



**Canada Impact+ Research Chair in
Safety of Net-Zero Energy and Mineral Resources
Department of Process Engineering,
Faculty of Engineering and Applied Science**

Posting Date: **March 3, 2026**

Closing Date: **April 3, 2026**

As per the [Canada Impact+ Research Chairs program competition](#), Memorial University's Faculty of Engineering and Applied Science invites applications for a **Canada Impact+ Research Chair (CIRC) in Safety of Net-Zero Energy and Mineral Resources**. CIRC's will be appointed for a period of eight years in values of either \$8 million (\$1 million per year) or \$4 million (\$500,000 per year), with the possibility of a 4-year extension at 50% of the original award value, determined by an external review in Year 7 of the award. The awardee may also request an additional \$100,000 per year over six years to [recruit an Early Career Researcher \(ECR\)](#) and to apply for [research infrastructure funding](#). While the CIRC program places no restrictions on nationality, the candidate must be internationally based (both working and residing outside of Canada) at the time of the intake's application deadline.

The CIRC program is a one-time-only initiative, funded by the Government of Canada, designed to recruit top-tier international researchers with expertise in key areas addressing critical national and global challenges. The program emphasizes both research excellence and tangible impact. The eight CIRC-identified strategic priority areas include: Advanced digital technologies (including artificial intelligence, quantum and cybersecurity); Health, including biotechnology; Clean technology and resource value chains; Environment, climate resilience and the Arctic; Food and water security; Democratic and community resilience; Manufacturing and advanced materials; and Defense and dual-use technologies.

Located in the [Department of Process Engineering](#), the vision for the **CIRC in Safety of Net-Zero Energy and Mineral Resources** is to develop Artificial Intelligence (AI) - enabled technologies to enhance the safety and reliability of clean, sustainable processes and energy systems supporting critical mineral and resource development, with particular emphasis on operations in remote, ocean and Arctic environments. This focus is directly motivated by the rapid expansion of natural resource and energy development in the Arctic and remote regions, and the significant critical mineral and energy assets located in Newfoundland and Labrador, including proposed critical mineral mining sites, large-scale wind energy developments, proposed hydro-electric projects, and

emerging large-scale carbon capture, utilization, and storage (CCUS) initiatives in offshore reservoirs among others. These initiatives introduce complex process safety, operability, and lifecycle risk challenges associated with processing in harsh environments, marine transport, and international supply chains. The candidate will provide research leadership in this domain by developing advanced safety and reliability frameworks and protocols, that address emerging industry needs.

The successful CIRC will either be appointed at the academic level of Full Professor or Associate Professor, eligible for promotion to Full Professor within 2 years of the Chair's start date, or; hold a position outside of academia with equivalent qualifications necessary for appointment at these academic levels. The salary for the position will be commensurate with qualifications and experience, in accordance with the Memorial University of Newfoundland Faculty Association (MUNFA) Collective Agreement.

Candidate Profile

The successful candidate must be an established, internationally recognized research leader with relevant expertise and experience in one or more of the following areas: safety and risk engineering, reliability engineering, digitalization of energy systems, and applied AI and machine learning. The candidate must demonstrate strong capabilities and experience in integrating theoretical and practical approaches to develop innovative strategies to ensure safety and reliability for the energy and mineral sector.

The candidate will be expected to build on and complement existing institutional research strengths and to lead a highly visible, externally funded research program at Memorial University. They will contribute to graduate and undergraduate education, mentor highly qualified personnel (HQP), foster meaningful partnerships with industry, government, and international collaborators, and develop and implement a plan for an inclusive research environment that fosters equity, accessibility and diverse participation at all levels. Memorial also has an all-Indigenous Committee on [Engaging Research Involving Indigenous Groups](#) to ensure that research, including classroom research, meets high ethical and responsible standards. The focus is on research with, by, and for Indigenous Peoples that emphasizes engagement grounded in understanding and respect.

How to Apply

The Canada Impact+ Research Chairs competition involves a two-stage process as outlined below.

