



CANADA EXCELLENCE RESEARCH CHAIR - PROFESSOR

Job Reference Number: 22-PR-1

Posting/Closing Date: February 18, 2022 to March 19, 2022

Workplace: All buildings

Department or Service: Office of the Vice-President – Research and Innovation

WORK ENVIRONMENT

Founded in 1873, Polytechnique Montréal today welcomes nearly 10 000 students and relies on the expertise of over 1,600 professorial and professional staff with a wide variety of qualifications. Polytechnique Montréal promotes excellence and creativity, and the core values of integrity, collaboration, respect, openness, and diversity guide all the institution's actions. Recognized as one of Montreal's best employers, it has received Silver Parity Certification from the Women in Governance organization, and offers excellent work conditions, in particular by fostering employees' work-life balance and well-being.

Applying to Polytechnique is a move to an enriching career, full of opportunity.

Located on Mount Royal, an exceptional setting in the heart of Montreal, Polytechnique is a world-renowned engineering university, excelling in cutting edge multidisciplinary and multi-sectoral research involved locally, nationally, and internationally, and is equally known for its top-tier training at all academic levels. An active advocate for sustainable development, Polytechnique has been certified Gold by the STARS organization. Polytechnique is known for its innovative approach, and its active role in technological, economic, and social development.

PHILOSOPHY AND RESEARCH ORIENTATIONS

In keeping with its historical role in the economic development of society, Polytechnique is responding to the major challenges of the future by training highly qualified personnel and by pursuing interdisciplinary research, in synergy with its environment, and by relying on its community as a driver of development. To do so, it advocates the pursuit of multidisciplinary research and development (R&D) activities with a collaborative and synergistic approach with numerous partners, including academic and government researchers, industrial partners ranging from local SMEs to large multinationals, governmental and non-governmental organizations and hospitals. These collaborations allow it to maximize its intellectual, economic, environmental and societal impact.

Polytechnique therefore integrates these challenges into all its R&D activities and its centres of excellence reflect this vision.

CANADA EXCELLENCE RESEARCH CHAIRS

The Canada Excellence Research Chairs (CERC) program is Canada's most prestigious research chair program. It is designed to attract world's top researchers whose achievements have had a major societal impact and who provide international leadership in their field. Successful applicants may be awarded a grant of up to \$1 million per year^[1] for a period of eight (8) years, with no possibility of renewal. Polytechnique Montréal will be granted up to four (4) CERC

The objectives of the Canada Excellence Research Chairs Program are to:

- Strengthen Canada's ability to attract the world's top researchers, in order to be at the leading edge of breakthroughs in science, innovation, and technology (ST&I) priority areas expected to generate social and economic benefits for Canadians;
- Help Canada build a critical mass of expertise in ST&I priority areas identified by the Government of Canada;
- Create a competitive environment to help Canadian institutions, in their pursuit of excellence in their research, attract a cadre of world-leading researchers; and
- Contribute to branding Canada as a location of choice for world-leading research, science and technology development, alongside other federal programs with similar objectives.

For more information on the CRC program, please visit the [Canada Excellence Research Chairs](#) website.

[1] Including the remuneration of the successful applicant and the indirect costs of research.

RESEARCH AREAS

Polytechnique Montréal is looking for exceptional candidates for the Canada Excellence Research Chairs program in areas of research at the intersection of its eight (8) spheres of excellence as described below, and areas of interest stemming from [federally-identified priorities in science, technology, and innovation](#).

Polytechnique Montréal's [eight \(8\) spheres of excellence](#) are consistent with its ambition to have a significant impact on society and are grouped into three interrelated categories describing research areas in which the institution has a critical mass of researchers.

Four spheres of excellence are linked to the societal issues to which Polytechnique wishes to contribute:

- Energy, Water, and Resources in a Transitional World

- Human Health
- Industries of the Future and Digital Society
- Sustainable Transport and Infrastructures

Three critical technological spheres represent transversal research themes present in many of Polytechnique's research activities:

- Modeling and Artificial Intelligence
- Innovative Materials
- New Frontiers in Information and Communication Technologies

At the very heart of all the eight (8) spheres of excellence is the sphere of excellence associated with the assessment, management, and consideration of the environmental, economic, and societal impact of activities:

- Environment, Economy, and Society

PROFILE SOUGHT

Candidates must:

- Be full professors or associate professors expected to be promoted to full professor within two years of the nomination;
- Possess the qualifications necessary to be appointed at these levels if they come from outside the academic sector;
- Be considered world-class researchers in their field;
- Indigenous candidates (First Nations, Inuit or Métis) based in Canada, must have a record of achievement at the international, national, regional and/or community level;
- Possess achievements that have had a major societal impact (depending on stage of career);
- Demonstrate ability to fund research through external sources of funding;
- Demonstrate ability to attract and mentor a diverse group of students, trainees, and research staff, and creates an equitable and inclusive research environment;
- Possess and demonstrate excellent teaching skills;
- Capable of building a diverse and high-quality research team that will significantly contribute to Polytechnique Montréal's reputation in the field;
- Committed to integrating equity, diversity and inclusion into their team and research design, once awarded the CERC.

INSTITUTIONAL COMMITMENT TO EQUITY, DIVERSITY, AND INCLUSION

In accordance with its recruitment policies, and in particular its "Equal Access and Employment Equity Program," Polytechnique Montréal is committed to fostering

excellence in research and research training and to guaranteeing equal opportunities for all candidates.

Polytechnique Montréal supports the principle that excellence and diversity are compatible and complementary and recognizes that good equity practices ensure access to the largest possible pool of qualified individuals.

Polytechnique particularly encourages women, members of visible and ethnic minorities, Indigenous Peoples individuals and persons with disabilities to apply.

Polytechnique Montréal recognizes that career interruptions and delays, such as maternity leave, parental leave, extended sick leave, or clinical training, as well as disabilities, can have an effect on productivity and research achievements. Where appropriate, applicants are encouraged to explain the impact of these career breaks so that they can be fairly considered in the evaluation. In addition, accommodations may be available for those with disabilities or special needs in this competition. Persons requiring accommodation are encouraged to contact Ms. [Maria-Gracia Girardi](#), Equity, Diversity and Inclusion Advisor.

APPLICATIONS

Those interested in this call for applications are invited to send their application package via email to the [Office of the Vice-President of Research and Innovation](#) no later than 5:00 pm on March 19, 2022.

This file must include:

- A letter of motivation;
- A detailed curriculum vitae;
- An overview of current and future research program(s), highlighting links to targeted research area(s) (maximum 2,500 words).

Successful candidates will be required to prepare an application package to be submitted to the Tri-agency Institutional Programs Secretariat (TIPS) by October 13, 2022.^[2]

Conditional to the award of a CERC by the federal program, candidates will be integrated into a faculty position, in accordance with hiring procedures in effect at Polytechnique Montréal. Selected candidates will have up to 12 months to accept the CERC after the notice of award and acceptance has been signed by all parties, and to join the Polytechnique faculty.

For more information and questions, please contact the [Office of the Vice-President Research and Innovation](#).

The Program does not impose any restrictions on applicants with respect to nationality or country of residence. [Employment and Social Development Canada](#) and [Immigration and Immigration, Refugees and Citizenship Canada](#) have established procedures that allow

CERC holders who are not Canadian citizens to work in Canada. Team members affiliated with the CERC holder may also be eligible for expedited employment authorization.

[\[2\]](#) Advanced registration for the CERC competition required by September 15, 2022.