Mechanical Design Engineer

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

Job Description

We are looking for a Mechanical Design Engineer to join the Regeneration Group. Reporting to the VP Engineering, the successful candidate will take lead the development of the next generation zinc electrolyzer.

Duties & Responsibilities:

- Lead the development of the next generation of Zinc8's novel electrolyzer
- Manage present electrolyzer design and support incremental improvements
- Conduct component and assembly design improvements
- Prepare detailed component design requirements and specifications
- Design components for volume production methods
- Mechanical design of all ancillary components
- Conduct component and assembly inspection, functional testing, characterization and performance validation testing
- Review part designs and assess conformance
- Support definition and development of test systems
- Identify and work with suppliers of components
- Work with contract manufacturers to ensure quality production of components
- Manage component production demand to meet project timelines
- Conduct component and module thermal modeling and analysis
- Work with cross functional teams: Research, Software, Electrical, Testing, Product
- Prepare 3D CAD models and engineering drawings according to ASME Y14.5 and GD&T standards

Minimum Qualifications:

- Bachelor's degree in Mechanical Engineering
- 5+ years of product development
- Experience in DFX of stacked assemblies
- Experience in part inspection
- Experience designing of sealed assemblies
- Experience designing of piping systems
- Strong understanding of fluid dynamics
- Demonstrated effective use of CFD/FEA for fluidic and thermal analysis
- Experience designing for injection molding, extrusion, stamping, casting, and other volume manufacturing methods would be an asset
- Experience in cost reduction methods
- Experience working in R&D and product development environments
- Demonstrated effective use of experimentation to solve problems

- Demonstrated effective use of rapid prototyping
- Demonstrated first principles and objective oriented thinking
- Proficiency in SolidWorks
- Must be fluent in English with excellent communication skills

Desirable Qualifications:

- Experience in fuel cell stack design
- Experience designing for corrosive environments
- Strong understanding of electrochemistry is an asset

Compensation:

We offer a competitive salary with generous benefits. We promote an open and inclusive environment in which our colleagues are encouraged to be creative and resourceful.

Location

Vancouver, B.C.

Great location – close to the Canada Line, Marine Drive, SkyTrain station!

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