

**Postdoctoral Research Position – Optical Nanocomposites**  
**Notice of Vacancy**  
**Institute for Shock Physics / Applied Sciences Laboratory**  
**Washington State University**

The Institute for Shock Physics' (ISP) Applied Sciences Laboratory (ASL) at Washington State University in Spokane, Washington has an immediate opening for a postdoctoral research associate to fabricate polymer – metal – organic semiconductor nanocomposites (for infrared photo-detectors) and polymer – metal – inorganic nanocomposites (for scintillators) and study their properties.

Only applicants who meet the following minimum qualifications will be considered for the position:

- A recent Ph.D. in Physics, Chemistry, Materials Science, or related field with a strong experimental background
- Experience in working with organic photovoltaic materials
- Hands-on experience with vacuum equipment, evaporation equipment, and photoelectric characterization, including electron microscopy
- Graduate or post-graduate experience at a U.S. Academic Institution or National Laboratory
- The ability and interest to solve challenging interdisciplinary problems
- The ability to deliver proof-of-concept results
- Excellent communication and organizational skills

Preference will be given to applicants who also have experience in solution processing and wet-chemical synthesis of oxide nanoparticles and their surface modification. 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.

For more information, please visit [www.asl.wsu.edu](http://www.asl.wsu.edu), and [www.shock.wsu.edu](http://www.shock.wsu.edu).

ASL provides excellent opportunity for growth and professional success. 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. We are located in downtown Spokane, Washington. For more information on Spokane, please follow the following link: <http://www.visitspokane.com/>.

### **THE APPLIED SCIENCES LABORATORY**

The Applied Sciences Laboratory (ASL) is a self sustaining, contract research organization that conducts a broad range of applied research projects for government agencies and private corporations, including the development of commercial applications.

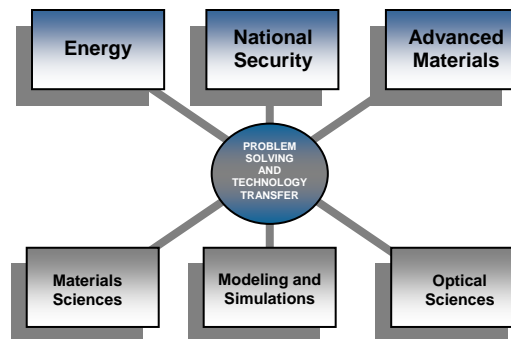


**Vision:** Transforming scientific innovations into practical solutions

**Mission:** Grow a self-sustaining, multidisciplinary contract research organization to link academic research to practical applications

ASL combines the creativity of academic research with the agility and customer focus of private industry. With an emphasis on problem solving and commercial applications, ASL is closely coupled to fundamental research at Washington State University (WSU). As the applied research component of WSU's Institute for Shock Physics, ASL builds on more than half a century of scientific excellence.

ASL's focus is on applied research and technology related to energy, national security, and advanced materials.



The scientific underpinnings for these projects are in materials sciences, computational modeling and simulations, and optical sciences. ASL provides the intellectual and scientific foundation for fostering economic growth through strategic investments in the physical sciences, engineering, and advanced technologies.

Further information about ASL may be found at [www.asl.wsu.edu](http://www.asl.wsu.edu).

## THE INSTITUTE FOR SHOCK PHYSICS

Nearly 50 years of research innovations and activities in understanding the dynamic response of materials at Washington State University provide the foundation for the research activities in ASL. A multidisciplinary research organization within the College of Sciences, ISP undertakes a broad range of fundamental scientific activities related to understanding condensed matter response under dynamic and static high pressures. Atomic-to-continuum level understanding is the pervading theme of research activities that emphasize integration of innovative experiments with theoretical and computational advances. Multidisciplinary efforts that combine expertise in Physics, Materials Science, Chemistry, and Mechanical Engineering are underway to address several exciting and challenging scientific problems. In addition to the research faculty within the Institute, students and faculty from several departments within the Colleges of Sciences and Engineering and Architecture participate in the Institute's research projects. State-of-the-art experimental and computational facilities are available for studying physical and chemical phenomena over a large range of length and time scales. Excellent research interactions are in place with the DOE / NNSA National Laboratories. Further information about the Institute is available at [www.shock.wsu.edu](http://www.shock.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. It is a Carnegie Doctoral/Research Extensive University with a strong emphasis on excellence in research and education. Current enrollment is approximately 21,000 undergraduate, graduate, and professional student FTEs, with approximately 5,600 faculty and staff. The University offers approximately 4300 courses in 150 undergraduate, and more than 70 graduate, degree programs. Academically the University is organized into 10 colleges (Agriculture, Human, and Natural Resource Sciences; Business; Education; Engineering and Architecture; Honors; Liberal Arts; Nursing; Pharmacy; Sciences; Veterinary Medicine) and a Graduate School.

## SPOKANE

Spokane is the second largest city in Washington. The population is approximately 200,000 and there are over 400,000 citizens in the greater metropolitan area. It is the heart of the Inland Northwest, known for its beautiful outdoor recreational attractions. 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 1,600 students in selected fields. Eastern Washington University, Gonzaga University and Whitworth University are nearby. The largest employers are Fairchild Air Force base, a combination of hospitals and health care providers, and Kaiser Aluminum. Other industries include Agilent Technologies, Alcatel, Avista, Getronics, Itron, Telect, World Wide Packets, General Dynamics/Itronix, F5 Networks, and Honeywell. There is a small but growing biotechnology industry.

## APPLICATIONS

Applicants should submit a detailed letter of application, elaborating on all requirements mentioned above, indicating date of availability, detailed curriculum vitae, and contact information for three professional references to:

Professor H. Eilers  
Institute for Shock Physics / Applied Sciences Laboratory  
Washington State University – Spokane  
PO Box 1495,  
Spokane, WA 99210-1495  
or via email at [ispjobs@wsu.edu](mailto:ispjobs@wsu.edu).

Be sure to specify the position you are applying for (Optical Nanocomposites Postdoc). We will begin reviewing submissions immediately and will continue to do so until the position is filled.

*WASHINGTON STATE UNIVERSITY IS AN EQUAL OPPORTUNITY/ AFFIRMATIVE ACTION EDUCATOR AND EMPLOYER. Members of ethnic minorities, women, special disabled veterans, veterans of the Vietnam-era, recently separated veterans, and other protected veterans, persons of disability and/or persons age 40 and over are encouraged to apply.*

*WSU employs only U.S. citizens and lawfully authorized non-U.S. citizens. All new employees must show employment eligibility verification as required by the U.S. Citizenship and Immigration Services.*

*Washington State University is committed to providing access and reasonable accommodation in its services, programs, activities, education and employment for individuals with disabilities. To request disability accommodation in the application process, contact Human Resource Services: 509-335-4521(v), Washington State TDD Relay Service: Voice Callers: 1-800-833-6384; TDD Callers: 1-800-833-6388, 509.-335-1259(f), or [hrs@wsu.edu](mailto:hrs@wsu.edu).*