MITACS POSTDOCTORAL POSITION IN
Enerkem and Department of Chemical and Materials Engineering

Enerkem (www.enerkem.com) is looking for a highly motivated and an experienced MITACS post-doctoral fellow (PDF) to work and support several interdisciplinary projects focused on the utilization of CO2, biomass- derived intermediates and renewable chemicals and fuels. The successful candidate will possess a solid track record of creativity in developing experimental strategies and a knowledge base on catalyst science and reactive distillation.

A strong background in chemical engineering with a demonstrated experience working with compressed gas cylinders, Swagelok tubing and fittings, pressure and temperature measurement and regulation, and other basic hand tools. Further experience in working with high pressure tubular reactor and online analytical quantification techniques (gas or liquid chromatography, FTIR, acid/base titration, NMR, etc.) would be a strength. The fellowship will be for a one-year appointment, renewable for one additional year, subject to a performance assessment. There is potential for the position to be extended beyond two years at Enerkem.

The qualified candidates should meet the following requirements:

• Ph.D. degree in Chemical Engineering or related fields with a sound understanding and demonstration of applying fundamental scientific and engineering principles to specific reactions that may have been studied during the thesis work or in industrial work carried out by the applicant. The initial appointment must occur within maximum five years from the completion of a doctoral degree; 

• 3+ years of relevant R&D or work experience in a pilot plant facility on clean energy, chemicals and fuel sector;

• Good understanding of catalysis, catalyst characterization and catalyst systems applications, design and execution of experiments as well as bench/pilot reactor system design and fabrication and separation techniques such as reactive distillation;

• Develop kinetic and reactor models as well as process integration models for scale-up using Aspen HYSYS and Aspen Plus and other advanced process modeling tools;

• Understanding technical and economic implications of novel process technologies on industrial processes with cost estimation experience;

• Evidence of scientific accomplishment via peer-reviewed publications;

• Excellent communication skills and the ability to work in a team / collaborative environment are required.

Location: Advanced Energy Research Facility (AERF) at Edmonton Waste Management Centre (EWMC) Edmonton, Alberta.

Starting Date: as soon as possible. Stipend: 50,000 CAD /year

The selected candidate will have an opportunity to work directly under both Enerkem (the industrial partner) and
the faculty member of University of Alberta under MITACS Accelerate program. The successful candidate will be registered as a PDF at the University of Alberta, Department of Chemical and Materials Engineering. Please visit https://www.mitacs.ca/accelerate for more information.

To Apply:
Please send your resume to Prashant Kumar at pkumar@enerkem.com.

Closing date:
Position open until filled. The applications are reviewed on the ongoing basis.

We thank all applicants for their interest; however, only those individuals selected for an interview will be contacted.

The University of Alberta is committed to an equitable, diverse, and inclusive workforce. We welcome applications from all qualified persons. We encourage women; First Nations, Métis and Inuit; members of visible minority groups; persons with disabilities; persons of any sexual orientation or gender identity and expression; and all those who may contribute to the further diversification of ideas and the University to apply.