emphasis.
• A strong understanding of general analytical lab techniques such as extraction, filtration, HPLC, GC, etc.
• Proven experience in bench scale methods for environmental analysis such as column and batch testing, standard EPA test methods, etc.
• Demonstrated ability to write and present clear, organized and informative technical reports and publications.
• The ability to maintain a laboratory notebook and data files.
• An understanding of how to take direction and work independently to bring a project to completion, but also to work as a part of a team.
• Strong ability to problem solve, and the ability and desire to engage in technical learning.
• Great communication skills, both written (to complete comprehensive and understandable reports) and verbal (to create great team relationships).
• An internal drive to get results.

Preferred but not required:

• Experience in an environmental lab is preferred.
• Knowledge of and experience using the latest EPA accepted environmental analytical procedures is a plus.