Physical & Environmental Sciences
UNIVERSITY OF TORONTO
SCARBOROUGH

The Department of Physical and Environmental Sciences at the University of Toronto Scarborough invites applications for a tenure stream appointment as an NSERC (Natural Science and Engineering Research Council of Canada) Industrial Research Chair in Nuclear Waste and Corrosion. The appointment will be at the rank of Assistant Professor and will be effective January 1, 2019. The appointment is contingent upon receipt of the NSERC Industrial Research Chair.

Candidates must have a PhD in Chemistry, Electrochemistry or a closely related field by the date of appointment or shortly thereafter. Candidates must demonstrate a record of excellence in research in evaluation, prediction or prevention of corrosion, with related experience in one or more of the following areas:

* Coating methodologies, such as electrodeposition and cold spray;
* Materials degradation;
* Surface analysis;
* Electrochemistry;
* Thermodynamic modelling;
* Microbiologically influenced corrosion; and/or
* Nuclear waste management and materials relevant to a deep geological repository, such as steel and copper.

Candidates must demonstrate the ability to develop an outstanding, independently funded experimental program of research and to work closely with the nuclear industry. Experience collaborating with industry is an important asset. Knowledge of quality assurance, and training highly qualified people within such an environment is valuable. Excellence in research is demonstrated by publications in top ranked and field relevant academic journals, or a research pipeline that is at high international levels, production of technical reports for industry or government, presentations at significant conferences, receipt of awards, and strong endorsements by referees of top international stature. Candidates must also provide evidence of a demonstrated commitment to excellence in teaching. Evidence of excellence in teaching can be demonstrated by strong endorsements from referees, teaching accomplishments highlighted as part of the applications, strong teaching evaluations, and the teaching statement submitted as part of the application.

Salary will be commensurate with qualifications and experience.
The successful candidate will be involved in research in corrosion of used fuel containers lead by the Nuclear Waste Management Organization (NWMO). The Industrial Research Chair is expected to develop an experimental program that independently evaluates the NWMO container designed for Canada's deep geological repository from a corrosion point of view, and deliver feedback that can be implemented for design improvements. In the future, the Chair may be requested to engage with the Canadian Nuclear Safety Commission (CNSC) or external reviewers to provide objective commentary on the NWMO program.

The appointment is at the University of Toronto Scarborough, which is a research-intensive institution with an interdisciplinary commitment, a multicultural student body, and a modern

campus. The University offers the opportunity to conduct research, teach, and live in one of the most diverse cities in the world. The University also offers opportunities to work in a range of collaborative programs and centres of research. The successful candidate will teach in the undergraduate and graduate programs of the Department of Physical and Environmental Sciences at the University of Toronto Scarborough and could be a member of the Graduate Department of Chemical Engineering and Applied Chemistry at the University of Toronto.

The Nuclear Waste Management Organization was established in 2002 under the Nuclear Fuel Waste Act (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.

All qualified candidates are invited to apply by clicking on the link below.

Applications must include a cover letter, curriculum vitae, and teaching dossier (including a statement of teaching philosophy along with any demonstrated evidence of teaching excellence), and concise descriptions of current research activity and future research plans. Three letters of reference (on letterhead, signed, and scanned) should be sent directly by the referee to the attention of the Chair, Prof. George Arhonditsis, at dpeschair@utsc.utoronto.ca.

All application materials should be submitted online. Submission guidelines can be found at: http://uoft.me/how-to-apply. We recommend combining attached documents into one or two files in PDF/MS Word format.

The closing date for applications is February 20, 2018.

If you have questions about this position, please contact us at dpeschair@utsc.utoronto.ca. For more information about the Department of Physical and Environmental Science, University of Toronto Scarborough, please visit www.utsc.utoronto.ca/physsci/. For information about the graduate department of Chemical Engineering and Applied Chemistry at the University of Toronto please visit: www.chem-eng.utoronto.ca.

The University of Toronto is strongly committed to diversity within its community and especially welcomes applications from racialized persons / persons of colour, women, Indigenous / Aboriginal People of North America, persons with disabilities, LGBTQ persons, and others who may contribute to the further diversification of ideas.

As part of your application, you will be asked to complete a brief Diversity Survey. This survey is voluntary. Any information directly related to you is confidential and cannot be accessed by search committees or human resources staff. Results will be aggregated for institutional planning purposes. For more information, please see http://uoft.me/UP.

All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority.