

Product Test Engineer

Zinc8 Energy Solutions is developing a range of energy storage products based on a novel zinc-air flow battery technology. A very substantial market for these products exists in utility, commercial, industrial, remote power generation and similar applications. With powerful backing and a committed nucleus Zinc8 is expanding its product verification team to capitalize on this rare opportunity.

Job Description:

We are looking for a Product Test Engineer to join the Product Verification Team. Reporting to our Senior Verification Engineer the candidate will conduct safety and performance testing of our flow battery product including normal and fault testing to UL and CSA standards.

Duties and Responsibilities:

- Contributing to design of tests and test procedures within the constraints of the applicable standards.
- Safety tests include
 - Temperature
 - Single fault tolerance validation of safety systems
 - Destructive tests
 - Ratings tests
 - Material tests
- Performance tests include
 - Efficiency
 - at various discharge – recharge rates
 - contribution of losses from various subsystems.
 - Subsystem and component performance validation
 - State of Charge characterization
 - State of Health characterization
 - Transient load behaviour
 - System state machine performance
 - Sensor performance and characterization
 - Discharge performance characterization
 - Recharge performance characterization
 - Establishment of product limitations and parameter defaults and ranges
- Analyze and document results and develop recommendations
- Present results and recommendations to various stakeholders
- Set up instrumentation as needed
- Create equipment operating procedures, test procedures, and operations checklists
- Assemble electro-mechanical sub-assemblies
- Assemble plastic piping systems as needed
- Troubleshoot component and system failures to identify root cause
- Work safely with hazardous chemicals
- Adhere to safety and environmental procedures for self and fellow employees

Minimum Qualifications:

- Bachelor's degree in electrical or mechanical engineering
- 5 years' experience testing electrical equipment in a lab environment
- Experience with regulatory testing for UL, CSA or equivalent
- Experience testing product performance for meeting specifications and for product robustness
- Lab experience testing grid connected power supplies or battery equipment

Desirable Qualifications:

- Experience testing failure modes, and life cycle testing
- Experience designing tests to isolate safety barriers to protect against failure modes
- Lab experience testing power inverters
- Experience using LabView
- Experience working with battery systems is an asset
- Ability to travel to site, and possibly out of country, would be an asset

Compensation:

We offer a competitive salary with generous benefits.

Location:

Vancouver, B.C.

Great location! Located close to the Canada Line Marine Drive SkyTrain station.

Please send your resume and cover letter to: careers@zinc8energy.com