

Chemical Engineering

Committed to teaching and research

The department of chemical engineering is committed to excellence in undergraduate and graduate education, in both teaching and research.

Since graduating its first BScE class in 1962, chemical engineering has been providing a curriculum that is aimed at provision of a broad background in the underlying sciences of Chemistry, Physics and Mathematics, and detailed knowledge of Chemical Engineering principles that has enabled graduates to proceed to further academic degrees by study and research at this University or elsewhere, or to carry on research development, design or production operations in any process industry. In addition to the facilities available for the students, many first year students are impressed with the small class size.

With an average of 35 students in each year of study, students quickly develop new friendships and study groups and are recognized by their professors.

Home to the Richard J. Currie Chair in Nanotechnology and a Canada Research Chair in Pulp and Paper Science and Engineering, the Department has strived for research excellence. The department's 13 full time faculty members are active in individual and collaborative research projects.

Lab services

Several researchers offer various lab services to the research community. Individuals interested in our testing are invited to contact the faculty member directly.

Researchers interested in polymer and colloidal characterizations, structure characterization for organic compounds and porous materials, and antimicrobial testing using E.coli as a standard bacterium can contact Dr. Huining Xiao.

Dr. Mladen Eic's lab services offers comprehensive surface characterization of nanoporous adsorbents and catalysts that includes pore structure information (BET areas and pore size distribution), adsorption isotherms in the range of 0-20 bars, separation factors, isosteric heats of adsorption, kinetics information, e.g., mass transfer properties, such as effective diffusivities and

surface barriers, and in-situ characterizations using thermogravimetric and FT-IR methods. The characterizations can be provided for both gas and liquid phase systems. The laboratory can also provide a design of gas separation processes based on pressure swing adsorption (PSA) and temperature swing adsorption (TSA) or a combination of both processes.