Canada Research Chair, Tier II

Assistant or Associate Professor

Mechanical Engineering - Faculty of Engineering

Canada Research Chair (CRC) Tier 2 in Assistive Technologies

Posting date: November 25, 2020

The Department of Mechanical Engineering invites applications from external candidates for a Canada Research Chair (CRC) Tier 2 in Assistive Technologies. Assistive technology development creates devices and methods for improving the quality of life for people living with a broad range of cognitive and physical challenges. This Canada Research Chair will run a world-class research program developing novel technologies to assist people in overcoming challenges faced in daily activities, rehabilitation, as well as to mitigate cognitive impairment. These technologies would improve the independence and quality of life of people across the age spectrum, and a particular focus on seniors, aging, and frailty. The target candidate will establish an externally funded, internationally recognized research program.

This CRC recruitment is part of a broad strategy to expand and raise the profile of research in health and aging at the University of Victoria. The successful candidate will be expected to engage with the UVic Institute on Aging and Lifelong Health (IALH) and CanAssist. IALH has a 25-year history of high-quality research, community outreach, and trainee support. Research strengths in the Institute on Aging and Lifelong Health are currently organized around cognitive health, lifelong health, and vulnerability and frailty. CanAssist is a grant funded, provincially recognized entity at UVic, and is dedicated to helping people with physical, cognitive and mental health challenges improve their quality of life, with a focus on promoting independence and inclusion. Their team develops innovative technologies and programs where there are gaps in existing provincial services. CanAssist provides a unique collaboration opportunity for this Chair that will enable access to the British Columbia health and social service sectors through their
existing partnerships in addition to providing specific research opportunities associated with its technology development program.

Tier 2 CRC Chairs are one of Canada’s premier early career recognition and recruitment programs, and are intended for exceptional emerging scholars (i.e., candidates must have been an active researcher in their field for fewer than 10 years at the time of nomination). However, applicants who are more than 10 years from having earned their highest degree (and where career breaks exist) may have their eligibility for a Tier 2 Chair assessed through the program’s Tier 2 justification process. For more information on the CRC program generally and on eligibility specifically, please consult the Canada Research Chairs website.

The successful applicant will be nominated by the university for a CRC Tier 2 and, upon approval by the CRC Secretariat, will be offered an appointment at the rank of Assistant Professor with eligibility for tenure, or, Associate Professor with eligibility for tenure or with tenure. The anticipated start date is January 2022.

Requirements

Candidates will be evaluated on the criteria that follow. The successful candidate will be an emerging world-class researcher in the field of Assistive Technologies who demonstrates particular research creativity; will have a critical understanding of medical devices in the context of Biomedical Engineering; and will propose an original, innovative research program of high quality with the potential to achieve international recognition. The candidate will offer evidence of high-quality teaching and graduate supervision, including support of diversity and inclusiveness. The successful candidate will collaborate with CanAssist – developing innovative, non-medical technologies that solve practical problems for differently abled clients. They will also facilitate integration of CanAssist’s expertise into the academic and research missions of the University of Victoria along with interactions with Mechanical Engineering. In addition, the candidate will translate the knowledge generated by their research program through the Research Partnerships and Knowledge Mobilization office. The successful candidate will possess a PhD degree in biomedical or mechanical engineering or a closely related field, be eligible for registration as a professional engineer, and will be expected to offer courses for our undergraduate program in Biomedical Engineering.

Additional information

The University of Victoria is consistently ranked in the top tier of Canada’s research-intensive universities. Vital impact drives the UVic sense of purpose. As an internationally renowned research and teaching hub, we tackle essential issues that matter to people, places and the
planet. Situated in the Pacific Rim, our location breeds a profound passion for exploration. Defined by its edges, this extraordinary environment inspires us to defy boundaries, discover, and innovate in exciting ways. It’s different here, naturally and by design. We live, learn, work and explore on the edge of what’s next—for our planet and its peoples. Our commitment to research-inspired dynamic learning and vital impact make this Canada's most extraordinary environment for discovery and innovation. Experience the edge of possibilities for yourself.

