



## **XL Batteries – Flow Battery 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 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 development stage company focused on long duration energy storage at the grid level. We are a growing, highly collaborative team currently developing a new chemistry for flow batteries at utility scale in our laboratory in Marlborough, MA. Our mission is to enable grid sustainability.

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 small industrial city in central Massachusetts, surrounded by historic Massachusetts towns and within day-trip distance of the Berkshires, White Mountains and Cape Cod. 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 ambitious & talented engineers who are looking to develop an industry leading storage technology and identify, frame and solve complex, challenging problems. We are looking for teammates who are collaborative and creative.

XL Batteries, is a fast paced, nimble startup where no job is too big or small, and where we strive to ask ourselves the hard questions before problems arise.

## Role Description

XL Batteries is developing a next generation flow battery for grid-scale energy storage. We seek creative, forward-thinking people to improve our existing battery and stack designs. The Battery Engineer will work with others to achieve increasing levels of performance, reliability and durability in 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 battery development shop and a chemistry laboratory
- Design, build and test various flow battery components and systems.
- Think critically about how to improve the system and stack design with an eye to performance reliability, durability, and cost.
- Conduct various ex-situ and in-situ electrochemical tests with our various electrochemical apparatus/devices.
- Record appropriate data, analyze, and report the results.
- Build mathematical models of various component and systems for improving performance of our multi-cell stack.
- Maintain a clean and safe work area.
- Manage waste streams and dispose of hazardous waste appropriately.

## Requirements

- B.S. in Mechanical, Chemical, Electrical Engineering or related fields – an M.S. is preferred.
- At least 3 years in an applied battery development environment.
- Strong understanding of electrochemistry and electrochemical/mechanical engineering.
- Experience with flow batteries and battery testing fundamentals preferred.
- 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.