

**Posting: Jan 16, 2021**

**University of Toronto  
Faculty of Applied Science and Engineering  
Mechanical and Industrial Engineering Department**

**Description:**

We are seeking a postdoctoral candidate, who holds a PhD in engineering or chemistry, to work in the area of thermofluids for energy and advanced materials. Research will be performed in the area of transport in porous media for electrochemical energy conversion technologies, such as fuel cells, electrolyzers, and batteries. Leadership will be required to manage students that are working in these areas as well as in the area of porous media for regenerative medicine.

**Requirements:** Experience in numerical modelling and experimentation involving thermofluids is required. Knowledge of transport in porous media is required, and experience in PEM fuel cells or electrolyzers will be considered a great asset. The main roles of the candidate will be to use and continue development of a pore network model for modelling multiphase flows involved with electrochemical energy conversion, design hardware, perform electrochemical testing, analyze electrochemical performance, and provide strong leadership to a group of students (primarily MAsC and PhD students and some senior undergraduate students). Excellent communication skills, project management, and strong independent research skills are required. The candidate will be expected to work independently, provide leadership to an interdisciplinary team of graduate students, produce publishable results, and publish frequently. If approved, funding for up to 2 years will be available, subject to performance.

**Salary:** starting from \$35,704

**Expected start date:** as soon as possible

**Term:** One-Year term with a possible renewal

**FTE:** 100% FTE

**Closing Date:** Feb 28, 2021

The normal hours of work are 40 hours per week for a full-time postdoctoral fellow (pro-rated for those holding a partial appointment) recognizing that the needs of the employees' research and training and the needs of the supervisor's research program may require flexibility in the performance of the employees' duties and hours of work.

Application package (to be emailed to Aimy Bazylak at [abazylak@mie.utoronto.ca](mailto:abazylak@mie.utoronto.ca) ) should include a cover letter, CV (including a list of 3 professional references), and copies three 1<sup>st</sup>-authored journal papers.

Employment as a Post Doctoral Fellow at the University of Toronto is covered by the terms of the CUPE 3902 Unit 5 Collective Agreement. This job is posted in accordance with the CUPE 3902 Unit 5 Collective Agreement.

The University of Toronto is strongly committed to diversity within its community and especially welcomes applications from racialized persons/ persons of colours, women, Indigenous/Aboriginal, People of North America, persons with disabilities, LGBTQ persons, and others who may contribute the further diversification of ideas.