

Principal Battery Systems Design Engineer

Location: Arlington VA (or flexible)

ABOUT FLUENCE

Fluence, a Siemens and AES company, is the leading global energy storage technology solutions and services company that combines the agility of a fast-growing technology company with the expertise, vision, and financial backing of two industry powerhouses. Building on the pioneering work of AES Energy Storage and Siemens energy storage, Fluence's goal is to create a more sustainable future by transforming the way we power our world. The company offers proven energy storage technology solutions designed to address the diverse needs and challenges of customers in a rapidly transforming energy landscape, providing design, delivery and integration in over 160 countries. Fluence works closely with customers throughout their journey and provides advisory, financing, and project lifecycle services.

Job Description

In this role you will be responsible for leading a team of battery experts across multiple disciplines focused on Li-ion battery systems including battery cell, module, BMS, DC systems, and data analytics. The team will evaluate, specify, and collaborate in the development of battery systems and their incorporation into Fluence energy storage systems. You will evaluate all aspects of battery supplier components from fundamental science to manufacturing and assembly. You will be responsible for internal battery testing, and your team will be the key providers of insights into DC subsystem design.

Responsibilities

- Design and engineering of battery systems, collaboration with vendors to minimize cost and maximize consistency
- Identification of test requirements in relation to stationary batteries, system and sub-system requirements.
- Supervision and execution of battery system testing and certification
- Agile test and test bed development including concept, design, data acquisition, evaluation, and documentation.
- Pragmatic evaluation of test concepts with idealization of physical effects and first principles reasoning approach and transfer of results to simulation
- Simulation of system and subsystems (e.g. using Amesim)

- Complete design cycles from concepts to fully validated products / product designs
- Travel as needed up to 10% with exceptions for pandemic conditions

Qualifications

- 7 or more years of system design for lithium-ion battery or related technologies
 - Experience with mathematical modeling of batteries or experimental work in the field of batteries
 - Experience in design, developing and testing of battery systems
 - Excellent written and verbal English and interpersonal skills
 - A dedication and commitment to results in a dynamic and fast developing environment
 - The ability to collaborate across disciplines, departments, both internal and external, and across geographies, with strong team skills
 - Passion for batteries, sharing know-how with others, and listening to others
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- M.Sc. Physics, Electrical Engineering, or similar with strong emphasis on practical work experience
 - 15+ years working experience with battery and related systems, 7+ years in design and development of battery systems
 - Strong knowledge of engineering fundamentals in electrical design, with broad knowledge base beyond electrical engineering
 - Additional relevant skills: statics, dynamics, fluid dynamics, and heat transfer.
 - Strong technical communication skills.

GET IN TOUCH

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

Fluence IS AN EQUAL OPPORTUNITY EMPLOYER and fully subscribes to the principles of Equal Employment Opportunity to ensure that all applicants and employees are considered for hire, promotion, and job status without regard to race, color, religion, sex, national origin, age, disability, veteran status, sexual orientation, marital or familial status.