

Full-time PhD positions in the Materials Engineering at McGill University

[About McGill] (From Wiki) McGill University is a public research university in Montreal, Quebec, Canada. In all major rankings, McGill consistently ranks in the top 50 universities in the world and among the top 3 universities in Canada. McGill counts among its alumni 12 Nobel laureates and 145 Rhodes Scholars, both the most of any university in Canada, as well as 10 billionaires, the current prime minister and two former prime ministers of Canada. Interested candidates can easily find other aspects of McGill by a simple search.

[Where] Materials Engineering, McGill University, Montreal, Quebec

[Research Group] Prof. Song heads the McGill Multiscale Modeling of Materials Group (M³G) and co-leads the McGill Hydrogen Embrittlement Facility (MHEF). He is currently the interim Department Chair of Mining and Materials Engineering, and William Dawson Scholar at McGill University. Song's group focuses on integrating multi-scale computational techniques, continuum mechanics and artificial intelligence for materials innovation in the areas of advanced aerospace and nuclear materials, hydrogen economy, energy conversion and storage, and nanotechnology.

[PI's Profile] <https://www.mcgill.ca/materials/jun-song>

[Google scholar page] <https://scholar.google.ca/citations?user=5aLhwjQAAAAJ&hl=en>

Field Code Changed

[Open Positions]

Fully-funded Ph.D. positions (Winter and Fall 2024)

1. Multiscale modeling of hydrogen embrittlement in high-strength metals

Candidates should have expertise in at least one of the following areas:

Solid mechanics, Hydrogen embrittlement and corrosion, Atomistic simulations, Continuum numerical simulations, machine learning.

2. Modeling of mechano-electro-chemical interplay in solid-state batteries (in collaboration with Prof. Changhong Cao (<https://www.mcgill.ca/mecheng/changhong-cao>))

Candidates should have expertise in at least one of the following areas:

Solid mechanics, atomistic and/or continuum simulations, materials science, electrochemistry, machine learning.

[McGill Application Deadline]

Winter 2024 Admission:

August 1, 2023 (International Applicants)

November 10, 2023 (Domestic Applicants)

Fall 2024 Admission:

Jan 15, 2024 (International Applicants)

Jun 21, 2024 (Domestic Applicants)

[Contact] Email the PI (Prof. Jun Song at jun.song2@mcgill.ca) with your CV for an interview if you are interested in any of the above positions.