

# **MECH 220-117 - Faculty & staff - University of Victoria**

## **Assistant Professor**

**Mechanical Engineering - Faculty of Engineering and Computer Science**

Date posted: May 10, 2022

### **Canada Research Chair (CRC) Tier 2 in Energy Systems**

*The University of Victoria community acknowledges with respect the Songhees, Esquimalt and WSÁNEĆ peoples on whose traditional territory the university stands and whose historical relationships with the land continue to this day.*

The Department of Mechanical Engineering at the University of Victoria invites applications from emerging researchers with the potential for developing a world-class research program in Energy Systems with a focus on Energy Storage (Thermal, Electrochemical, Mechanical) and/or Conversion (Fuel Cells, Electrolyzers, Redox-flow Batteries, Batteries, Supercapacitors) as well as Renewable Energy Generation (Wind, Solar, Marine, Hydro, Geothermal). The successful applicant will be nominated for a Tier 2 Canada Research Chair (Tier 2 CRC) in Energy Systems, sponsored by the Natural Sciences and Engineering Research Council (NSERC). Upon approval by NSERC, an appointment to the Mechanical Engineering Department will be granted at the rank of Assistant Professor. Appointment at the rank of Associate Professor may be considered for eligible applicants with exceptional qualifications. The successful candidate will also be a member of the Institute for Integrated Energy Systems (IESVic) – a multi-disciplinary UVic research institute that is a leading centre focused on charting feasible pathways to innovative, decarbonized and sustainable energy systems.

The Department of Mechanical Engineering offers Bachelors, Masters, and Ph.D. degree programs. We have 28 faculty members, including two Canada Research Chairs, over 550 undergraduate students, and over 130 graduate students. Industrial collaboration enriches our teaching and research activities, and our expertise in Clean Energy Systems, Clean Transportation, Aerospace, Biomedical Systems, Mechatronics and Robotics is demonstrated in vibrant undergraduate and graduate curricula that expose our students to cutting-edge engineering tools, technologies and systems. With an excellent collegial atmosphere and strong collaborative spirit, the Department empowers faculty to build research networks across academia and industry, secure research support from industry, provincial, federal and international sources and deliver impactful innovation. Information on the Department can be found on the web at <https://www.uvic.ca/ecs/mechanical/>.

Many of the Department's 28 faculty are members of IESVic. IESVic research is multi-faceted, spanning energy conversion, distribution and storage technologies (energy supply), human dimensions of energy use (energy demand), systems-level techno-economic assessment and energy planning and policy. These elements are

united by a common goal of finding pathways to a ‘net-zero’ future. Energy systems research in IESVic occurs over a multitude of scales, including building, remote community, city, regional and provincial energy systems, with extensive stakeholder engagement and knowledge mobilization occurring at all of these levels. Between 1998-2008 IESVic research led UVic to be ranked 5th in the world by Science Watch for impact in energy and fuels research. The successful candidate will contribute to IESVic’s development of the breakthrough technologies, tools and methods that support Canada’s pursuit of its 2050 ‘net-zero’ goal. Information on IESVic can be found on the web at <https://www.uvic.ca/research/centres/iesvic/index.php>.

## Requirements

The successful candidate will have:

- A Ph.D. in mechanical or chemical engineering or a closely-related discipline;
- Must be a registered professional engineer in Canada, or be eligible to apply for registration with Engineers and Geoscientists of British Columbia (details available at [egbc.ca](http://egbc.ca));
- Be an emerging researcher in the field of Energy Systems who demonstrates particular research creativity in theoretical and/or experimental aspects of energy systems design, characterization, modelling, and integration;
- Have demonstrated the potential to achieve international recognition in their fields in the next five to ten years;
- Be committed to establishing collaboration across disciplines, develop academic, government and industry partnerships, and engage in community energy initiatives with real world impact;
- Show potential to translate the knowledge generated by their research program through the UVic Research Partnerships and Knowledge Mobilization office (<https://www.uvic.ca/research-innovation/research-partnerships/index.php> );
- Demonstrate a strong commitment to excellence in undergraduate and graduate engineering education as evidenced by:
  - potential for excellence in teaching courses related to the Energy Systems discipline, and
  - an inclusive approach to mentoring and supervising diverse students both in classroom and research environments.

Tier 2 CRC’s 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.

**In accordance with the University’s Equity Plan and pursuant to Section 42 of the BC Human Rights Code, preference will be given to women.**

Our search committee will first review the pool of applications from those who self-identify as a woman. For your application to be considered in this first round of review, you must self-identify in your cover letter. The committee will review other

applications in the event that they do not find a suitable candidate in the initial pool.

## **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 teaching and research 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 and the Faculty of Engineering are committed to supporting early career academics work to develop outstanding teaching & research contributions. The successful candidate will be immersed in a supportive, collaborative research environment at UVic focused on electrification, decarbonization, sustainability and economic development through clean technology. This support will come from IESVic and also the [Pacific Institute for Climate Solutions](#) (an endowed provincial research institute informing climate change mitigation in BC and Canada) as well as [CIFAL Victoria](#), a new training centre at UVic that empowers communities and governments to action the UN Sustainable Development Goals.

Teaching release is provided for new Faculty to develop an engaging curriculum and establish impactful research programs and to develop curriculum that translates their cutting-edge research methods and outputs into our senior undergraduate and graduate courses. The UVic Learning and Teaching Support and Innovation Centre provides supports for curricular planning, technology integration and professional development for young Faculty.

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](#).

The University of Victoria requires all students, staff and faculty coming to campus to declare their COVID-19 vaccination status. The declaration is confidential and will be securely stored. New employees will be required to be fully vaccinated for COVID-19 prior to beginning employment at the University of Victoria.

Candidates should submit a single PDF document that includes: (1) a cover letter providing an overview of the candidate's qualifications and how their research experience will complement the position as described; (2) a detailed curriculum vitae; (3) a max 3-page description of the candidate's proposed research program; (4) a max 2-page description of the candidate's teaching experience and philosophy; (5) a statement on commitment to equity, diversity and inclusion; and (6) contact information for four referees.

In forming their EDI statement, applicants are asked to refer to the [2018-2023](#)

UVic Strategic Framework, particularly our institution's priority to, "Cultivate an Extraordinary Academic Environment," and elaborate on how they will build and lead a diverse research team that champions inclusivity, ensures that all members have opportunity to reach their full potential and works to create opportunities for meaningful collaborations across the UVic campus.

To be considered, please submit your application package via email to: [mech.asst.chair@uvic.ca](mailto:mech.asst.chair@uvic.ca), with the subject line "MECH CRC Energy Systems Position" by 22 June, 2022.

Applications should be addressed to:  
Dr. B. Buckham  
Chair, Department of Mechanical Engineering  
University of Victoria  
PO Box 1700 STN CSC  
Victoria, BC, Canada V8W 2Y2

## **Application deadline**

**June 22, 2022**

## **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, and for this particular search, preference will be given to women.

Read our full equity statement here: [www.uvic.ca/equitystatement](http://www.uvic.ca/equitystatement).

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.

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](mailto:FRrecruit@uvic.ca). Any personal information provided will be maintained in confidence.