The University of Victoria Campus is located on the traditional lands of the Coast Salish Peoples and we are privileged to do our work in a way that is inspired by their history, customs, and culture. Please see the University of Victoria’s Territory Acknowledgement for more information.

The Department of Mechanical Engineering has a complement of 22 regular faculty members including two existing CRCs. We have over 150 graduate students, over 450 undergraduate students, and a great compliment of department staff, adjunct faculty members, research personnel, and visiting researchers. The department is strongly committed to both excellence and equity, and to increasing the diversity of approaches and perspectives in teaching and research. This CRC position will also help support our undergraduate program in Biomedical Engineering, which has over 170 students. Our Biomedical Engineering Program was established in 2012, and has a gender ratio of approximately 50/50 female/male students. It was the first BME Program in Western Canada, and is accredited by the Canadian Engineering Accreditation Board. Our programs attract excellent, highly motivated students. Many of our undergraduate students are actively engaged in research through volunteer research lab positions, research co-op jobs, and in-course research project opportunities, which leads to a research engaged learning environment. Some students participate in extracurricular teams such as the BMed team, which placed second nationally in the Innovative Designs for Accessibility (IDeA) student competition in 2019. We have an upcoming Professional Master’s (MEng) program in Biomedical Systems, which will lead to an expansion of our student body, teaching and research capabilities, and industrial interactions. Using this program as catalyst, the Department is planning to develop a research-based Master’s program (MASc) and Ph.D. program in Biomedical Engineering. We have a strong collaboration with the Division of Medical Sciences, which includes seven active research faculty, including one Tier 1 CRC and one Tier 2 CRC. The Division also has a number of affiliated faculty who actively participate in UVic's interdisciplinary neuroscience graduate program and teach in the Island Medical Program.

The Mechanical Engineering and Biomedical Engineering Programs value candidates who share our commitment to equity and inclusivity in scholarship and teaching.

Faculty and Librarians at the University of Victoria are governed by the provisions of the Collective Agreement. Members are represented by the University of Victoria Faculty Association.
Contact information

Candidates should submit a single PDF document that includes (1) a cover letter providing an overview of the candidate’s qualifications, how they fulfill the CRC criteria, and how their research capacity will complement existing research strengths defined above; (2) a detailed curriculum vitae, (3) a 3-5 page description of the candidate’s proposed CRC research program (addressing the key criteria of NSERC’s CRC guidelines), (4) a 1-page description of the candidate’s three most important research contributions to date, (5) a maximum 2-page statement of teaching experience and approach, including evidence of teaching effectiveness, (6) A one-page statement identifying their strengths and experiences in promoting equity, diversity and inclusion, and (7) contact information for three referees. To be considered, please submit your application package via email to: meng.asst.chair@uvic.ca, with the subject line “Assistive Technologies Position” by January 22, 2021.

Applications should be addressed to:
Dr. Nick Dechev, PhD, PEng
Acting Chair, Department of Mechanical Engineering
University of Victoria

c/o meng.asst.chair@uvic.ca

Please note that reference and background checks, including credential and degree verification, may be undertaken as part of this recruitment process.

Application deadline

January 22, 2021

Equity statement

UVic is committed to upholding the values of equity, diversity, and inclusion in our living, learning and work environments. In pursuit of our values, we seek members who will work respectfully and constructively with differences and across levels of power. We actively encourage applications from members of groups experiencing barriers to equity.

Read our full equity statement here: equity statement

The University acknowledges the potential impact that career interruptions can have on a candidate’s record of research achievement. We encourage applicants to explain in their
application the impact that career interruptions have had on their record. For more information, see http://www.chairs-chaires.gc.ca/program-programme/equity-equate/recruitment-recrutement-eng.aspx

Persons with disabilities, who anticipate needing accommodation for any part of the application and hiring process, may contact Faculty Relations and Academic Administration in the Office of the VP Academic and Provost at FRrecruit@uvic.ca. Any personal information provided will be maintained in confidence.