

**NOTICE OF VACANCY**  
**Condensed Matter Physics**  
**Postdoctoral Research Position**

The Institute for Shock Physics (ISP) seeks a post-doctoral research associate for experimental condensed matter research focusing on structural changes and thermodynamic response (equilibrium and nonequilibrium) in solids under extreme conditions

ISP research scientists use shock wave compression to achieve the most extreme thermodynamic states of matter in the laboratory. This includes very large compressions (up to 2x solid density), high temperatures (including shock induced melting), and large deformations on very short time scales (picosecond to microsecond). These unique high pressures conditions result in a rich array of physical and chemical changes. The near instantaneous transition to a high stress state associated with shock wave compression is probed using time-resolved (ns resolution) laser interferometry, allowing material processes to be examined in real time.

This position would be ideal for an experimentalist with an academic background in condensed matter physics. Prior experience in shock wave compression science is not required. The ISP provides in-depth training in shock wave physics; however, strong hands-on experimental skills and a temperament to perform single event experiments are essential.

The ISP offers world class facilities and expertise for training and research in shock wave physics. As a result, ISP graduates and postdoctoral research associates have moved on to successful professional careers, particularly at the National Laboratories (Department of Energy/NNSA and Department of Defense).



Applicants who and meet the following minimum qualifications will be considered for these positions:

- A recent Ph.D. degree in Physics, or related field.
- Strong academic and hands-on, experimental research background with excellent problem-solving skills.
- 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; and attention to detail.

### **APPLICATIONS**

Applicants should submit the following information via [WSU Jobs](#):

- Cover letter explicitly addressing the qualifications for this position and date of availability
- Detailed curriculum vitae
- Contact information for three professional references

We will begin reviewing submissions immediately and will continue to do so until the positions are filled. Please contact Ms. Sheila Heyns with questions ([ispjobs@wsu.edu](mailto:ispjobs@wsu.edu), 509-335-5345).

**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 has ongoing research activities at the following three locations:

- *Institute for Shock Physics - Pullman, WA*: Combining research innovations and rigorous education ([shock.wsu.edu](http://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](http://dcs-aps.wsu.edu))
- *Applied Sciences Laboratory - Spokane, WA*: Transforming science into practical solutions ([asl.wsu.edu](http://asl.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, the Tri-Cities, and Everett. Due to its strong emphasis on excellence in research and education, the Carnegie Classification™ has designated WSU as R1/Tier 1: Doctoral University – Highest Research Activity. Current enrollment is approximately 31,600 undergraduate, graduate, and professional students. The University offers 98 majors, 86 minors, and 100+ in-major specializations for undergraduates, 78 master's degree programs, 65 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 Pharmaceutical Sciences; and Veterinary Medicine) and a Graduate School. For more information, please visit [wsu.edu](http://wsu.edu).



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