POSITION PROFILE

TITLE: Senior Research Scientist

DEPARTMENT/LOCATION: FM Global, Norwood, Massachusetts

DATE: October 17, 2016

Responsibilities
The purpose of this position is to develop new scientific knowledge, engineering technologies, and engineering solutions to problems in fire protection, which can be used and applied by FM Global for mitigating industrial property loss. The primary responsibility of the position in FM Global is to plan, conduct, and communicate results of research projects in support of the critical business needs of FM Global.

The principal responsibilities are to carry out internally-funded research projects in the areas of fluid dynamics, flammability of materials, combustion, flame spread, fire suppression / extinguishment, heat and smoke generation, and heat transfer from fires. Key areas of research include understanding of fire growth and suppression behavior at laboratory and large scales, and developing cost-effective fire protection solutions. The experimental, theoretical and numerical studies will be closely integrated with large-scale fire testing and suppression research within the working group and with collaborative fire model development and validation. Additional components consist of performing focused studies and conveying their results in a form suitable for use by FM Global engineers. Long-range studies of fundamental nature will be balanced with applied research focused on critical business needs.

The position is responsible for all aspects of project management including project proposal, execution, budget and documentation. In addition, the position is responsible for communicating and transferring research results for practical use within FM Global and, as appropriate, to outside organizations including the scientific/engineering communities and standard organizations. The position also acts as a consultant to FM Global business units as well as to insured clients.

Qualifications
The position requires a Ph.D. in Mechanical, Chemical, Aerospace Engineering, or related fields with a strong fundamental background in combustion, fluid mechanics, heat transfer, and applied mathematics. Extensive experience in experimental methods in thermal fluids, combustion/fire, and an understanding of associated numerical methods are required. Excellent written and verbal communication skills, as well as demonstrated expertise in developing solutions to challenging technical problems, and a fundamental understanding of the physics relevant to fire phenomena are required. Title and salary are commensurate with qualifications and experience.

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