

R&D Chemist @ Energy Storage Systems, Inc.

1.0 Job Description

Energy Storage Systems (ESS) is a fast-growing, venture-backed, clean technology start-up, located in Portland, OR. ESS has developed an advanced flow battery technology for commercial, industrial, and utility applications. ESS is looking for a motivated and versatile R&D Chemist to join our team. Our current program scope involves the design, develop and evaluate new generation negative and positive electrodes for the All-Iron Redox Flow batteries. The responsibilities below define the current needs in a dynamic company with lots of room for future career growth.

- Lead R&D activities to develop the new generation, low cost electrodes for All-Iron Redox Flow Battery.
- Design, develop and evaluate electrode and coating materials ex-situ using electrochemical methodologies.
- Construct and perform reliability tests on various key system components
- Build and test flow batteries of various sizes and capacities using developed electrodes. Able to troubleshoot, collect and analyze data and present test results to the engineering team.
- Run design validation tests and perform analyses afterwards to guide design goals for improved battery performance and reliability.
- Develop and optimize chemical processes for flow batteries of different scales.
- Interact with manufacturing engineer to scale up production of the developed low cost electrodes.

2.0 Desired Skills & Experience

- Master Degree or higher in ChE, Chemistry, Physics, Material Science or Mechanical Engineering.
- Electrochemistry skills and knowledge are must - wet chemistries and reactions, interactions and material behaviors.
- Demonstrated knowledge of the chemical process engineering principals in a fuel cell or battery industry.
- Good interpersonal and communication skills to work effectively with a small, dynamic team responsible for product development.
- U.S. Citizenship or permanent residency required.