

Opportunity Title: Postdoctoral - Civil Engineering Opportunity Reference Code: ERDC-GSL-2020-0002

Organization U.S. Department of Defense (DOD)

Reference Code ERDC-GSL-2020-0002

How to Apply Components of the online application are as follows:

- Profile Information
- Educational and Employment History
- · Essay Questions (goals, experiences, and skills relevant to the opportunity)
- Resume (PDF)
- Transcripts/Academic Records -<u>Click here for detailed information about acceptable</u> transcripts
- References

Submitted documents must have all social security numbers, student identification numbers, and/or dates of birth removed (blanked out, blackened out, made illegible, etc.) prior to uploading into the application system.

If you have questions, send an email to <u>usace@orise.orau.gov</u> list the reference code of this opportunity in the subject line of the email.

All documents must be in English or include an official English translation.

Description The U.S. Army Corps of Engineering - Engineering Research and Development Center (EDRC) -Geotechnical and Structures Laboratory (GSL) knows that location and spatial relationships, as well as geographical data and information are the central elements of success in the battlespace environment. So ERDC's Geospatial Research and Engineering (GRE) research and development business area provides the data, analytic tools, information and decision framework capabilities to ensure superior situational awareness of the battlespace environment for the warfighter. For more information, please visit <u>https://www.erdc.usace.army.mil/Locations/GSL/Missions.aspx.</u>

The fellow will be assigned to a research program focused on optimizing force protection and asset rehabilitation. In conjunction with these studies, the fellow will also focus on innovating, modeling, testing, and demonstrating methods of protection against threats to military installations and their ability to perform persistent operations during and after attack. This research will improve our ability to shape nation's strategic capability, a critical component of the nation's deployment and distribution enterprise. While engaged in this program, the fellow can expect to expand their expertise in the field of force protection and asset rehabilitation and further develop their skills in advance technology demonstration involving protection from penetration, fragmentation, and airblast threats. Finally, the fellow will continue the development of their analytical and experimental skills while forming productive collaborations with experts within the force protection community. In addition to their involvement in research, the fellow will attend seminars and demonstrations focused on force protection and asset rehabilitation and will make regular formal presentations of novel research findings to further develop skills in presentation and scientific writing.

#### **Appointment Length**

This ORISE appointment period is up to six months in length. Appointments may be extended depending on funding availability, project assignment, program rules, and availability of the participant.

**Participant Benefits** 

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Participants will receive a stipend to be determined by ERDC-GSL. Stipends are typically based on the participant's academic standing, discipline, experience, and research facility location. Other benefits may include the following:

- Health Insurance Supplement. Participants are eligible to purchase health insurance through ORISE.
- Relocation Allowance
- Training and Travel Allowance

#### Nature of Appointment

The participant will not enter into an employee/employer relationship with ORISE, ORAU, DOD, or any other office or agency. Instead, the participant will be affiliated with ORISE for the administration of the appointment through the ORISE appointment letter and Terms of Appointment.

While participants will not enter into an employment relationship with DOD or any other agency, this opportunity may require a suitability investigation/background investigation. Any offer made is considered tentative pending favorable outcome of the investigation.

Qualifications Candidate must have a Ph.D. in Civil Engineering. The candidate must have experience with force protection and asset rehabilitation. Additionally, the candidate must have knowledge in innovating, modeling, testing, and demonstrating methods of protection against threats to military installations and their ability to perform persistent operations during and after attack. The candidate must have knowledge of the advance technology demonstration involving protection from penetration, fragmentation, and airblast threats, familiarity with the field of hardened and semi-hardened permanent facilities to expeditionary protection of aircraft and vulnerable assets and publications within a related area to those topics. Finally, the candidate must have strong skills in the communication of scientific findings, through oral presentations, manuscript preparation, and a strong ability to work collaboratively both within our research group and across labs.

### Eligibility • Citizenship: U.S. Citizen Only

# Requirements

- Degree: Doctoral Degree.
- Discipline(s):
  - Chemistry and Materials Sciences (12. )
  - Communications and Graphics Design (1. .
  - Computer, Information, and Data Sciences (16 )
  - Earth and Geosciences (21. (21)
  - Engineering (27 •)
  - Environmental and Marine Sciences (14 (14)
  - Life Health and Medical Sciences (45.)
  - Mathematics and Statistics (<u>10</u>)
  - Other Non-Science & Engineering (2.)
  - Physics (<u>16</u>)
  - Science & Engineering-related (1.)
  - Social and Behavioral Sciences (27. )
- Age: Must be 18 years of age