Title: Post-Doctoral Researcher for Explosion Protection Research

Description: This position focuses on the development of new scientific knowledge and innovative experimental techniques for assessing explosion hazards associated with emerging renewable-energy applications. Key areas of interest include hydrogen safety, thermal runaway of lithium-ion batteries, and flame dynamics in gas and dust explosions. The overall objective is to provide the foundation for science-based models and tools that support solving practical business problems for industrial and commercial property protection. The experimental and analytical studies performed in this work will have a unique opportunity to be implemented and validated at full scales at the FM Global Research Campus.

Requirements: the qualification of suitable candidates will include

- Ph.D. degree in relevant field such as mechanical engineering, chemical engineering, aerospace engineering, or applied physics.
- Strong fundamental background in combustion, gas dynamics, heat transfer, thermodynamics, and applied mathematics.
- Extensive experience in experimental methods including optical diagnostics, and developing analytical models in thermal-fluid science, especially combustion research.
- Previous research experience in hydrogen safety, battery technology, or premixed combustion including spherical flame propagation is desirable.
- Excellent written and verbal communication skills.
- Demonstrated expertise in developing innovative solutions to challenging technical problems.

Job Location: Norwood, MA


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