Canada Research Chair (Tier II) and Assistant Professor, Sustainable Hydrogen Engineering, Department of Chemical and Petroleum Engineering

The University of Calgary and, in particular, the Department of Chemical and Petroleum Engineering within the Schulich School of Engineering, is globally recognized for energy research and scholarship. Leveraging its existing strengths, the University is embarking on a new strategic plan, Framework for Growth, which emphasizes transdisciplinary scholarship, deeper community integration, and future-focused program delivery. The plan includes a strong focus on "Energy Transformation" where the University will lead in transdisciplinary scholarship on societal, economic, legal and technical challenges and solutions to support local, national and international transition to zero-emission energy systems.

The Schulich School of Engineering is a key contributor to the University of Calgary via its own Strategic Plan, Catalyst for a Connected World, which identifies three priorities: 1) Enhancing global research impact, 2) Expanding access to engineering, and 3) Enriching the student experience. The Department of Chemical and Petroleum Engineering supports this strategic plan, and is building on its leadership in energy research and scholarship by sharpening its focus on sustainable energy, consistent with the global energy transformation. An area of emphasis in the Department is sustainable hydrogen engineering in alignment with the new Government of Alberta Hydrogen Roadmap and the Government of Canada Hydrogen Strategy. Alberta, a province known for its wealth of natural resources, is the largest hydrogen producer in Canada, and the City of Calgary is Canada's energy hub

The **Department of Chemical and Petroleum Engineering** in the **Schulich School of Engineering** at the **University of Calgary**, is pleased to invite national and international applications for a **Tier II Canada Research Chair (CRC)** in the area of **Sustainable Hydrogen Engineering**. The Chair will be appointed at the rank of **Assistant Professor (tenure-track)** in the Department of Chemical and Petroleum Engineering. **The anticipated start date is July 1, 2022**.

In alignment with the University of Calgary's strategic plan, and in support of its academic and research priorities, the Chair will actively contribute to research, graduate student and postdoctoral scholar supervision, and teaching at the undergraduate and graduate levels. The Chair will also provide service to the Department, School, University, community and profession, contribute to achieving equitable, diverse, inclusive and accessible employment practices, workplaces and learning environments, and add to the diversity of the collegial and vibrant academic community. The area of focus for this CRC position exemplifies the University of Calgary's vision of research that is built around excellence, entrepreneurial thinking, innovation, advanced technology, and strong connections to industry and community.

To be eligible for consideration candidates must hold a B.Sc. in Chemical Engineering (or equivalent Engineering degree) and a Ph.D. in Chemical Engineering or a closely related discipline, a strong research record, and teaching experience.

We are seeking an emerging scholar with an original and innovative research program related to Sustainable Hydrogen Engineering, who is forward-looking with accomplishments that indicate the potential to achieve international recognition and lead in their field within the next 5-10 years. The successful candidate will establish a strong research program at the University of Calgary in the area of Sustainable Hydrogen Engineering. They will attract competitive external funding to support their research activities, and attract excellent trainees to develop into independent researchers. The successful candidate will also work within, and eventually lead, highly collaborative, interdisciplinary and transdisciplinary research teams involving academic and industry partners at sub-national, national and international levels.

The successful candidate will support positive student learning outcomes and experiences. They will be expected to teach core undergraduate and graduate courses in chemical engineering, as well as courses related to clean energy and sustainability, and actively contribute to curriculum development, graduate student supervision, and mentoring. The successful candidate should have strong oral and written English communication skills, and be eligible for registration as a professional engineer with the Association of Professional Engineers and Geoscientists of Alberta (APEGA).

The successful candidate will develop a high-impact research program that creates knowledge and solutions that can be mobilized to support the development of a sustainable hydrogen economy in alignment with the University of Calgary Strategic Plan, Alberta Hydrogen Roadmap and Government of Canada Hydrogen Strategy. The research program should consider sustainability from not only the environmental perspective (particularly relative to net-zero targets) but also from economic, social and safety perspectives. Research themes of particular interest include:

- Sustainable Hydrogen Production and Separation Technologies
- Hydrogen Carriers
- Technologies for Sustainable Hydrogen End Use

In accordance with the regulations set for Tier II Canada Research Chairs, applicants must have received their Ph.D. within the last 10 years and be an emerging world-class researcher. Candidates who are more than 10 years from having earned their highest degree and who have had career breaks, such as maternity, parental, or extended sick leave, and research interruptions due to the COVID-19 pandemic, etc., may have their eligibility for a Tier II Chair assessed through the program's Tier II justification process. Please contact UCalgary's Office of Research Services for more information: ipd@ucalgary.ca. Further information about the Canada Research Chair Program, including eligibility criteria, can be found the on the Government of Canada's CRC website.

