

POSITION PROFILE

TITLE: Postdoc Fellow – Fire Dynamics, Flammability and Battery Safety

DEPARTMENT/LOCATION: FM Global, Research Division, Norwood, Massachusetts

DATE: June 4, 2024

Responsibilities

The purpose of this position is to develop new scientific knowledge, technologies and engineering solutions to problems in material flammability, fire dynamics and Lithium-ion battery safety research, which can be used for the prevention or control of industrial property loss.

The principal responsibilities are to carry out research projects in the areas of flammability, fire spread, and heat transfer in fires from solid combustible as well as Lithium-ion batteries. Key areas of research include understanding of fire behavior at the medium and large scales via bench-scale experiments and theoretical models on material flammability and flame heat transfer. Projects can also involve advanced flame diagnostic of buoyant turbulent sooty flames and wall fires. The experimental and theoretical studies will be closely integrated with Computational Fluid Dynamic (CFD) model development and validation within the work group.

The position is responsible for all aspects of project management including project proposals, execution, and reporting.

Essential Requirements

The position requires a PhD in Mechanical, Chemical Engineering, or related fields with a strong fundamental background in combustion, fluid mechanics, heat transfer, material science and applied mathematics. Extensive experience in experimental methods in thermal fluids, material flammability, heat transfer, combustion/fire, and an understanding of associated numerical methods are required. Research experience with advanced laser diagnostics in flame, experimental measurement in turbulent flame, heat transfer and failure analysis of battery is desirable. Also needed are excellent written and verbal communication skills, as well as demonstrated expertise in developing solutions to challenging technical problems.

Full benefit package is offered with this position. Salary is commensurate with qualifications and experience.

How to Apply

Contact:

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