Stage 1

Applications must be submitted as a single PDF file, with the subject heading: **CIRC Safety of Net-Zero Energy and Mineral Resources** and quoting the reference number: **F98766-2026-13**. The application should include the following information, provided in the order listed below:

- a) a cover letter describing the applicant's vision, leadership experience, and fit with the *CIRC in Safety of Net-Zero Energy and Mineral Resources* (1-2 pages);

- b) current curriculum vitae with a clear summary of major research, leadership and knowledge mobilization achievements;
- c) a research plan for the duration of the 8-year CIRC, outlining objectives, methodology, expected outcomes, and impacts (3-5 pages);
- d) significant contributions to research and innovation (2-4 pages);
- e) teaching philosophy and plan including mentorship of undergraduate and graduate students, postdoctoral fellows, and/or early-career faculty colleagues (2-3 pages);
- f) copies of three relevant technical publications;
- g) names and contact information of at least three referees, and;
- h) a statement on how the applicant's research program fosters and implements best practices in equity, diversity, inclusion and anti-racism (For guidance see http://www.nserc-crsng.gc.ca/doc/EDI/Guide_for_Applicants_EN.pdf).

The successful candidate should also be eligible for registration as a professional engineer in the Province of Newfoundland and Labrador.

Application packages should be submitted through this portal: [CLICK HERE TO APPLY](#), as soon as possible but no later than (March 30, 2026). The application review will begin immediately and continue until the position is filled. Candidates with inquiries about this position, the Department of Process Engineering, the Faculty of Engineering and Applied Sciences, and / or the broader Memorial community, are encouraged to contact the Process Engineering Department Head, enr.process@mun.ca.

Memorial acknowledges that career paths can be diverse and that life circumstances, such as illness, disability, and family and community responsibilities, are often an expected part of life and are likely to affect a nominee's record of research achievement. Applicants are encouraged to explain in their cover letter any life circumstances that may have resulted in career interruptions, if applicable. These impacts will be carefully considered during the assessment process.

Memorial is committed to employment equity, diversity, inclusion and anti-racism, and encourages applications from all qualified candidates, including: women; people of any sexual orientation, gender identity, or gender expression; Indigenous Peoples; visible minorities, and racialized people; and people with disabilities. All applicants are invited to identify themselves as a member of an equity-deserving group(s) as appropriate.

Please note that applicants cannot be considered as a member of an equity-deserving group(s) unless they complete Memorial's employment equity (EE) survey. Applicants will receive the EE survey via email once they submit their application. The EE survey link expires after 7 days of receiving it. If an applicant does not receive a survey or has any questions about the EE survey, please contact equity@mun.ca.

Memorial is committed to providing an [inclusive learning and work environment](#). If there is anything we can do to ensure your full participation during the application process, please contact Mandy Penney, equity@mun.ca, and we will work with you to make the appropriate arrangements.

Stage 2

The successful candidate will be registered with the CIRC program as Memorial's nominee and will complete the CIRC application with support from the Faculty of Engineering and Applied Science and Memorial's Research Initiatives & Services (RIS). The completed nomination package will be submitted electronically by the CIRC's application deadline. Appointment of a candidate to the advertised position is contingent upon the success of the submitted CIRC application.

Memorial University

As Newfoundland and Labrador's only university, [Memorial University](#) plays an integral role in the province's education and cultural life, offering diverse undergraduate and graduate programs to more than 17,000 students from over 120 countries. Memorial's St. John's campus provides a distinctive and stimulating environment for learning in the capital city. Home to many natural wonders, including puffin colonies, whales, and icebergs, St. John's is steps from the Atlantic Ocean, with a vibrant arts and culture scene, mild temperatures, and access to a wide range of year-round outdoor activities.

The [Faculty of Engineering and Applied Science](#) offers accredited undergraduate and graduate programs in civil engineering, computer engineering, electrical engineering, mechanical engineering, ocean and naval architectural engineering, and process engineering, following a fully integrated co-operative education model, as well as course-based master's programs in computer engineering, energy systems, environmental systems, oil and gas, and safety and risk engineering. New programs to be launched in the next year include an undergraduate program in mechatronics engineering and two graduate programs in software engineering and artificial intelligence (in partnership with computer science).

We acknowledge that the lands on which Memorial University's campuses are situated are in the traditional territories of diverse Indigenous groups, and we acknowledge with respect the diverse histories and cultures of the Beothuk, Mi'kmaq, Innu, and Inuit of this province.