



## CALL FOR EXTERNAL CANDIDATES

### CANADA RESEARCH CHAIRS – TIER 1

The Mechanical Engineering Department of the Faculty of Science and Engineering of Université Laval invites applications for Tier 1 NSERC Canada Research Chairs.

In particular, the Department is seeking applications in the following areas:

- Solid mechanics and mechanical systems
- Combustion
- Advanced manufacturing systems
- Advanced and sustainable design and fabrication
- Biomechanics
- Large-scale engineering project management
- Experimental aerodynamics

#### ***The CRC program***

Tier 1 Chairs are awarded to outstanding researchers recognized by their peers as world leaders in their field. These seven-year, once-renewable chairs are funded at \$200,000 per year and contribute to the salary of the chairholder.

The CRC Program is founded on an unwavering commitment to excellence in research and training. Candidates must demonstrate a significant differential contribution compared with researchers working in the same field internationally (Level 1). This differential contribution is defined, among other things, by:

- a publication record above the reference group average;
- supervision of graduate students. Diversity and inclusion of students and research staff will be valued;
- funding above the reference group average;
- international collaborations (publications, research funding, knowledge-sharing activities);
- a number of knowledge-sharing activities above the average for the reference group: for example, carrying out diverse activities such as attending scientific symposia, giving radio interviews, disseminating their research results in both scientific journals and major newspapers, sharing with communities of practice, etc;
- leadership, as demonstrated by the fact that the candidate is a major contributor to the development and sharing of knowledge in his or her field of expertise.

#### ***The University's commitment to equity, diversity and inclusion***

Université Laval rejects all forms of discrimination, promotes excellence in research and research training, and guarantees equal opportunity for all candidates. We endorse the principle that excellence and equity are compatible and complementary. We welcome and encourage applications from members of racialized

and visible minority groups, women, Canada's First Peoples (Aboriginals), people with disabilities, ethnic minorities, 2SLGBTQI+ communities, and all qualified individuals with the skills and knowledge to engage productively with diverse communities.

By joining Université Laval, you will be able to benefit from the following integration measures:

- welcome and orientation days for new professors;
- peer mentoring;
- free French courses for you and your partner;
- settlement support in Quebec City and job search assistance for your spouse, for professors coming from abroad;
- tax exemption (under certain conditions).

In November 2020, Université Laval published an update to its [Equity, Diversity and Inclusion Action Plan](#) (PDF) to increase the proportion of people from the four designated groups - women and gender diversity, people with disabilities, Aboriginals and members of visible minorities - in CRC positions at our institution.

Université Laval has made significant progress in bridging the representation gaps among its CRC holders. Additional efforts are still required to meet the representation targets for 2025, 2027 and 2029. For a more detailed explanation of the rationale behind these EDI commitments, as well as to find out the representation gaps that the University must close by 2029, we invite you to consult our web pages dedicated to EDI as well as those of the CRC Program.

### ***Eligibility***

Candidates for a Tier 1 Chair must hold full professor status or be in the process of obtaining it. If they come from outside the academic sector, candidates must have the necessary qualifications to be appointed at this level.

### ***Career breaks, special circumstances and adaptation measures***

Université Laval recognizes that career interruptions or slowdowns (e.g. maternity or parental leave, extended sick leave or clinical training) as well as disabilities can have an effect on productivity and research achievements. Candidates are therefore invited to explain any such effects, so that they can be considered when assessing their application. In addition, accommodations may be offered to people with disabilities based on their needs in the context of this competition, particularly in terms of accessibility. If you require accommodation, please contact Patrice Bouchard at [Patrice.Bouchard@fsg.ulaval.ca](mailto:Patrice.Bouchard@fsg.ulaval.ca).

### ***Position description***

- Teaching and supervising undergraduate and graduate students.
- Research and dissemination of research results in the above-mentioned fields on a non-exclusive basis.
- Participation in the pedagogical and administrative activities of the Department and Faculty.
- Participation in external activities of an academic nature contributing to the reputation of the Department, the Faculty and the University.

### ***Selection criteria***

- PhD in Mechanical Engineering, Industrial Engineering, or a discipline relevant to the research field of this position;
- Relevance of scientific training and experience to the identified field;

- Demonstrated ability to conduct university-level research at the level required of CRC level #1 holders
- Demonstrated aptitude or potential for teaching at the undergraduate and graduate levels, mentoring graduate students, and commitment to pedagogical innovation;
- Potential or demonstrated commitment to service to the community;
- Ability to communicate and integrate into the institution's French-speaking environment within a reasonable timeframe;
- Fit between the professional potential and the key competencies needed to perform as a professor
  - Analysis, synthesis and judgment
  - Creativity and innovation
  - Communication skills
  - Interpersonal skills and openness
  - Ability to work in a team and with partners
  - Autonomy and sense of responsibility
  - Sense of ethics and duty
  - Supervision of persons.

### ***Selection process***

After an initial review of the application files received, the candidates who are selected will be invited to a one-day interview. They will be asked to give a teaching demonstration, present their research program and take part in a structured interview on the competencies listed above. They will also meet members of the departmental community.

The person chosen by the Mechanical Engineering Department based on the above selection criteria will then have to successfully go through an evaluation at VRRCI, a selection and ranking at the Faculty of Science and Engineering (FSG), a second internal selection at VRRCI, and an evaluation by the CRC Program.

Please consult [Université Laval's 2024 Call for applications – NSERC CRC Tier1](#) for detailed information on the steps and timetable of the selection process, as well as the evaluation criteria for the steps following the department's selection.

To find out more about the CRC program and the eligibility criteria for candidates, please visit the [Canada Research Chairs Program](#) website.

### ***Candidate application package***

The complete application package consists of

- A presentation letter
- A curriculum vitae in PDF format like the CRC CV. Please follow detailed instructions as described in the document [Instructions for Applicants](#) (PDF) ([Word template](#) for part 1 of the CV).
- A description of the proposed research program (maximum 6 pages) and of its capacity-building (1 page) in PDF format. Please follow detailed instructions as described in the document [Instructions for Applicants](#) (PDF).
- The [Université Laval self-identification form](#) (available in French only).

***Application deadline***

Interested candidates should submit their complete application file, together with the names and addresses of three referees, to the Dean of the Faculty of Science and Engineering at [doyen@fsg.ulaval.ca](mailto:doyen@fsg.ulaval.ca) .

Applications will be accepted until September 30, 2024.