Experimental Postdoctoral Research Associate Positions, 2022

Members of the High Energy Density and Extreme Fluids Focus Area in Los Alamos National Laboratory’s Physics Division are seeking candidates for postdoctoral positions in experimental fluid mechanics. The experiments focus on precision measurements under various flow conditions, including shocked and subsonic variable-density turbulence and multiphase flows. The successful candidate will work on a team to design experiments, record and analyze experimental data, and compare results to theoretical models. There will be opportunities to publish high-quality experimental results and present work at international conferences. The team works closely with numerical physicists to simulate the experimental results and incorporate the experimental data into modeling efforts.

Applied and Fundamental Physics (P-2) in Los Alamos's Physics Division is a diverse group of experimental physicists, engineers, technicians, and students engaged in a range of fundamental and applied research in nuclear physics beyond the Standard Model, neutrinos, dark matter, weapons physics, plasma physics, and fluid dynamics. We support a diverse program that includes scientists of many nationalities, participation in experiments worldwide, sponsorship of workshops and conferences, and unclassified and classified experiments and analyses. The LANL Postdoctoral Program is a pipeline for hiring technical staff at the Laboratory, many of whom first joined LANL as postdocs. The Laboratory encourages its postdoc mentors to help their postdocs explore possibilities for conversion to a permanent staff position.

**Required skills:** (1) Experimental fluid mechanics experience; (2) Publication of experimental fluid dynamics research in peer-reviewed journals; (3) Experience with modern fluids diagnostics relevant to turbulence and mixing; (4) Strong communication and language skills, as evidenced by publications, presentations, and the cover letter.

**Desired skills:** (1) Experience with implementation of PIV, PLIF, or shock diagnostics; (2) Volumetric imaging and measurements; (3) Experience with turbulence modeling; (4) Experience with LabVIEW, Matlab, and SolidWorks; (5) Ability to obtain a U.S. Department of Energy Q Clearance, which requires U.S. citizenship except in extremely rare circumstances.

**Required education:** A Ph.D. (completed in 2017 or later) in mechanical or aerospace engineering, physics, or a related field.
**Instructions:** A C.V. and a cover letter addressing the required and desired skills in detail should be sent to Dr. John Charonko at john.charonko@lanl.gov. Please also apply online at jobs.lanl.gov to IRC105055. Applications will be accepted until the positions are filled.

Candidates may be considered for Director's Fellowships or Distinguished Fellowships.

Los Alamos National Laboratory is an equal opportunity employer and supports a diverse and inclusive workforce. All employment practices are based on qualification and merit, without regards to race, color, national origin, ancestry, religion, age, sex, gender identity, sexual orientation or preference, marital status or spousal affiliation, physical or mental disability, medical conditions, pregnancy, status as a protected veteran, genetic information, or citizenship within the limits imposed by federal laws and regulations. The Laboratory is also committed to making our workplace accessible to individuals with disabilities and will provide reasonable accommodations, upon request, for individuals to participate in the application and hiring process. To request such an accommodation, please send an email to applyhelp@lanl.gov or call 1-505-665-4444 option 1.

March 14, 2022