Engineering NSERC Tier 1 Canada Research Chairs (Internal) – Two Positions

Date Advertised: December 22 2022

The Faculty of Engineering at the University of Waterloo is seeking exceptional scholars and researchers to internally fill two Tier 1 Canada Research Chair (CRC) openings. CRCs are established by the Government of Canada to enable Canadian universities to foster research excellence (www.chairs-chaires.gc.ca). The anticipated start date of November 1 2023, at the earliest. To address legal requirements for supporting underrepresented groups in the CRC program, eligible candidates for this search are required to identify as a woman, which is defined to include individuals who self-identify as women, transgender people, non-binary, or two-spirited. Current tenured faculty members or faculty members who have fully signed offers dated on or before December 31, 2022 within the Faculty of Engineering are eligible to apply.

The faculty of Engineering is looking for candidates with research that is based on or related to one or more of the following faculty priority research fields:

- Water Resources
- Sustainability and Renewable Energy Systems
- Smart and Adaptive Infrastructure
- Additive and Advanced Manufacturing
- Automotive and Mobility
- Connectivity, Network Communications, and Security
- Data Analytics, Artificial Intelligence, and Human-Machine Interaction
- Robotics and Autonomous Systems
- Bioengineering and Health

Qualifications

- Candidates should be at the rank of Full Professor or be an Associate Professor who is expected to be promoted to the rank of Full Professor within one to two years of the nomination.
- The candidate will propose an innovative program of high-quality research that will attract external funding and excellent graduate students.
- Evidence of an active and developing research program and a successful record of Tri-Agency funding is required.
- Ability and desire to partner with faculty in closely related fields is required.

Duties include research, teaching at the undergraduate and graduate level, service to the unit, and the supervision of graduate students. Experience developing an array of traditional and/or on-line courses for a diverse student body is required. The successful candidate would be expected to have reduced teaching load during the term of the CRC.

The successful candidate will be subsequently nominated for a Tier 1 Canada Research Chair. Nominations for Canada Research Chairs (CRC) are subject to review by the CRC Secretariat and appointment as a CRC is conditional on their approval (see the CRC terms of reference). The University of Waterloo is committed to providing the candidate with support to secure the CRC.

To meet the criteria for a Tier 1 CRC, successful candidates must be:

• outstanding and innovative world-class researchers whose accomplishments have made a major impact in their fields and be recognized internationally as leaders in their fields.

- They must also have superior records of attracting and supervising graduate students and postdoctoral fellows (taking into account different practices in the relevant field or discipline)
- as chairholders, be expected to attract, develop and retain excellent trainees, students and future researchers
- proposing an original, innovative research program of the highest quality.

The University of Waterloo understands the impact that legitimate career interruptions (e.g. parental leave, leave due to illness) can have on a candidate's record of research achievement and encourages potential candidates to explain in their application the impact this may have on their record; this information will be taken into careful consideration during the assessment process. Please consult the CRC website and the Office of Research for full program information, including further details on eligibility criteria.

The closing date for applications is January 31, 2023. Applications must include:

- Cover letter (addressed to Prof. David A. Clausi, Associate Dean, Research & External Partnerships) [1 page]
- Research Statement: current program and future plans [no more than 2 pages]
- Teaching Statement: curriculum development, student recruitment, and training [no more than 2 pages]
- Full CV

All applicants to this CRC opportunity are required to self-identify using the <u>self-identification applicant survey</u> at https://uwaterloo.ca1.qualtrics.com/jfe/form/SV_08RcdJzz6YAh4TX. Because this is a special opportunity for a specific member of the four designated groups, applicant self-identification information will be used for the purposes of screening and consideration. Please note that this information will be securely accessed only by members of a central selection committee and, for nominees selected, for the fulfillment of CRC program purposes(s) detailed at: http://www.chairs-chaires.gc.ca/program-programme/equity-equite/index-eng.aspx.

Completed applications are to be uploaded to the following website:

https://uwaterloo.ca/engineering/applications-nserc-tier-1-crc-tier-internal-search

The University values the diverse and intersectional identities of its students, faculty, and staff. The University regards equity and diversity as an integral part of academic excellence and is committed to accessibility for all employees. The University of Waterloo seeks applicants who embrace our values of equity, anti-racism and inclusion. As such, we encourage applications from candidates who have been historically disadvantaged and marginalized, including applicants who identify as Indigenous peoples (e.g., First Nations, Métis, Inuit/Inuk), Black, racialized, people with disabilities, women and/or 2SLGBTQ+.

However, this particular selection process will follow the provisions for a special program as described by the Ontario Human Rights Commission in order to address the underrepresentation of individuals from equity-seeking groups among our Canada Research Chairs, which has been identified through research (Canadian Association of University Teachers, 2018; Council of Canadian Academies, 2012; Henry et al., 2017; and Witteman, Hendricks, Straus, & Tannenbaum, 2019) to be systemic in nature. As such, this opportunity is open only to individuals who self-identify as a woman. Improving the representation, participation and engagement of equity-seeking groups within our community is a key objective of Waterloo's Strategic Plan 2020-2025.

The University of Waterloo acknowledges that much of our work takes place on the traditional territory of the Neutral, Anishinaabeg, and Haudenosaunee peoples. Our main campus is situated on the Haldimand Tract, the land granted to the Six Nations that includes six miles on each side of the Grand River. Our active work toward

reconciliation takes place across our campuses through research, learning, teaching, and community building, and is centralized within our Indigenous Initiatives Office (http://uwaterloo.ca/human-rights-equity-inclusion/indigenousinitiatives).

The University of Waterloo is committed to accessibility for persons with disabilities. If you have any application, interview or workplace accommodation requests please contact Occupational Health (occupationalhealth@uwaterloo.ca or Karen at extension 40538); who will work with the selection committee to secure accommodation while ensuring that the information is safe-guarded and confidentiality is maintained.

If you have any questions regarding the position, the application process, assessment process, eligibility, or the CRC program, please contact the Associate Dean, Research and External Partnerships (adr.eng@uwaterloo.ca).

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

Three reasons to apply: https://uwaterloo.ca/faculty-association/why-waterloo.