Posting: May 17, 2021

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

Area of Research: Sustainable Materials Additive Manufacturing

Description of Duties: The Centre for Biocomposities & Biomaterials Processing (CBBP), directed by Prof. Mohini Sain in the Department of Mechanical & Industrial Engineering (MIE), is recruiting a post-doctoral fellow to develop innovative 3D printing applications for novel sustainable polymers and composites. The project will output both academic publications and practical technologies deployed by industry partners. The fellow will contribute to the technical and software management of multiple 3D printing subprojects as well as supervision of students on those subprojects.

Required Qualifications: Applicants should hold a Doctoral (Ph.D) degree in Mechanical & Industrial Engineering, Chemical Engineering or related physical sciences in 3D printing and related area. Applicants should demonstrate an active publication record and high potential for success in materials and process engineering.

Applicants should demonstrate strong applied knowledge of polymers and composites, their physical and mechanical properties and methods to characterize these properties. Advanced knowledge of polymer processing methods and fundamentals is highly desirable. Applicants must have a practical knowledge of computer aided design (CAD) and computer aided manufacturing (CAM) software specific to FDM 3D printing.

Excellent communication skills, strong independent research skills, and an interest in furthering industry partner collaboration are required. The applicant will be expected to work independently, provide leadership to an interdisciplinary team of graduate students, and produce publishable results.

Salary: starting from $36,000
Expect start date: as soon as possible
Term: 1 year term with possible renewal
FTE: 100%

Posting Date: May 18, 2021

Closing date: May 27, 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 employee's research and training and the needs of the supervisor's research program may require flexibility in the performance of the employee's duties and hours of work.

Application Instructions: The application package (to be emailed to Prof. Mohini Sain) should include a cover letter and CV, including a list of 3 professional references. If available, the CV should also include key publications highlighting past work in the area of polymer processing and additive manufacturing. Please email to m.sain@utoronto.ca with subject line "PDF Application: Sustainable 3D Printing".

Employment as a Postdoctoral 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 colour, women, Indigenous/ Aboriginal People of North America, persons with disabilities, LGBTQ persons, and others who may contribute to the further diversification of ideas.