

# Research Scientist, High Pressure Research for FORCE

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Arizona State University: Office of the Executive Vice President Knowledge Enterprise: KE Core Facilities: Eyring Materials Center

**Location**  
Tempe, AZ  
**Open Date**  
Nov 09, 2021

## **Description**

FORCE (Facility for Open Research in a Compressed Environment) is searching for a Ph.D.-level Research Scientist to participate in the establishment and operation of a unique facility for high-pressure research that is initially being funded through a five-year Mid-Scale Research Infrastructure grant from the National Science Foundation. Once operational, FORCE will serve as a national center that will attract high pressure researchers from the U.S. and around the world, and it is expected to operate as a cutting-edge facility for many years. With emphasis on its highly specialized equipment, FORCE will be made openly accessible to outside scientists and ASU personnel. Undergraduate students, graduate students, and summer interns will participate in implementation of the facility. The Research Scientist will work under the direction of Dr. Kurt Leinenweber, PI on the NSF grant. ***The preferred start date for this position is April 1, 2022.***

Salary Range: \$75,000-\$80,000 per year; DOE

## **Essential Duties:**

The successful candidate will be involved with the procurement, installation, testing and calibration of four major pieces of high pressure equipment: a 6000-ton uniaxial Kawai-type press, a cubic press, a torsional device, and a 1 GPa gas vessel. Space for the facility is currently being planned and renovated, and preparation areas and supporting equipment are being set up. Following installation, each piece of equipment will need to be calibrated

and tested. After the end of the implementation period, focus will shift to facility management, technique development, and equipment maintenance, as well as assisting and working closely with users. Much of the research should lead to journal publications.

### **Working Environment:**

Arizona State University is a dynamic and evolving University with total on-campus and online enrollment of over 125,000 students. The successful candidate will work with a wide variety of people and have access to a dynamic research environment. They will also have access to a wide range of support equipment for analysis of the products from testing and development of the new equipment.

#### **Qualifications**

##### **Minimum Qualifications:**

- Ph.D. in a field of physical science and 7 years of successful research experience

##### **Desired Qualifications:**

- Experience in high pressure is necessary and experience with large-volume presses is highly desirable.
- Good mechanical skills and knowledge of electronics and software are necessary.
- Demonstrated research skills, written and oral communications skills, experience in technical writing, and a record of working with other researchers are important.

#### **Application Instructions**

Applicants are responsible for including a cover letter, CV, and the names of three professional references in their application through the Interfolio website:

<https://apply.interfolio.com/98711>. Emailed applications will not be accepted.

The initial application deadline is **January 10, 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 filled.

For the seventh year in a row, ASU has been named the most innovative school in the nation, recognizing the university's culture of groundbreaking research and partnerships, as well as its commitment to helping students thrive in college and beyond. U.S. News and World Report has named ASU as the most innovative university all seven years the category has existed.

ASU Knowledge Enterprise advances research, innovation, strategic partnerships, entrepreneurship, and international development. Our success arises from solutions-focused, interdisciplinary research; an entrepreneurial approach that is embedded in every

school and department; and a commitment to transform society in a positive way. <http://research.asu.edu/>

### **Equal Employment Opportunity Statement**

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 receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, 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.

**COVID-19 Vaccination Requirements** - Under the recent executive order issued by President Biden requiring all employees of federal contractors to receive COVID-19 vaccinations, ASU expects all employees, including new hires, to be vaccinated unless they have an approved medical or religious accommodation. Proof of vaccination will be required by January 4, 2022. For questions about medical or religious accommodations, please visit the [Office of Diversity, Equity and Inclusion's webpage](#).