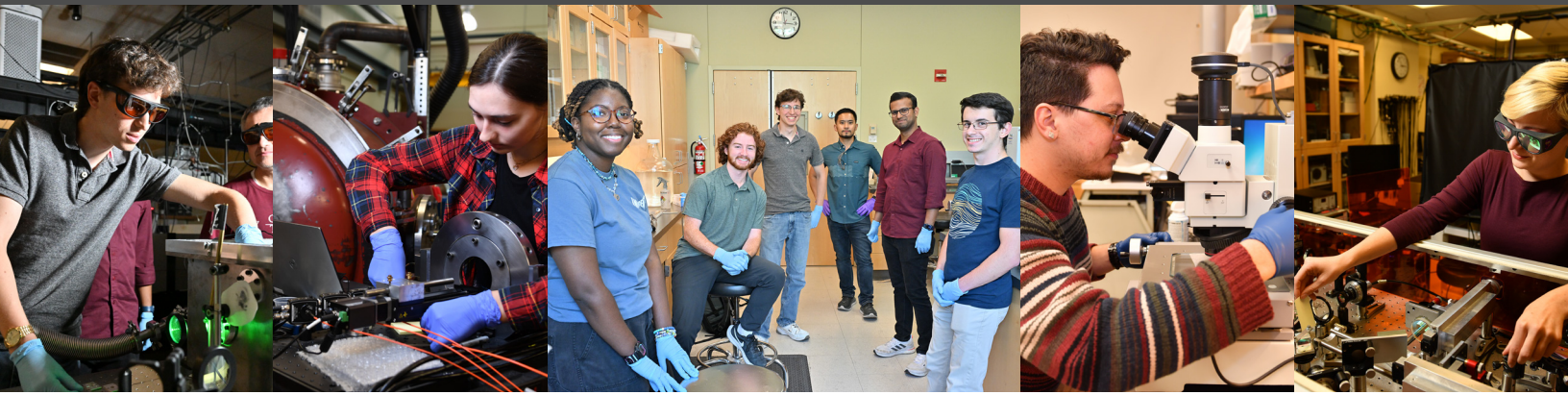


Graduate Research *at the* Institute for Shock Physics, Washington State University



Graduate students from a range of disciplines (Physics, Chemistry, Materials Science, Mechanical Engineering, and Geo/Planetary Science) have a unique opportunity to study the response of materials at extreme conditions with the internationally renowned scientists at Washington State University.

Working within their respective academic departments, graduate students conduct their Ph.D. research in the Institute for Shock Physics (ISP), which provides learning and research opportunities through:

- Innovative and multidisciplinary research
- Independent, hands-on work
- Access to state-of-the-art experimental facilities*
- Academic partnerships with Caltech and Princeton
- Collaborations with DOE Labs ([LLNL](#), [LANL](#), [SNL](#))

One of ISP's principal accomplishments is well-educated and rigorously trained scientists who have successful professional careers and are leaders in the field.



*Institute for Shock Physics,
Pullman, WA*

*Dynamic Compression Sector,
Argonne, IL*

* Students have access to the facilities at the Institute for Shock Physics in Pullman, as well as the Dynamic Compression Sector - located at the Advanced Photon Source, Argonne National Laboratory.

The ISP has a Research Assistantship (RA) available for the 2025 Academic Year.

The RA includes:

- Nationally competitive stipend
- Waiver of tuition
- Health insurance



Students may also qualify for special fellowships. Scan the QR code for more information, or visit shock.wsu.edu/financial-support/

Understanding Materials at Extreme Conditions

Shock wave experiments, using innovative measurement capabilities, allow researchers to examine condensed matter states at extreme compressions and temperatures. These experiments have been central to advances in fundamental science and modern technology.

Examples include:

- High pressure and high temperature phenomena in meteorite impacts and in planetary interiors
- Space and National Security applications: including improved armor and understanding of detonations for safe and improved use of energetic materials
- Semiconductor research related to understanding the role of strains in layered devices used in electronics and optoelectronics
- Materials synthesis



WASHINGTON STATE UNIVERSITY
Institute for Shock Physics