Call for candidates

Professor in Experimental and/or Urban Hydraulics

N° 06942 Posting period: April 11 to May 31, 2024

JOB DESCRIPTION: Professor LOCATION: Main Campus STATUS: Regular ADMINISTRATIVE UNIT: Faculty of Engineering Civil and Building Engineering Department SCHEDULE: Full time tenure-track position



The <u>Université de Sherbrooke</u> (UdeS) is seeking applications for a position as professor in experimental and/or urban hydraulics. This is a full-time tenure track position in the Civil and Building Engineering Department of the Faculty of Engineering.

About the Faculty of Engineering

The UdeS <u>Faculty of Engineering</u> is a leader in education and applied research. Recognized for its dynamism in collaborative research, it stands out particularly in terms of technology transfer and concrete impacts on society.

It is also a faculty on a human scale, which favours rigorous and complete training of its students, particularly through the alternating <u>study and internship program</u>. In a friendly and highly collaborative environment, discovery and innovation are strongly encouraged.

To foster its long-term growth, the Faculty of Engineering is particularly focused on interdisciplinary initiatives and emerging fields. The Faculty of Engineering has several research centers as well as the <u>Interdisciplinary Institute for Technological Innovation</u> (3IT), a part of the Integrated Innovation Chain along with the <u>Institut quantique</u> (IQ) and the <u>Centre de collaboration MiQro Innovation</u> (C2MI).

Discover all the advantages of a career at the UdeS Faculty of Engineering, in the heart of the Eastern Townships!

Page 1 of 4



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About the Department

The faculty members of the Civil and Building Engineering Department is active in the fields of materials such as concrete, structures, water resources, geotechnics, the environment, life cycle assessment, building energy efficiency and integrated building design. The Department offers master's and doctoral programs that enable students to work in state-of-the-art laboratories under the supervision of internationally renowned researchers. The Department's facilities include over 2,000 square meters of laboratories for structure and material testing, a concrete pilot plant, three large reaction walls, two test slabs, state-of-the-art testing equipment, environmental laboratories, building energy efficiency laboratories, an external hydraulics and hydrology complex with an experimental watershed and an artificial river, and a 2,000-square-meter scale-up center for the manufacture of large-scale concrete specimens. The Water Resources Group consists of 3 professors with established strengths in hydraulics and hydrology and with research integrating numerical, laboratory and field experiments. The facilities of the group include the Outdoor Experimental River Facility (OERF) and the Outdoor Experimental Watershed (OEWS) and the large indoor hydraulics laboratory. The newly constructed OERF consists of a 50 long, 3 m wide channel carved in an erodible 20 m wide valley. Recirculatory pump capacity is 750 l/s. The hydraulics laboratory is equipped with several tilting flumes (1.2 m, 0.6 m and 0.15 m wide) as well as the newly constructed delta-density confluence flume (DDCF). State-of-the-art instrumentation includes: multispectral and lidar drones, GNSS, particle image velocimetry systems, acoustic Doppler velocimeters and acoustic current profilers

Expertise

The candidate should have a strong background in Water Resources Engineering and more specifically in experimental hydraulics in order to take advantage of the existing state of the art facilities available at UdeS. It is expected that the candidate will as well strengthen and contribute to the growth of the UdeS experimental hydraulic facilities. Areas of research include:

- Urban hydraulics
- Environmental fluid mechanics
- River engineering.

Functions

- Teach at the undergraduate and graduate levels.
- Develop fundamental or applied research activities.
- Supervise graduate students.
- Participate in university life.
- Contribute to community service.

Page 2 of 4







- Hold a doctorate in a relevant discipline
- Have an interest in and aptitude for teaching, university pedagogy and skills development.
- Have an interest in research (disciplinary, interdisciplinary), innovation and knowledge transfer.
- Be able to plan, organize and develop a project independently.
- Demonstrate an ability to supervise graduate students.
- Have previously published in peer-reviewed journals.
- Demonstrate the ability to establish and maintain good interpersonal relationships, collaboration and teamwork skills.
- Demonstrate leadership qualities, initiative and excellent ability to communicate and interact effectively and smoothly with various internal and external partners.
- Ability to comply with the requirements of responsible research conduct.
- Have the ability to **teach in French** or to achieve this ability within a reasonable time frame.
- Be a member of the *Ordre des ingénieurs du Québec* (OIQ) or have the qualifications to become a member and commit to becoming a member within 5 years.

The working conditions are governed by the collective agreements in force.

Regular, full-time, tenure-track position,

Anticipated start date: September 1, 2024.

Equity, diversity and inclusion

The Université de Sherbrooke (UdeS) values equity, diversity, equality and inclusion in employment within its community and invites all qualified individuals to apply, particularly women, members of visible and ethnic minorities, Aboriginal peoples and <u>persons with disabilities</u> in compliance with the Quebec Act respecting equal access to employment in public bodies. The screening and assessment tools can be adapted according to the needs of persons with disabilities who request them, and this, in complete confidentiality. The Université de Sherbrooke also encourages people of all sexual orientations and gender identities to apply. Priority will be given to Canadians and permanent residents. Learn more about equity, diversity and inclusion at UdeS.

Page 3 of 4



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Application process

The deadline for submitting applications is May 31, 2024.

Review of applications will begin on June 1st, 2024 and will continue until the position is filled. We invite you to submit your application electronically by clicking on the "<u>Postuler</u>" button. Please combine the following in one pdf document: (please provide complete files)

- 1. Your curriculum vitae;
- 2. A letter of motivation;
- 3. A proposal for a research chair program (2 pages) describing the problem, objectives, methodological approach, links with your previous work, as well as the training of highly qualified personnel (students, research staff, etc.). The adequacy with the strategic plan of the Université de Sherbrooke and the Faculty of Engineering should also be explained. Funding opportunities (granting agency programs, companies, etc.), as well as the collaborations and networking envisaged should be described;
- 4. A description of your vision of teaching (2 pages) including the <u>courses</u> to which you could contribute and/or that you would like to develop and the teaching methods that you advocate;
- 5. A one-page text on equity-diversity-inclusion (EDI) that presents specific actions already taken or planned to promote EDI (i) in the training of new staff (recruitment, mentoring, career development); (ii) in the realization of research projects; and (iii) in the involvement in university life. We invite you to consult the <u>guide to submitting an EDI text</u> (in French). The Faculty is interested in individuals whose research, teaching, and community involvement demonstrate the importance it places on diversity in higher education;
- 6. Reprints from the most relevant recent contributions (maximum 3).

In addition, please have **three external referees** each send a letter of recommendation directly to the contact information below:

Dean of the Faculty in Engineering Job Posting no 06942 Université de Sherbrooke 2500, boulevard de l'Université Sherbrooke (Québec) J1K 2R1 doyen.genie@USherbrooke.ca

Page 4 of 4

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