



**Tenure-Track Faculty Position
Department of Civil Engineering;
The Natural and Built Environment
Queen's University at Kingston, Canada**

January 2023

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

[The Department of Civil Engineering](#) in the [Faculty of Engineering and Applied Science](#) at [Queen's University](#) invites applications for a **tenure-track faculty position in Climate Change Resilience of Structural or Geotechnical Infrastructure** at the rank of Assistant Professor in the Department of Civil Engineering at Queen's University. The preferred start date of the appointment is July 1, 2023.

Criteria:

The successful candidate(s) must hold a PhD in Civil or Geological Engineering, Geoscience, or another related field at the start date of the appointment.

The main criteria for selection are:

- Evidence of high-quality scholarly output that demonstrates potential for independent research leading to peer-assessed publications and the securing of external research funding, active engagement with industry, and the supervision of graduate students. For this position, we are especially interested in candidates with expertise in structural and/or geotechnical engineering, and who are motivated to apply their expertise to address challenges related to climate change resilience of infrastructure.
- Strong potential for outstanding teaching contributions at both the undergraduate and graduate levels, and an ongoing commitment to academic and pedagogical excellence in support of the department's programs;
- Evidence of their ability to work collaboratively in an interdisciplinary and student-centered environment;
- 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.).
- Relevant industrial experience will be considered an asset.

Research areas of candidates may include, but are not limited to:

- Structural theme: innovative and resilient technologies for structures, infrastructure, and cities; incorporation of sustainable materials; effects of natural hazards on built infrastructure;

development of standards, loading criteria, and design procedures for climate change effects on structures. Approaches could include laboratory, field, and/or numerical techniques.

- Geotechnical theme: research to improve the resilience of our natural and built infrastructure to climate change including geohazards, permafrost engineering, energy geotechnics, soil-structure interaction, swelling soils, and tailings dam engineering. Approaches could include numerical simulations (e.g. finite element and/or large deformation particle-based methods), physical modeling (e.g. small or large scale geotechnical testing, flume and/or centrifuge model experiments), element testing (e.g. use of large-scale triaxial apparatus) and/or field monitoring

The successful candidate will demonstrate the ability to enhance the existing excellence in research contributions and training of our highly collaborative structural and/or the GeoEngineering Centre at Queen's-RMC research groups:

- The structural research group consists of 6 faculty members with expertise in concrete, composite, steel, and timber structures. World class facilities include a large-scale structures laboratory and strong floor, high-capacity hydraulic actuators with state-of-the-art control equipment, significant research capacity for distributed fiber optic strain sensing for field or laboratory based structural health monitoring, and the unique Rolling Load Simulator.
- 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. This critical mass of researchers has enabled the development world-class research facilities including the state-of-the-art 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 construction (home of new facilities including a geotechnical centrifuge, 1 m diameter triaxial, buried pipeline testing facility, and submarine landslide tank).

Our programs incorporate innovative approaches to engineering education, with an emphasis on developing technical and professional skills. 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. Salary is commensurate with qualifications and experience.

Prior to May 1, 2022, the University required all students, faculty, staff, and visitors (including contractors) to declare their COVID-19 vaccination status and provide proof that they were fully vaccinated or had an approved accommodation to engage in in-person University activities. These requirements were suspended effective May 1, 2022, but the University may reinstate them at any point.

Your Career with Queen's 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. The Department of Civil Engineering at Queen's University currently has an enrolment of approximately 300 undergraduate students and over 100 graduate students. Current faculty conduct internationally recognized research in the areas of Water Resources and the Environment, Geotechnical and Geoenvironmental Engineering, and Structural Engineering. The Department

actively involves industry partners in both research and teaching (see www.civil.queensu.ca for further details).

Opportunities for collaboration are also enabled by two internationally recognized research centres supported by the department: the Beaty Water Research Centre (www.waterresearchcentre.ca) and the GeoEngineering Centre at Queen's–RMC (www.geoeng.ca) with interdisciplinary expertise in areas that cover physical and chemical research related to water, and how water affects natural and built materials and environments.

Among our top priorities in the Faculty of Engineering and Applied Science is providing opportunities for early career academics to develop exceptional research and teaching contributions while fostering an inclusive environment where all faculty can thrive. 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. To promote on-going teaching success, there is support for course development and delivery provided by [the Queen's Centre for Teaching and Learning](#), the [Engineering Teaching and Learning Team](#), the Department of Civil Engineering and the Faculty of Engineering and Applied Science. Queen's Engineering is also committed to promoting equity, diversity, and inclusivity in Engineering, supported by the recent establishment of a [Chair for Women in Engineering](#), the new [Engineering Strategic Plan](#), and [Engineering for Everyone](#).

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. Queen's historic campus is located in the heart of the vibrant Kingston community in the Thousand Islands region of South Eastern Ontario. Queen's is positioned centrally with respect to three major metropolitan areas: Toronto, Montreal, and Ottawa. 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 [Faculty Recruitment and Support website](#). Visit [Inclusive Queen's](#) for information on equity, diversity and inclusion resources and initiatives.

The University invites applications from all qualified individuals. Queen's is strongly committed to employment equity, diversity, and inclusion in the workplace and encourages applications from Black, racialized/visible minority and Indigenous/Aboriginal people, women, persons with disabilities, and 2SLGBTQ+ persons. 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.

To comply with federal laws, the University is obliged to gather statistical information about 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 career interruptions.

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 (including a list of publications);
- a statement of research vision and interests;
- a statement of teaching interests, experience and philosophy (including teaching outlines and evaluations if available);
- a statement of commitment to –as well as an outline of experience with or plans for– ensuring equity, diversity and inclusivity in scholarly activities; and,
- Candidates who are invited for an interview will be required to submit three reference letters within three weeks of being invited for an interview.

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 – Climate Resilient Infrastructure", 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 28, 2023, 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 [Collective Agreement](#) between the University and the [Queen's University Faculty Association \(QUFA\)](#), which is posted at [Collective Agreements / LoU's / MoA's | Faculty Relations Office \(queensu.ca\)](#) and at <http://www.qufa.ca>.