Applicant Requirements:

The Combustion and Reacting Transport Section (Code 6185) is seeking independent, self-motivated US citizens studying for or with recent undergraduate degrees in fire protection engineering, chemical engineering, mechanical engineering, chemistry, physics, optics, or a closely related field are invited to apply for a research position.

The Naval Research Laboratory is dedicated to advancing basic and applied research with emphasis on topics relevant to naval operations. The Combustion and Reaction Transport Section is conducting fundamental and advanced research in combustion power, fire suppression, and oil spill remediation.

Undergraduate applicants need to have a background in laboratory and/or computational research, the ability to work in a team environment, excellent oral and written communication skills. Ambitious candidates with experience in single and multi-phase (foam, spray, particulate, gaseous) flow, combustion phenomena and fire suppression, optical diagnostics, CFD and reactive multi-phase flow simulations, chemical kinetics, instrumentation development, data interpretation, laboratory and practical-scale experimental development are desired. Script-driven processing, algorithm implementation, and analytical development from mathematical theory of fundamental combustion phenomena, model development, validation, and refinement experience is needed for computational candidates. Hands-on experience in a shop, laboratory, and/or field setting with working knowledge of digital data acquisition, basic electronics, prototype design and fabrication, and processing systems would be beneficial. The applicant will work with an R&D team on a variety of programs, implement new experimental designs, coordinate laboratory personnel, and interface with the Department of Defense and other government and non-government entities to develop new avenues of research. State-of-the-art instrumentation and infrastructure are available.

Particular areas of interests include, but are not limited to the following:

• Fire Suppression Foams
• Cone Calorimetry
• Instrumentation Electronics
• LabView
• Spray Characterization

Contact:

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