MULTISCALE CHARACTERIZATION AND MODELLING OF THE PERFORMANCE OF ADVANCED MATERIALS

The Department of Mechanical and Mechatronics Engineering at the University of Waterloo, invites applications from highly qualified scholars and researchers for a tenure track position at the assistant professor rank with research interest in multiscale characterization and modelling of the performance of advanced materials for transportation lightweighting.

The successful candidate must have excellent communication skills and hold a PhD in Mechanical Engineering or a closely related discipline. Preference will be given to candidates with expertise in constitutive model development for crystal plasticity theory, and microstructure-process-performance relationship research. A strong background in experimental methods, and expertise in TEM, SEM, EBSD and in situ experiments with synchrotron x-rays is required. Applicants with active research on performing multiscale experiments to calibrate/validate numerical models for light metals and ultra-high strength steels will be preferred. This position offers a unique opportunity to engage in collaborative research with the automotive industry. It is expected that the applicant will work closely with our new NSERC/GM Industrial Research Chair in “Integrated Computational Mechanics for Mass Efficient Automotive Structures” as well as develop an independent complementary research program. Besides research, duties will also include teaching in the area of solid mechanics at the undergraduate and graduate level, and supervising graduate students.

Applicants should send their full curriculum vitae, a concise research and teaching vision statement, and the names of three references to:

Dr. Amir Khajepour
Interim Chair, Department of Mechanical and Mechatronics Engineering
University of Waterloo
200 University Avenue West
Waterloo, Ontario, Canada N2L 3G1
Email: mmechair@uwaterloo.ca

Applications will be accepted until June 30, 2017 with an anticipated start date of September 1, 2017. Eligibility for registration as a Professional Engineer is a requirement. The successful applicant is expected to have an engineering license for practice in Canada or to apply for an engineering license with the Professional Engineers of Ontario within five years. The salary range for this position at the Assistant Professor rank is $100,000 to $150,000. Negotiations beyond this salary range will be considered for exceptionally qualified candidates. Information about the Faculty, Department and Research Group can be found at https://uwaterloo.ca/engineering/, https://uwaterloo/mechanical-mechatronics-engineering/ and http://uwaterloo.ca/mechanical-mechatronics-engineering/research/solid-bodies-mechanics-and-mechanical-design.

The University of Waterloo respects, appreciates and encourages diversity. We welcome applications from all qualified individuals including women, members of visible minorities, aboriginal peoples and persons with disabilities. All qualified candidates are encouraged to apply; however, Canadian citizens and permanent residents will be given priority.

“Three reasons to apply: http://uwaterloo.ca/faculty-association/why-waterloo,”