NOTICE OF VACANCY
Postdoctoral Research Position:
Laser Spectroscopy
ISP/Applied Sciences Laboratory

Institute for Shock Physics
Washington State University

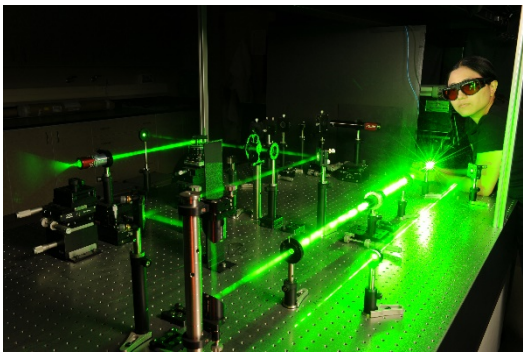
The Spokane-based Applied Sciences Laboratory (ASL) of the Institute for Shock Physics (ISP) at Washington State University is a contract research organization that emphasizes multidisciplinary research activities in the physical sciences and engineering to undertake a broad range of applied science and technology projects for government agencies and corporations, including technology transfer for commercial applications. The scientific underpinnings to address the multidisciplinary challenges involve physics, materials science, chemistry, mechanics of materials, and computational modeling and simulations.

We have an immediate opening for a postdoctoral research associate to conduct various types of laser spectroscopy experiments for optical characterization of materials. Representative examples include: characterize irreversible phase transitions due to short-term heating, and to identification of materials or compounds through Raman measurements. The successful candidate is expected to contribute to a range of related research projects. We are looking for a creative, self-motivated researcher who has the ability and the drive to pursue challenging, interdisciplinary problems in a fast-paced research environment.

Only applicants who are currently in the U.S. and meet the following minimum qualifications will be considered for the position:

- A recent Ph.D. degree in Physics, Chemistry, or other closely related field
- Strong academic and research background related to laser spectroscopy, interpretation of optical spectra (e.g., lanthanide photoluminescence, Raman scattering, etc.), and excellent problem-solving skills
- Hands-on experience with optical spectroscopy equipment, including pulsed and cw lasers, spectrometers, CCD cameras, and data acquisition
- Demonstrated experience in analyzing optical spectra, including pre-processing of data, statistical modeling and multivariate analysis, and analysis automation
- Graduate or post-graduate experience at a U.S. Academic Institution or National Laboratory
- Ability to work independently and in a team environment, as needed.
- Interest to pursue challenging, interdisciplinary problems, and the ability to deliver proof-of-concept level results are essential.
- Personal attributes should include critical thinking; excellent communication skills, both oral and written; sound judgment; clear sense of purpose; attention to detail; and accountability

Preferred qualifications include experience with nonlinear optical properties, and maintenance and alignment of lasers, boxcar integrators, and lock-in amplifiers.



Individuals with a strong desire to work in applied research within a contract research organization, and who are comfortable working within a milestone-driven project-management environment are encouraged to apply. This is an ideal position for a creative, self-motivated individual.

The salary structure is both attractive and nationally competitive. Other benefits include health/dental insurance, vacation/sick leave, retirement plans, and access to all University facilities. The position is located in Spokane, WA.

Application Process

Applicants should submit a letter of application explicitly addressing the required qualifications for this position and date of availability; detailed curriculum vitae; and the contact information for three professional references to the attention of Dr. Hergen Eilers via email at asl.jobs@wsu.edu.

To ensure consideration, please specify the position (Postdoc: Laser Spectroscopy) for which you are applying. We will begin reviewing applications immediately and will continue to do so until the position is filled. Please contact Ms. Julie Cronnelly with inquiries regarding this position (asl.jobs@wsu.edu, 509-358-7700).

Due to the large volume of applications, we will contact only those selected for next steps.

The Institute for Shock Physics Overview

The Institute has ongoing research activities at the following three locations:

- *Applied Sciences Laboratory - Spokane, WA:* Transforming science into practical solutions (asl.wsu.edu)
- *Institute for Shock Physics - Pullman, WA*: Combining research innovations and rigorous education (shock.wsu.edu)
- *Dynamic Compression Sector - Argonne, IL:* Frontier of dynamic compression science (first-of-a-kind worldwide user facility) located at the Advanced Photon Source, Argonne National Laboratory (dcs-aps.wsu.edu)

Washington State University

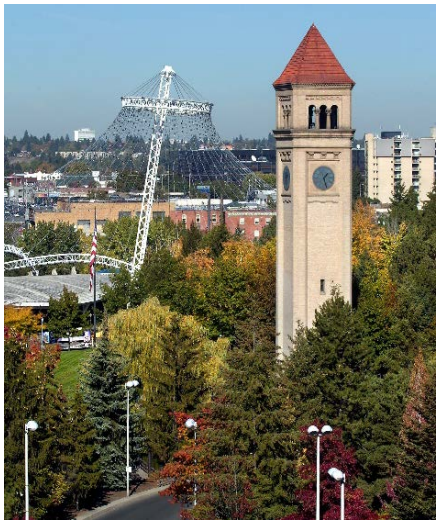
Washington State University, one of the two research universities in the state, was founded in 1890 as the state's land-grant institution and is located in Pullman with regional campuses in Spokane, Vancouver and the Tri-Cities. Due to its strong emphasis on excellence in research and education, the Carnegie Classification™ has designated WSU as RU/VH: Research Universities (very high research activity). Current enrollment is approximately 29,686 undergraduate, graduate, and professional students. The University offers more than 200 fields of study, with 95 majors for undergraduates, 79 master's degree programs, 63 doctoral degree programs, and 3

Washington State University

professional degree programs. Academically, the University is organized into 11 colleges (Agriculture, Human, and Natural Resource Sciences; Arts and Sciences; Business; Communication; Education; Engineering and Architecture; Honors; Medicine; Nursing; Pharmacy; and Veterinary Medicine) and a Graduate School. For more information, please visit www.wsu.edu.

Spokane

The Spokane region serves as the business, transportation, medical, industrial and cultural hub of the Inland Northwest, an area that comprises a population of more than 1.4 million people. This region is located on the east side of Washington State, 18 miles west of the Idaho state line and 100 miles south of the Canadian border. Spokane is 75 miles from Pullman. Washington State University has a location at the downtown River Point Campus location on the Spokane River with an enrollment of approximately 1,400 students in selected fields. Eastern Washington University, Gonzaga University and Whitworth College are nearby. The regional economy is incorporating the emergence of new technologies in research and education, health and bio-sciences, while maintaining traditional industries including agriculture, manufacturing, and forestry. For more information on Spokane, please follow the following link: http://www.visitspokane.com/.



WSU is an EO/AA Educator and Employer