

November 12, 2024

RE: Available PhD Position at McGill for Fall 2025

Dear Colleagues,

One PhD position is available for Fall 2025 at McGill University in *Advanced Multifunctional and Multiphysics Metamaterials Lab* (Department of Bioresource Engineering). The research topic is on the area of **Reconfigurable Mechanical Metamaterials**. Theoretical and computational multiscale modelling along with 3D printing and experimental characterization will be utilized for multiphysics multiscale design, analysis, and fabrication of rationally designed architected multifunctional materials. The candidate will work under the supervision of Prof. Hamid Akbarzadeh at McGill University.

Required qualifications for the position are:

- (1) Strong background in Nonlinear buckling analysis, Advanced mechanics of materials, Computational multiscale nonlinear mechanics, Architected metamaterials, and Multiphysics simulation and characterization.
- (2) Prior experience on Reconfigurable metamaterials, Shape changing materials, Machine learning, and 3D printing of functional materials is highly desirable.
- (3) Proficiency in nonlinear finite element analysis and using commercial finite element packages such as ANSYS/ABAQUS or COMSOL is a must.
- (4) Excellent programming skills using MATLAB and/or Python/C.
- (5) Proficiency in English and high undergraduate and graduate GPA (**GPA>3.5** out of 4.0 for both MSc and BSc degrees) are required for admission at McGill University.
- (6) Good publication records in well-respected journals.

Interested candidates should send their Cover letter (emphasizing on their prior experience on the aforementioned topics, specifically in the area of metamaterials), CV, and two representative publications (if available) to Prof. Hamid Akbarzadeh (hamid.akbarzadeh@mcgill.ca). We strongly encourage applications from women, persons with disabilities, indigenous peoples, and members of visible minorities.

Short-listed candidates might be asked to provide further information and they will be recommended to submit their complete application to McGill University by **January 15, 2025**.

Sincerely Yours,

Hamid Akbarzadeh, PhD, PEng, CRC

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