



Postdoctoral Research Associate

Job Title: Postdoctoral Researcher

Location: Washington, DC

Pay: Annual stipend of \$94,199 or higher

Applicant Requirements:

The Combustion and Reacting Transport Section (Code 6185) of the U.S. Naval Research Laboratory is seeking candidates for postdoctoral research fellowships with the potential to transition to civil service. Motivated candidates with **permanent U.S. residency and a doctorate degree** in chemistry, physics, or engineering are invited to apply for a postdoctoral research position within the Combustion and Reacting Transport Section of the Navy Technology Center for Safety and Survivability. Topics include fundamental to advanced research on combustion-related power and energy, fire suppression, and pollution remediation.

Particular areas of interest and skill include, but are not limited to, the following:

- Gas, liquid, solid, or mixed-phase fuel combustion
- Detonation and shock-induced combustion
- Fire suppression and aqueous foams
- Plasma-assisted combustion
- Laser-induced fluorescence of reacting flows
- Emissions spectroscopy and thermometry
- Bubble growth with fuel, surfactants, Langmuir-Blodgett films
- Spray characterization using phase Doppler anemometry
- Raman spectroscopy of hydrogen and hydrocarbon combustion

A strong record of research accomplishments, the ability to work in and direct multi-disciplinary team environments, excellent oral and written communications skills, presentations of scientific results at national meetings, and/or publications in peer-reviewed journals are desired. Ambitious candidates with experience in optical diagnostics of single and multi-phase (gaseous, spray,

particulate, solid, foam) combustion and reacting phenomena, chemical kinetics, instrumentation development, data processing and interpretation, laboratory and practical-scale experimental development are most desired. Hands-on experience in a laboratory or field setting with working knowledge of data acquisition and data processing systems would be beneficial. Strong fundamentals in interface science and transport phenomena are also advantageous. The applicant will work with an R&D team on a variety of programs and disciplines, 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.

Successful and competitive candidates that can demonstrate technical expertise; the ability to identify, develop, and secure funding for novel research topics; and the ability to successfully collaborate across multiple organizations and technical fields will have the opportunity to transition to civil service.

Positions open only to citizens or permanent residents of the U.S. Links to the opportunities are listed below each contact.

Contact and Specific Opportunities:

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