

NOTICE OF VACANCY

Postdoctoral Research Position: Optical Spectroscopy under Dynamic Compression



Institute for

Shock Physics

WASHINGTON STATE UNIVERSITY

The Institute for Shock Physics (ISP) at Washington State University is a DOE/NNSA “Center of Excellence” with a strong focus on the Dynamic Compression of Material. WSU (as the lead institution) and three outstanding academic partners – Princeton University, California of Technology, and Stanford University – conduct substantive research leading to advances/innovations in the field of Dynamic Compression Science. Multidisciplinary research activities involving students, postdocs, and faculty members from different academic disciplines at the four participating institutions are emphasized to comprehensively address the exciting scientific challenges. In addition, meaningful and mutually beneficial collaborations with scientists at the NNSA Labs: Los Alamos, Lawrence Livermore, and Sandia National Laboratories.

We have an immediate opening for a postdoctoral research associate (experimentalist) to examine condensed matter phenomena -- at the microscopic level -- under dynamic compression, using time-resolved (ps-ns resolution) optical spectroscopy and laser-interferometry in single event experiments. The scientific objectives are to relate shock wave induced physical/chemical changes in condensed systems to the underlying atomic/molecular mechanisms. We are looking for a creative, self-motivated experimentalist (physicist or chemist) who has the ability and the drive to pursue challenging, interdisciplinary problems in a fast-paced research environment.

This position is located on the WSU Campus in Pullman. WA.

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

- A very recent Ph.D. degree in Physics or Physical Chemistry
- Strong academic and research background related to condensed matter research and excellent problem-solving skills
- Strong experimental skills and hands-on experience in laser-spectroscopy or related optical measurements to probe condensed matter phenomena
- 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
- Personal attributes should include critical thinking; excellent communication skills, both oral and written; sound judgment; clear sense of purpose; attention to detail; and accountability

Prior experience in dynamic compression research is not required. However, strong hands-on experimental skills relevant to the scientific objectives listed above are essential.

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.

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 Professor Y. M. Gupta via email at ispjobs@wsu.edu.

To ensure consideration, please specify the position (Postdoc: Optical Spectroscopy under Dynamic Compression) 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. Sheila Heyns with inquiries regarding this position (ispjobs@wsu.edu, 509-335-1861).

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

Additional information about the Institute for Shock Physics and Washington State University follows:

The Institute for Shock Physics Overview

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

- *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)
- *Applied Sciences Laboratory - Spokane, WA:* Transforming science into practical solutions (asl.wsu.edu)



Shock Physics Building, Pullman, WA

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 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.



Washington State University

WSU is an EO/AA Educator and Employer.