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Tier 1 Canada Research Chair in Geotechnical Engineering or Coastal Engineering

Department of Civil Engineering Faculty of Engineering and Applied Science Queen's University at Kingston November 2021

Queen's University is situated on traditional Anishinaabe and Haudenosaunee Territory.

The Faculty of Engineering and Applied Science at Queen's University invites applications for a Tenured faculty position at the rank of Associate Professor or Professor in Civil Engineering specialising in Geotechnical Engineering (including groundwater) or Coastal Engineering with a preferred starting date of July 1, 2022. The successful candidate will submit an external nomination for a seven year term position as a Tier 1 Canada Research Chair, eligible for renewal once, to a maximum of two seven year terms as a Tier 1 Canada Research Chair.

This appointment is open only to qualified individuals who self-identify as women¹. We welcome and support applications from such candidates who also identify as members of other equity-deserving groups, i.e. Indigenous/Aboriginal peoples, persons with disabilities, racialized/visible minorities, and members of 2SLGBTQ+ communities.

Queen's University is committed to academic and research excellence while advancing inquiry to solve problems and promoting a more equitable, diverse and inclusive research enterprise. To fully realize this, we must ensure that we have diversity of perspective and experiences to boldly take on societal, cultural and environmental challenges. Queen's University has an employment equity program that meets the goals of the Canada Research Chairs program and the requirements of our collective agreement with the Faculty Association. Until such time as we have met our Canada Research Chairs Program equity targets (http://queensu.ca/vpr/prizes-awards-chairs/canada-research-chairs-program-crcp), preference will be given to members of the Four Designated Groups under the Canada Research Chairs program: women, Indigenous/Aboriginal peoples, persons with disabilities and racialized persons/visible minorities. All applicants will be invited to self-identify once they have applied. Self-identification information will be held in confidence by the Human Rights and Equity Office and one specially trained member of the selection committee. All qualified candidates are encouraged to apply; however, in accordance with Canadian Immigration requirements, Canadian citizens and Permanent Residents of Canada will be given priority.

Canada Research Chairs were established as part of a national strategy to foster research excellence (www.chairs-chaires.gc.ca). The successful candidate must submit an external application to the Tri-agency Institutional Program Secretariat that meets the requirements for the successful nomination to the Canada Research Chairs Program.

^{1 &}quot;Women" is used because the CRC Program currently employs the categories of the four federally designated groups (FDG) - Women, Indigenous Peoples, Persons with Disabilities, and Members of Visible Minorities - to monitor progress towards meeting equity goals. Queen's has an under-representation of women among Tier 1 Chairholders. The Tri-Agency Institutional Programs Secretariat (TIPS) has established targets for CRC representation, with staggered deadlines for meeting targets between the period of 2020 to 2029. This initiative follows the provisions for a special program as described by the Ontario Human Rights Commission.

Requirements of Tier 1 Chair as defined by the Canada Research Chairs Program:

- be outstanding and innovative world-class researchers whose accomplishments have made a major impact in their fields;
- be recognized internationally as leaders in their fields;
- have superior records of attracting and supervising graduate students and postdoctoral fellows (taking into account different practices in the relevant field or discipline) and, as chairholders, be expected to attract, develop and retain excellent trainees, students and future researchers; and
- be proposing an original, innovative research program of the highest quality.

Your Career with Queen's Engineering

Among our top priorities in the Faculty of Engineering and Applied Science is providing opportunities for early career academics to develop distinguished research and exceptional teaching contributions while fostering an environment where all faculty can thrive. To promote on-going success, there is support for course development and delivery that is provided by the Department, the Queen's Centre for Teaching and Learning, and the Faculty of Engineering and Applied Science. Faculty have access to a range of educational technologies including industry-leading instructional design support offered through the Engineering Teaching and Learning Team. Support for faculty to develop strong research programs includes Special Research Grant opportunities, grant writing workshops and review services, and one-to-one mentorship from experienced colleagues. Queen's Engineering is also committed to increasing the proportion of women in engineering, supported by the recent establishment of a Chair for Women in Engineering.

