



# Stack Engineer

Calgary, Alberta

Ayrton Energy's mission is to propel the global shift towards sustainable energy with broad deployment of our cutting-edge hydrogen storage technology, reshaping hydrogen distribution to mirror the safety, simplicity, and efficiency of traditional fuels such as diesel or gasoline.

Are you ready to embark on a dynamic career journey with a rapidly growing company? Ayrton Energy is seeking a dedicated and adaptable individual to join our team in a role that requires a "get it done" attitude and a commitment to excellence. You will play a pivotal role in driving the development and innovation of our technology.

## You will love this job if:

- You enjoy working on the frontier of deep technology development, where the answers aren't always clear, and you get to find new solutions to challenges being faced for the first time
- You have the ability to convert complex issues into simple solutions
- You have the ability to prioritize resources and are willing to be hands-on to drive outcomes
- You have a passion for clean technology and a desire to develop products for a sustainable future
- You want to work in a collaborative and supportive team environment

## Your Responsibilities:

- Design and develop fuel cell stacks, including optimizing performance and reliability.
- Create and validate design specifications for fuel cell components and system integration.
- Develop and implement test and assembly fixtures to support the manufacturing and evaluation processes.
- Perform detailed performance modeling and system trade-offs to enhance efficiency and durability.
- Utilize Computational Fluid Dynamics and Finite Element Analysis to analyze and improve electrochemical reactor designs
- Model fuel cell systems using MATLAB and Simulink to predict performance and guide design decisions.
- Collaborate with cross-functional teams including manufacturing, quality assurance, and research and development. Support the development and protection of system/process IP, with a focus on strategic patent filing and management
- Collaborate with leadership team to define project goals, deliverables, budgets and timelines

## Your Skills and Experience:

- Minimum undergraduate degree in Materials Engineering, Mechanical Engineering, Chemical Engineering or related field
- Minimum of 5 years proven experience in designing and developing fuel cell stacks and components , preferably for commercial applications
- Expertise in CFD and FEA tools for performance and structural analysis
- Excellent communication and collaboration skills, with the ability to work effectively in a team environment
- Strong problem-solving skills
- Familiarity with regulatory standards and compliance related to electrochemical technology
- Knowledge of advanced materials and/or manufacturing processes for electrochemical technologies
- Experience in fuel cell, electrolyzer or similar sectors

## At Ayrton We Value:

- Honesty – We are solving hard problems and look for diversity in thought.
- Accountability – We value action over words and will empower you to get things done.

- Kindness – We are a team. Win together, lose together, learn together.

**Benefits:**

- Compensation in the form of salary and equity
- Generous vacation policy
- Health and dental benefits

We're excited to find the right candidate to join our team full-time for the long term and are ready to hire as soon as we do! While we're grateful for all interest, only those most closely aligned with the role will be contacted.

Ayrton is an equal opportunity employer that values equity, diversity, and inclusion within our team. As a women-led venture, our company strives to provide a supportive atmosphere for under-represented individuals in business and STEM fields, including a focus on work-life balance and employee mental health.

**How to apply:**

Please send a cover letter and resume to [jobs@ayrtonenergy.com](mailto:jobs@ayrtonenergy.com) and use Job Application – Stack Engineer in the subject line.