The successful candidate will benefit from a rich ecosystem, which includes world-class scholars, a focus on entrepreneurship and innovation, and an equitable, diverse, and inclusive university community that supports transdisciplinary research, partnerships and collaborations, and education excellence. Hydrogen features prominently as a major area of focus in the new University of Calgary Energy Research Strategy, and involves a transdisciplinary group of scholars from across campus, including the Faculties of Engineering, Science, Law, Economics, Business, Arts and the School of Public Policy. Within the Schulich School of Engineering, existing research in the hydrogen area includes catalyst development, gasification, thermal or electrochemical generation, and pipeline engineering. The Department, School and University have excellent research infrastructure to support experimental research programs in sustainable hydrogen, including state-of-the-art laboratories and a suite of advanced instruments for materials characterization and chemical analysis.

How to Apply
Interested individuals are encouraged to submit an application online via the 'Apply Now' link. Applications should include:

- Cover letter and curriculum vitae, including the name and contact information of three referees
- Statement of research interests, accomplishments as they relate to this position, and vision for the position (maximum 2 pages). This should include a 5-year plan for the position including possible funding sources, resources required, and potential collaborations
- Statement on equity, diversity and inclusion (EDI) (maximum 2 pages). This should include approaches that will be taken to incorporate EDI in research and scholarship activities, as well as in teaching and learning activities inside and outside the classroom. It could also include approaches to working with a culturally diverse and international student body. Past contributions to EDI may also be described.
- Statement of teaching philosophy that promotes learning and success (maximum 2 pages). This can include information on teaching experience, training, and mentoring inside and outside the classroom at the undergraduate, graduate and postdoctoral levels

Applications will be accepted until March 7, 2022.

Questions may be addressed to:
Dr. Arindom Sen
Head, Department of Chemical and Petroleum Engineering
Email: asen@ucalgary.ca

The University of Calgary has launched an institution-wide Indigenous Strategy in line with the foundational goals of Eyes High, committing to creating a rich, vibrant, and culturally competent campus that welcomes and supports Indigenous Peoples, encourages Indigenous community partnerships, is inclusive of Indigenous perspectives in all that we do.

The University of Calgary recognizes that diverse staff and faculty benefits and enriches the work, learning and research experiences of the entire campus and greater community. We are committed to removing barriers that have been historically encountered by some people in our society. We strive to recruit individuals who will further enhance our diversity and will support their academic and professional success while they are here; in particular, we encourage members of equity-deserving groups (women, Indigenous Peoples, persons with disabilities, members of visible minorities and diverse sexual orientation and gender identities) to apply. All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority. To ensure a fair and equitable assessment, we offer accommodation at any stage during the recruitment process to applicants with disabilities. Questions regarding diversity or requests for accommodation can be sent to Human Resources (hrhire@ucalgary.ca).

The University of Calgary recognizes that candidates have varying career paths and that career interruptions can be part of an excellent academic record. Candidates are encouraged but not required to provide any relevant information about their experience and/or career interruptions to allow for a fair assessment of their application. Selection committees have been instructed to give careful consideration to, and be sensitive to, the impact of career interruptions when assessing the candidate's research productivity.

To learn more about academic opportunities at the University of Calgary and all we have to offer, view our **Academic Careers website**. For more information about the Schulich School of Engineering visit **Careers in the Schulich School of Engineering.**

COVIDSafe Campus Strategy

The University has implemented a new **Vaccination Directive** that requires all faculty and staff to be fully vaccinated against COVID-19 by January 1, 2022. You will be required to upload proof of vaccination prior to commencing your duties. Please review the **COVIDSafe Campus website** for further information and access to additional resources.

About the University of Calgary

The University of Calgary is situated on land adjacent to where the Bow River meets the Elbow River; the traditional Blackfoot name of this place is "Mohkinstsis", which we now call the City of Calgary. Calgary is home for the traditional territories of the Blackfoot and the people of the Treaty 7 region in Southern Alberta and the Metis Nation of Alberta, Region III.

The University of Calgary is Canada's leading next-generation university – a living, growing and youthful institution that embraces change and opportunity with a can-do attitude. Located in the nation's most enterprising city, the university is making tremendous progress on its Eyes High journey to be recognized as one of Canada's top five research universities, grounded in innovative learning and teaching and fully integrated with the community it both serves and leads. The University of Calgary inspires and supports discovery, creativity and innovation across all disciplines. For more information, visit **ucalgary.ca**.

About Calgary, Alberta

Calgary is one of the world's cleanest cities and has been named one of the world's most livable cities for years. Calgary is a city of leaders - in business, community, philanthropy and volunteerism. Calgarians benefit from a growing number of world-class dining and cultural events and enjoy more days of sunshine per year than any other major Canadian city. Calgary is less than an hour's drive from the majestic Rocky Mountains and boasts the most extensive urban pathway and bikeway network in North America.

Posting Date: January 20, 2022
Closing Date: March 7, 2022