

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



Apply at [**shock.wsu.edu/admissions/**](https://shock.wsu.edu/admissions/)

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 at Washington State University.

Working within their respective academic departments, graduate students conduct their Ph.D. research in the **Institute for Shock Physics**, 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:
 - [Caltech](#)
 - [Princeton University](#)
 - [University of Texas at El Paso](#)
- Collaborations with Department of Energy National Laboratories:
 - [Lawrence Livermore](#)
 - [Los Alamos](#)
 - [Sandia](#)

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

Research Assistantships (RA) are available for the 2026- 2027 Academic Year

The RA includes:

- Stipend
- Tuition waiver
- Health insurance



Students may also qualify for special fellowships

Scan the QR code for more information,
or visit [**shock.wsu.edu/financial-support**](https://shock.wsu.edu/financial-support).

Understanding Materials at Extreme Conditions

Shock wave experiments allow researchers to examine condensed matter at extreme pressures and temperatures central to advancing fundamental science and modern technology. Examples include:

- Phase transitions and equation-of-state (EOS)
- Material strength, damage, and plasticity
- Geophysics – planetary physics and impacts
- Inertial Confinement Fusion (ICF)
- Response of novel materials by design
- Ballistics and armor, debris shields
- National security applications



*Students access facilities at the
Institute for Shock Physics in
Pullman, Washington (left) and the
Dynamic Compression Sector at the
Advanced Photon Source, Argonne
National Laboratory (right).*

