



XL Batteries – Flow Battery Prototype Engineer

APPLICATIONS SUBMITTED THROUGH INDEED/LINKEDIN WILL NOT BE CONSIDERED

To Apply by Email:

Visit <https://xl-batteries.com/contact/> and send us an email with the subject line “[YOUR NAME] - Application for XL Batteries XL202202: Flow Battery Prototype Engineer” replacing the bracketed text with your name. Please include a CV, and cover letter, each attached as a separate PDF. Thank you.

About Us

XL Batteries is a Massachusetts-based scientific research company developing next generation battery technology for grid-level energy storage. We are a growing, highly collaborative team currently conducting chemical synthesis and battery engineering research and development in our laboratory in Marlborough, MA. Our mission is to enable large scale energy storage for use with existing infrastructure. Our ultimate goal is to unlock the potential of intermittent renewable generation such as solar and wind.

XL Batteries is an equal opportunity employer. We offer competitive salary and benefits, including healthcare, dental, vision, and a retirement plan.

About Our Location

Marlborough, MA is a beautiful small city in central Massachusetts, surrounded by quaint Massachusetts towns and within day-trip distance of the Berkshires. For those who prefer a more urban lifestyle, we are located directly off I-495 within easy commuting distance of Boston and Cambridge (30-40 minutes), Worcester (25 minutes), Nashua, NH (45 minutes) and Providence, RI (50 minutes).

About You

We are seeking talented individuals with a proven track record who are looking to solve complex, challenging research problems. We are looking for teammates who are collaborative and creative.

Each team member has an opportunity to truly impact XL Batteries, and with that mentality we need team members that are excited to work in a fast paced startup

environment that is ever changing, where no job is too big or too small, and where we strive to constantly question everything.

Role Description

XL Batteries is developing a new generation of flow battery for grid-scale energy storage. We are currently seeking creative, forward-thinking individuals to help improve our existing battery and stack design. Team members in this role will work with the Engineering team members to enhance the performance and durability of our battery and stack architecture. A deep understanding of flow battery or fuel cell design and operation is preferred. Applicants must show the ability to quickly and efficiently design, fabricate, test, iterate and improve upon new battery systems on the cell and stack level.

Responsibilities

- Work safely in a chemistry laboratory.
- Rapidly prototype various cell designs and components for flow battery cells and stacks.
- Think critically about how to improve the cell and stack design with an eye to performance and durability.
- Conduct various ex-situ and in-situ electrochemical tests with our existing electrochemical apparatus/devices.
- Record appropriate data, analyze, and report the results.
- Collaborate in building mathematical models for optimizing the performance of our multi-cell stack.
- Maintain a clean and safe laboratory work area.
- Manage waste streams and dispose of hazardous waste appropriately.

Requirements

- M.S. in Mechanical, Chemical, Electrical Engineering or related fields.
- Strong understanding of electrochemistry and electrochemical engineering.
- Experience with battery testing fundamentals.
- Hands on experience with 3D prototyping technologies (e.g., CNC, 3D printers). Including programming of same.
- Highly motivated and self-driven individual with the ability to work independently and multi-task.
- A “maker’s mindset”: comfortable bringing ideas quickly from paper to prototype.
- Comfortable machining different types of materials.
- Prior experience with C/C++/Fortran programming languages is a plus.
- Familiarity with finite element and finite volume methods.
- Strong written and oral communication skills required.
- Must have legal authorization to work in the United States.
- This is a full-time in-person position.

