Re: Postdoctoral Fellow (PDF) position in Water and Energy Research Laboratory (WERL) at the University of Toronto

A postdoctoral position is currently available in the Water and Energy Research Laboratory (WERL) at the University of Toronto. A potential candidate will be required to take a lead on two projects concurrently:

- 1. Design and optimization of a passive water aeration system for fish ponds designed for rural areas.
- 2. Characterization and optimization of a pico-hydro turbine system.

The first project consists of various phases that are ongoing in parallel: CFD simulations and design optimization of the device, lab benchtop experiments, and field trials.

The second project is comprised of CFD simulations and design optimization of a pico-hydro turbine in conjunction with characterization of various BLDC motors as generators.

There are multiple graduate students assigned to each project. The prospective PDF is expected to:

- 1. have a strong knowledge of fluid and heat transfer modelling.
- 2. be able to take a lead on both projects and coordinate tasks among team members.
- 3. be comfortable with helping team members with their experiments.
- 4. help with writing grant proposals and progress reports as they arise.

The successful applicant will join a dynamic research group in Mechanical Engineering with a focus on design and optimization of innovative water and energy systems. The University of Toronto is the largest research university in Canada and is at the heart of downtown Toronto, one of the most vibrant, diverse, and culturally rich cities in the world. Applicants must have (or be close to completing) a PhD in Mechanical Engineering or a related field.

Appointment: 01 year with a possible renewal

Salary: Minimum of \$31,000/year

Job Posting: November 2, 2016

Job Closing: December 31, 2016

How to Apply: Applicants should submit a resume, including a cover letter, CV, publications, and contact information for three references to <u>werl-admin@mie.utoronto.ca</u>. Use the subject line "WERL PDF" in the email.

Employment as a Postdoctoral Fellow at the University of Toronto is covered by the terms of 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 colour, women, Indigenous / Aboriginal People of North America, persons with disabilities, LGBTQ persons, and others who may contribute to the further diversification of ideas.