

Deflagration Modeling Engineer – Product Design

Location: Arlington, VA or remote

ABOUT FLUENCE

Fluence, a Siemens and AES company, is the global market leader in energy storage technology solutions and services, combining the agility of a technology company with the expertise, vision and financial backing of two well-established and respected industry giants. Building on the pioneering work of AES Energy Storage and Siemens energy storage, our goal is to create a more sustainable future by transforming the way we power our world. Providing design, delivery and integration, Fluence offers proven energy storage technology solutions that address the diverse needs and challenges of customers in a rapidly transforming energy landscape.

Fluence currently has more than 2.4 gigawatts of projects in operation or awarded across 24 countries and territories worldwide. We topped the Navigant Research utility-scale energy storage leaderboard in 2018 and were named one of Fast Company's Most Innovative Companies in 2019. In 2020, our sixth-generation Tech Stack won Commercial Technology of the Year at the 22nd annual S&P Global Platts Global Energy Awards.

Leading

Do others come to you for your subject matter expertise? Are you excited by the challenge of working in a start-up atmosphere with a purpose?

Fluence is seeking a Deflagration Modeling Engineer to play a critical role in helping Fluence deliver the next generation of energy storage technology. In this high visibility, high impact role, the Modeling Engineer will be responsible for managing critical simulation efforts and steering system design based on the analysis results.

Responsible

- In this role, you will support Fluence's Product Development Teams with the design of safe and competitive enclosure systems that can safely handle the potential release of combustible gases.
- You will be responsible for modeling the deflagration process of complex gas mixtures, including the determination of properties like burning velocity, flammability limits, etc.
- Together with Fluence's Product Development Teams, you will be responsible for devising and selecting preferred approaches for handling potential combustible gas emissions by batteries to meet code requirements, including NFPA 68 and NFPA 69.

- Provide technical leadership to ensure that designs meet or exceed product and certification requirements and support the certification efforts with analysis as required.
- Propose and manage the design of product improvements and technology updates.
- Provide technical consultation to other departments and colleagues.
- Demonstrate Fluence values.

Agile

Here at Fluence, we strive to continuously improve, be intellectually curious and be adaptive to our customers' and employees' needs. Collaboration is key, both in our partnerships with our customers and with each other. Fluence prioritizes the most critical efforts that allow for the greatest impact.

As an ideal candidate you have:

- Bachelor's and a Master's degree in Mechanical Engineering, Physics, or similar (PhD welcome).
- 5 years industry experience required.
- Experience using CFD software for combustion simulation (FLACS, etc) required.
- Knowledge in writing scripts to generate multiple CFD runs efficiently analyze scenarios and sensitivities.
- Previous product consultancy and/or product development experience preferred.
- Strong modeling and problem-solving skills.
- Strong communicator (written and verbal).
- Good technical writing skills.
- Able to manage projects.
- Requires expert knowledge of CFD software and techniques, tools, and principles.
- Comprehension of practical applications of deflagration panels and venting systems.

Fun

Fluence is defined by its unwavering commitment to safety, quality, and integrity. We take personal ownership in what we do, and we prioritize the development of trust in our relationships. We firmly believe in having honest, forthcoming, respectful, and fair communications.

Working on transforming a fundamental part of our society is exciting and fulfilling. It requires creativity, diversity of ideas and backgrounds, and building trust to effect change and move with speed. We respect our coworkers and customers. We listen to what others have to say, and we are inclusive.

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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.