

NOTICE OF VACANCY
Postdoctoral Research Position:
Structural/Chemical Changes under
Extreme Compression



Institute for
Shock Physics
WASHINGTON STATE UNIVERSITY

Description of Position

The Institute for Shock Physics at Washington State University in Pullman, WA has an immediate opening for a postdoctoral research associate (experimentalist) to examine structural and chemical changes in energetic molecular crystals under dynamic and static compression using X-ray diffraction and optical spectroscopy methods in single event experiments. The scientific objectives are to understand how crystal structure and molecular changes govern chemical reactions in compressed energetic crystals. We are looking for a creative, self-motivated experimentalist who has the ability to work independently and as a part of a team, 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 very recent Ph.D. degree in Physical or Materials Chemistry, or a closely related field
- Strong academic and research background in condensed matter science and with expertise in at least one of the following areas: X-ray diffraction, optical spectroscopy, high-pressure science, or crystallography
- Strong experimental skills and hands-on experience using X-ray diffraction or laser spectroscopy to study condensed matter response
- Graduate or post-graduate experience at a U.S. Academic Institution or National Laboratory
- Excellent communication skills, both oral and written, demonstrated via scientific publications and technical presentations
- Critical thinking, good judgment, clear sense of purpose, attention to details, and accountability, as well as good interpersonal skills necessary for functioning positively in a multi-disciplinary team

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 qualifications for this position and date of availability; detailed curriculum vitae; and contact information for three professional references to the attention of Professor Y. M. Gupta via email at ispijobs@wsu.edu.

To ensure consideration, please specify the position (Postdoc: Structural/Chemical Changes under Extreme Compression) for which you are applying. We will begin reviewing submissions immediately and will continue to do so until the position is filled.

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

THE INSTITUTE FOR SHOCK PHYSICS

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 90 majors for undergraduates, 76 master's degree programs, 64 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; Medical Sciences, Nursing; Pharmacy; Veterinary Medicine) and a Graduate School. WSU has established a medical school with preliminary accreditation received in Fall 2016. For more information, please visit www.wsu.edu.



Washington State University

WSU is an EO/AA Educator and Employer.