

**Arizona State University**  
**School of Sustainable Engineering and the Built Environment**  
**Postdoctoral Research Scholar in Infrastructure Resilience to Climate Events**

**Description**

A team of faculty members in the Fulton School of Engineering at Arizona State University was recently awarded a two-year project titled “Assessing the utility of safe-to-fail design to improve climate hazards resilience of interdependent infrastructure systems”. This project is funded by the [Disaster Resilience Research Grants](#) (DRRG) of the National Science Foundation (NSF) and the National Institute of Technology (NIST). The main goal of the project is to develop an integrated model that simulates safe-to-fail resilience strategies for interdependent roadways, stormwater, and power systems over multidecadal periods under heavy rainfall and windstorm events. The Postdoctoral Research Associate will work on the development of the roadway and power models, the integration of all models, and the simulation of different design scenarios. Additional details on the project are available [here](#).

The postdoc will work closely with professors Giuseppe Mascaro, Mikhail Chester, Jorge Sefair, and Nathan Johnson, including researchers and staff in their respective research labs. As such there is considerable opportunity for networking and broader engagement in related research. The faculty have a long history of advancing postdocs to leadership positions including tenure track faculty and national laboratory scientists. Salary \$55,000.

**Essential Duties**

The position will require producing reports and peer-reviewed journal publications, engaging with faculty, and outreach. *The start date is contingent on arrivals of funds, which is expected in summer 2022.*

**Required Qualifications**

- PhD in Civil, Environmental, Mechanical or Industrial Engineering, or related field.
- Experience programming and analyzing data in Python, R, Matlab, or similar language

**Desired Qualifications**

- Prior coursework or research in infrastructure systems, resilience, and climate effects
- Experience with infrastructure modeling and simulation of dynamic systems

For additional information regarding this position, please contact Professor Mikhail Chester at [mchester@asu.edu](mailto:mchester@asu.edu). Women and underrepresented minority applicants are strongly encouraged to apply.

**Application Instructions**

The review of applications will begin as they are received. Applications should be submitted prior to August 15, 2022. To apply please submit the following to Dr. Mikhail Chester at [mchester@asu.edu](mailto:mchester@asu.edu).

- One-page cover letter
- Curriculum Vitae
- Copy of Transcripts
- Writing sample such as a prior publication or report

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 ASU's full non-discrimination statement (ACD 401) at <https://www.asu.edu/aad/manuals/acd/acd401.html> and the Title IX statement at <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 – Arizona State University is a federal contractor and subject to federal regulations which may require you to produce a record of a COVID-10 vaccination. For questions about medical or religious accommodations, please visit the [Office of Diversity, Equity and Inclusion's webpage](#).