Queen's University is one of Canada's leading research-intensive universities with a global reputation and is a recognized leader in Canadian higher education.

Queen's brings together and builds synergies among leading researchers, scholars and innovators making a real and measured impact. The interdisciplinary nature of our faculty's research expertise is exemplified through seven innovative research centres, institutes, and major differentiating research facilities. These innovation hubs are designed to support collaborative discovery and mentoring, facilitating research innovation for FEAS faculty, students and colleagues across the university. Our education programs incorporate innovative approaches to engineering education, with an emphasis on developing technical and professional skills.

The successful candidate will provide evidence of high quality scholarly output that demonstrates independent research leading to peer-assessed publications and the securing of external research funding, active engagement with stakeholders, and the supervision of graduate students. We are especially interested in candidates with expertise in geotechnical engineering (including groundwater) or coastal engineering supporting the vision of our two internationally recognized research centres (the GeoEngineering Centre at Queen's–RMC (www.geoeng.ca) and the Beaty Water Research Centre (www.waterresearchcentre.ca) to conduct highly influential research to improve the resilience of our natural and built infrastructure to climate change. Areas of expertise include numerical simulations (coastal, geomorphological, geomechanical or hydrogeological), physical modeling (e.g. small or large scale geotechnical testing, landslide-tsunami flume and wave basin experiments), and novel methods of field investigation.

Formed in 2002, the GeoEngineering Centre at Queen's – RMC has grown to become North America's most productive and impactful team of GeoEngineering scholars. The Centre's 21

faculty members and over 100 graduate students are drawn from three engineering departments at the two Universities and are dedicated to innovation and advancement of knowledge in geotechnical, geosynthetics, hydrogeological, cold regions, geochemical, and geomechanical engineering. Founded in 2017, the Beaty Water Research Centre (BWRC) is an inter-disciplinary research centre committed to fostering an environment that encourages collaborative research spanning both traditional water-related disciplines, as well as non-traditional and emerging disciplines. The BWRC has 66 associated faculty members and trains Canada's water research experts in engineering, science, health science, law and business. This critical mass of researchers has enabled the Department of Civil Engineering to develop world-class research facilities including the new state-of-the-art Mitchell Hall environmental laboratory and large-scale testing facilities at the 525 m² Geotechnical Engineering Laboratory, 2000 m² Coastal Engineering laboratory, and the 1000 m² CASTLE ("Climate Adaptive infraStructure Testing and Longevity Evaluation") Laboratory currently under development (home of new facilities including a geotechnical centrifuge, 1 m diameter triaxial, buried pipeline testing facility, and submarine landslide tank).

Criteria:

The successful candidate must have a PhD in Civil, Environmental or Geological Engineering or a related discipline and will demonstrate the ability to enhance the existing excellence in theoretical and applied research and training within our highly-collaborative geotechnical, groundwater, and surface water engineering research groups.

The main criteria for selection are:

- evidence of research and teaching excellence;
- ability to provide evidence of high quality scholarly output in their field as well as outstanding teaching contributions at both the undergraduate and graduate levels;
- an ongoing commitment to academic and pedagogical excellence in support of the Department's programs;
- Professional engineering licensure in Canada, or the eligibility to obtain licensure, is a requirement. Note that all forms of engineering licensure in Canada are considered acceptable (e.g. P.Eng., temporary engineering license, provisional engineering license, etc.).
- Demonstrated commitment to professional leadership and provide evidence of an ability to work collaboratively in an interdisciplinary and student-centered environment.
- Relevant industrial experience is considered an asset.

The successful candidate will also be expected to make contributions through service to the Department, to the Faculty, to the University, and/or to the broader community

Queen's University Commitment to Equity, Diversity and Inclusion.

