

The School of Earth and Space Exploration (SESE) at Arizona State University invites applications for a postdoctoral research scholar in Mineral physics.

Applications are invited for a postdoctoral position to carry out high-pressure research as a member of mineral physics group (<https://www.DanShimLab.info>) at ASU. The researcher will conduct experimental studies to understand hydrogen storage in the mantles and the cores of rocky planets; water-rock interactions in the interiors of water-rich planets; and atmosphere-interior interaction of sub-Neptune and lava-world exoplanets. The researcher will carry out experiments for reactions between hydrogen and minerals (silicates and metals) and between water and minerals at high pressure and high temperature in multi-anvil press and laser-heated diamond-anvil cell at ASU and synchrotron facilities. The researcher is expected to operate the hydrogen gas loading system at ASU. The researcher will analyze data and develop models for planetary implications of experimental results. The researcher will travel for synchrotron experiments and for presenting research results at scientific conferences.

SESE is an interdisciplinary department, bringing together all of Earth and space science at ASU, including astrophysics, cosmology, planetary science, and geology.

The initial appointment is for one year with subsequent annual renewal for up to two additional years contingent upon satisfactory performance, the needs of the university, and availability of resources. The desired start date is September 1, 2022. This position comes with a competitive salary, funding for academic travel, and full health insurance coverage.

Minimum qualifications include a Ph.D. in Earth sciences, physics, chemistry, materials science or closely related field by the start date.

Desired qualifications include a background in laser-heated diamond-anvil cell or multi-anvil press; synchrotron X-ray techniques; Raman spectroscopy and infrared spectroscopy; and electron microscopy. Candidates must be within five years from receipt of the doctoral degree.

To apply, please submit to <http://apply.interfolio.com/107061> to include the following:

- A cover letter
- Contact information for three references
- A curriculum vitae with a publication list
- A statement of past research accomplishments and future research goals (three pages or less)
- A statement addressing how your past and/or potential contributions to diversity and inclusion will advance ASU's commitment to inclusive excellence.

Deadline for initial review of complete applications will be June 18, 2022. Applications will continue to be accepted on a rolling basis for a reserve pool. Applications in the reserve pool may then be reviewed in the order in which they were received until the position is closed.

Postdoctoral benefits can be found at: <https://cfo.asu.edu/new-employee-orientation>

The College of Liberal Arts and Sciences (<https://thecollege.asu.edu/faculty>) at ASU values cultural and intellectual diversity, and continually strives to foster a welcoming and inclusive environment. We are especially interested in applicants who can strengthen the College diversity of the academic community.

A background check is required for employment. Arizona State University is a VEVRAA Federal Contractor and an Equal Opportunity/Affirmative Action Employer. All qualified applicants will be considered without regard to race, color, sex, religion, national origin, disability, protected veteran status, or any other basis protected by law. (See <https://www.asu.edu/aad/manuals/acd/acd401.html> and <https://www.asu.edu/titleIX/>.)

In compliance with federal law, ASU prepares an annual report on campus security and fire safety programs and resources. ASU's Annual Security and Fire Safety Report is available online at <https://www.asu.edu/police/PDFs/ASU-Clery-Report.pdf>

You may request a hard copy of the report by contacting the ASU Police Department at 480-965-3456.