

### **Industrial Research Chair in Nuclear Fuel Waste Behaviour**

The Department of Chemistry at Western University invites applications and nominations for an NSERC (Natural Science and Engineering Research Council of Canada) Industrial Research Chair in nuclear fuel waste behaviour at open rank of tenure-track Assistant or Associate Professor, or a Tenured appointment, at the rank of Associate of full Professor. The candidate must have a PhD in Chemistry, Electrochemistry, Chemical/Materials Engineering or a closely related field. S/he should have knowledge of electrochemistry, corrosion science, particularly related to aqueous systems and experience in the chemistry and microscopy of materials. An ability to develop an understanding of fundamental processes related to nuclear fuel waste behaviour is considered essential.

The goal of the Chair is to provide the scientific framework and numerical database required to support nuclear waste disposal performance assessment models with a primary emphasis on an understanding of the corrosion processes occurring in spent nuclear fuel or alternative waste forms, and in nuclear waste containers under the conditions expected to prevail in a deep geologic disposal site. The successful candidate will engage in research related to (i) the influence of the chemical environment within the site on the corrosion behaviour of the container; and (ii) the evolution of redox conditions within a failed container and how they influence fuel corrosion leading to radionuclide release.

The successful candidate will have demonstrated excellence and innovation in research and teaching and in industrial application. Past accomplishments would establish the potential to fulfil the goals of the Chairship by a strong record of attracting research funding or managing an industrial or government research group, publications in high-quality, field-appropriate journals and/or production of technical reports for industry or government, serving on advisory boards (e.g. journals, government/industry, granting agencies, and/or task force panels, etc), a record of management of researchers, which could include supervision of other researchers/staff or graduate students and postdoctoral fellows.

In addition to the research funded through the Chair, it is expected that the successful candidate will demonstrate the ability to develop an innovative, independently funded experimental research program. The Chair is also expected to contribute to the teaching mission in the Department of Chemistry and to the training of undergraduate and graduate students as well as postdoctoral fellows.

The Department of Chemistry (<http://www.uwo.ca/chem/>) is a large, research-intensive department with strong programs in many areas of chemistry and with interdisciplinary links to research groups in other departments in the Faculties of Science and Engineering and Surface Science Western. The Department already has strong ties with the NWMO and the nuclear industry.

The Chair will be co-funded by NSERC and the Nuclear Waste Management Organization (NWMO). The Nuclear Waste Management Organization was established in 2002 under the *Nuclear Fuel Waste Act* (<http://www.nwmo.ca>). The company's mandate is to collaborate with Canadians to develop and implement a management approach for the long-term care of Canada's used nuclear fuel that is socially acceptable, technically sound, environmentally responsible, and economically feasible.

With a full-time enrolment of about 35,000 students, Western University is a large, research-intensive university with a full range of academic and professional programs. General information about the University can be found at <http://www.uwo.ca/>. The university campus is in London Ontario, a city of 410,000, located midway between Toronto and Detroit. With parks, river valleys, tree-lined streets, and bicycle paths, London is known as the "Forest City". London boasts an international airport, galleries, theatre, music and sporting events (see <http://www.goodmovelondon.com/>).

The appointment will be at the rank commensurate with experience (Assistant, Associate or Full Professor) and is contingent on approval by NSERC. Interested applicants should submit a cover letter with a statement of interest and a curriculum vitae. Candidates selected for consideration of interview will also have to provide a concise description of current and future research directions, evidence to support the ability to contribute to the teaching mission of the university, and arrange for letters of reference. The materials must be sent to:

Professor Bryan Neff, Associate Dean (Research)  
Office of the Dean, Faculty of Science  
The University of Western Ontario  
London, Ontario N6A 5B7, Canada

Please ensure that the form available at <http://www.uwo.ca/facultyrelations/pdf/careers/Faculty/Application-FullTime-Faculty-Position-Form.pdf> is completed and included in your application submission.

Applications will be reviewed starting October 1 2016 and will continue to be considered until the position is filled. The preferred starting date is July 1 2017, but it is negotiable.

Positions are subject to budget approval. Applicants should have fluent written and oral communication skills in English. The University invites applications from all qualified individuals. Western is committed to employment equity and diversity in the workplace and welcomes applications from women, members of racialized groups/visible minorities, Aboriginal persons, persons with disabilities, persons of any sexual orientation, and persons of any gender identity or gender expression.

In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents.

Accommodations are available for applicants with disabilities throughout the recruitment process. If you require accommodations for interviews or other meetings, please contact Stephanie Attardi at [sattard3@uwo.ca](mailto:sattard3@uwo.ca)

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