

We are looking for a talented **Fuel Cell Modeling Specialist** to join our **#Accelerate by Cummins** Business unit located in **Mississauga, ON**.

**In this role, you will make an impact in the following ways:**

- This applied science position applies chemical principles that create and develop product functionalities which are integrated and sold into Cummins' products.
- Provides independent leadership of smaller business impact projects or ownership of complex components, products, systems or services with greater elements of ambiguity over the senior or lead engineer level and with full accountability to the project team. Delivers independent execution of established and emerging work processes and systems, while still developing technology or product knowledge.
- Leads the development and improvement of work processes and systems across a functional discipline area within a business unit.
- Coordinates and directs work amongst technicians and temporary student employees, assists in the transfer of knowledge to lesser experienced engineers through either indirect (scope of influence) or direct management of a small, local group of engineers.
- Provides support and guidance to influence technical direct this applied science position applies chemical principles that create and develop product functionalities which are integrated and sold into Cummins' products.

**Qualifications:**

**To be successful in this role you will need the following:**

- Work within the fuel cell stack R&D team and will be involved in developing fuel cell stacks for next generation PEM fuel cell systems.
- Model and optimize fuel cells and fuel cell stacks.
- Collaborate with CFD and CAD designers to develop and validate models.
- Collaborate with service providers and research institutions on fuel cell simulation.
- Characterize fuel cell subcomponents, including GDLs and CCMs.
- Work proactively with stack designers to ensure smooth and proper interface and integration of MEA within the stack.
- Analyze, interpret and summarize simulation and testing data.

**Education, Licenses, Certifications**

College, university, or equivalent Bachelor's degree in Engineering or appropriate STEM field is required.

Post-graduate (Master's) degree relevant to this discipline area may be required for select roles.

This position may require licensing for compliance with export controls or sanctions regulations.

**Requirement:**

- Prior Senior or Lead Engineer equivalent work experience in a relevant discipline area is required with a demonstrated track record of technical problem solving and quality decision making. Knowledge of MS Office tools is preferred

- The successful candidate will work within the fuel cell stack R&D team and will be involved in developing fuel cell stacks for next generation PEM fuel cell systems.
- At least 3 years' experience in PEM Fuel Cells, Electrolyzers, and/or other Electrochemical Technologies.
- Ability to work effectively with interdisciplinary teams of engineers and scientists.
- In-depth knowledge of the PEM fuel cell and its subcomponents as well as the effects to the performance and durability.
- Strong modeling experience of electrochemical technologies, fluid mechanics, and thermodynamics (e.g., MATLAB, Python, ANSYS, COMSOL, etc.) is required.
- Knowledge and experience of electrochemical modeling, model development, and testing is an asset.

If interested, please email your CV directly to  
Nan Ge, Ph.D.  
Fuel Cell and Hydrogen Technologies  
[nan.ge@cummins.com](mailto:nan.ge@cummins.com)