

## **POSITION PROFILE**

**TITLE:** Postdoc Fellow – Battery Safety Research

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

### **Responsibilities**

The purpose of this position is to develop new scientific knowledge, technologies and engineering solutions to problems in the area of 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 Lithium-ion battery flammability, thermal runaway, and thermal runaway/fire propagation in battery energy storage system. Key areas of research include developing standard test approach for evaluating cell thermal runaway characteristics under different abuse scenarios, thermal runaway propagation of battery module via bench and intermediate - scale experiments and theoretical models on heat transfer and reaction kinetics. 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, electrochemistry and applied mathematics. Extensive experience in experimental methods in thermal fluids, Lithium-ion battery, heat transfer, combustion/fire, and an understanding of associated numerical methods are required. 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:***

Dr. Yi Wang

Group Manager -- Fire Dynamics

Fire Hazards and Protection

Research, FM Global

1151 Boston-Providence Turnpike, Norwood, MA 02062, USA

e-mail: yi.wang@fmglobal.com