Within the Faculty of Engineering and Applied Science, innovation thrives with new perspectives and experiences, and the diversity of our workforce enhances our research and teaching excellence. People from across Canada and around the world come to learn, teach and carry out research at Queen's University. With foundational values of collaboration, respect and diversity, we are committed to embracing an inclusive environment and supporting each member of our community to reach their fullest potential. Ranking 1st in Canada and 5th in the World in the 2021 Times Higher Education Impact Rankings, Queen's is committed to advancing the United Nations Sustainable Development Goals. We encourage those who share our commitments to diversity and inclusion to join our Faculty.

The University is situated on the traditional territories of the Haudenosaunee and Anishinaabe, in historic Kingston on the shores of Lake Ontario. Kingston's residents enjoy an outstanding quality of life with a wide range of cultural, recreational, and creative opportunities. Visit Inclusive Queen's for information on equity, diversity and inclusion resources and initiatives.

Faculty and their dependents are eligible for an extensive benefits package including prescription drug coverage, vision care, dental care, long term disability insurance, life insurance and access to the Employee and Family Assistance Program. You will also participate in a pension plan. Tuition assistance is available for qualifying employees, their spouses and dependent children. Queen's values families and is pleased to provide a 'top up' to government parental leave benefits for eligible employees on maternity/parental leave. In addition, Queen's provides partial reimbursement for eligible daycare expenses for employees with dependent children in daycare. Details are set out in the Queen's-QUFA Collective Agreement. For more information on employee benefits, see Queen's Human Resources.

Additional information about Queen's University can be found on the <u>Faculty Recruitment and Support</u> website.

To comply with federal laws, the University is obliged to gather statistical information as to how many applicants for each job vacancy are Canadian citizens / permanent residents of Canada. Applicants need not identify their country of origin or citizenship; however, all applications must include one of the following statements: "I am a Canadian citizen / permanent resident of Canada"; OR, "I am not a Canadian citizen / permanent resident of Canada". Applications that do not include this information will be deemed incomplete.

In addition, the impact of certain circumstances that may legitimately affect a nominee's record of research achievement will be given careful consideration when assessing the nominee's research productivity. Candidates are encouraged to provide any relevant information about their experience and/or <u>career interruptions</u>.

A complete application consists of:

- a cover letter (including one of the two statements regarding Canadian citizenship / permanent resident status specified in the previous paragraph);
- a current Curriculum Vitae that includes a comprehensive list of publications (with supervised students on publications clearly identified), awards, and grants received;
- a statement of research interests and achievements;
- a statement of teaching interests and experience (including teaching outlines and evaluations if available);
- a statement of commitment to as well as ideas and any experience on how to ensure equity, diversity and inclusivity in scholarly activities, and
- the contact information for three references.

Applicants are encouraged to send all documents in their application package electronically – as one single PDF file – to Sandra Martin at sandra.martin@queensu.ca with the subject line "Application for Faculty Position", although hard copy applications may be submitted to:

Dr. Ian Moore
Department Head
Department of Civil Engineering
Queen's University
Kingston, Ontario
Canada, K7L 3N6.

Review of applications will begin on February 1, 2022 and applications will continue to be accepted until the position is filled.

The University will provide support in its recruitment processes to applicants with disabilities, including accommodation that takes into account an applicant's accessibility needs. If you require accommodation during the interview process, please contact Sandra Martin in the Department of Civil Engineering at sandra.martin@queensu.ca.

Academic staff at Queen's University are governed by a <u>Collective Agreement</u> between the University and the <u>Queen's University Faculty Association (QUFA)</u>, which is posted at http://queensu.ca/facultyrelations/faculty-librarians-and-archivists/collective-agreement and at http://www.qufa.ca.

Appointments are subject to review and final approval by the Provost. Only nominees external to Queen's University will be considered. (Please note that, for the purposes of this competition, Queen's Term Adjuncts and Adjunct-1s will be considered as external nominees).