

Department of the Navy Naval Research Laboratory – Washington, DC

Postdoctoral Projects - For Official Use Only (FOUO) – Unclassified October 2023 – October 2025

Computational Fluid Dynamics for Numerical Simulations of High-Speed Combustion Systems

Preferred PhDs: Physics, Computer Science, Mathematics

Control and Detection of CRISPR/Cas through Surface Conjugation

Preferred PhDs: Biophysics, Bioengineering, Material Science

Degradation of PFAS by Bacterial Biofilms

Preferred PhDs: Biology, Microbiology, Environmental science

Faraday Rotation (FR) Observations of Coronal Mass Ejections (Cmes)

Preferred PhDs:
Physics, Astronomy, Mathematics, or Computer Science

Faraday Rotation (FR) Observations of the Solar Wind in Support of Parker Solar Probe

Preferred PhDs: Physics, Astronomy, Mathematics, or Computer Science

Material-Systems Intelligence via Neuromorphic Computing (MINC)

Preferred PhDs:
Mechanical Engineering, Applied Mechanics, Materials
Engineering

Material-Systems Intelligence via Neuromorphic Computing (MINC)

Preferred PhDs: Mechanical Engineering, Applied Mechanics, Materials Engineering

Nanostructured Polymer Films for High Power Applications

Preferred PhDs: Physical Chemistry

Novel IR Transmitting Optical Polymers

Preferred PhDs:
Materials Science, Materials Engineering (w/ Polymer Science Engineering background)

Power Beaming for Energy Delivering

Preferred PhDs: Electrical Engineering, Computer Science, Mathematics

Pure and Applied Deep Learning

Preferred PhDs: Computer Science

Sorbents for Mitigation of Bulk Chemical Materials - Chemical warfare agents (CWAs)

Preferred PhDs: Chemistry, Chemical Engineering, Environmental Sciences

Sorbents for Mitigation of Bulk Chemical Materials – Slippery Liquid Infused Porous Surfaces (SLIPS)

Preferred PhDs: Chemistry, Chemical Engineering, Mechanical Engineering

Space Solar Concept & Technology Development

Preferred PhDs: Electrical Engineering, Computer Science, Mathematics

Strong Coupling for Tailored Photonics and Reaction Platforms

Preferred PhDs: Chemistry, Chemical Engineering

Tunable Dielectric Metasurfaces in Chalcogenide Glass

Preferred PhDs: Optical Science, Material Science

Validation of Graphical Comprehension Assessment

Preferred PhDs: Computer Science (with a focus on Human Factors), Experimental Psychology, Human Factors