

Research in Materials Development Engineering



uOttawa

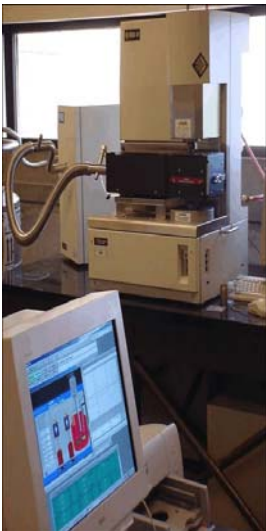
L'Université canadienne
Canada's university

Université d'Ottawa
Faculté de génie

Génie chimique et
biologique

University of Ottawa
Faculty of Engineering

Chemical and Biological
Engineering



Photos courtesy of David Taylor

The Department of Chemical and Biological Engineering at the University of Ottawa has a long history in the development of materials for a broad range of industrial applications. Expertise in the design and production of membranes, adsorbents, adsorbent membranes, polymers, biomedical materials, catalysts and nanoparticles is the focus of several of our researchers.

Experts

- * Dr. Xudong Cao
- * Dr. Marc A. Dubé
- * Dr. Boguslaw Kruczek
- * Dr. Christopher Lan
- * Dr. Takeshi Matsuura (Emeritus)
- * Dr. Sidney Omelon
- * Dr. F. Handan Tezel
- * Dr. Jules Thibault
- * Dr. André Tremblay
- * Dr. Jason Zhang



Partners

- * Omnova Solutions
- * National Centre for Upgrading Technology
- * Air Products and Chemicals, Inc.
- * Alcan Specialty Aluminas
- * Med-Eng Systems

Some Current Projects

- * Development of pressure-sensitive adhesives
- * Development of emulsion-based coatings and resins
- * Production of biopolymers via fermentation
- * Thermo-responsive hydrogels
- * Development of ring-opening catalysts
- * Nano-structured gas separation membranes
- * Development of PPO-based nanocomposite material for membrane separation
- * Study of physical aging of glassy polymers
- * Development of adsorbent membranes
- * Development of regular and hybrid adsorbents
- * Development of membrane-based microclimate cooling system