

Opportunity Title: Chemistry - Environmental / Geochemistry Research
Opportunity Reference Code: ERDC-EL-2021-0004

Organization U.S. Department of Defense (DOD)
Reference Code ERDC-EL-2021-0004
How to Apply **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 - [Click here for detailed information about acceptable transcripts](#)
- Recommendation

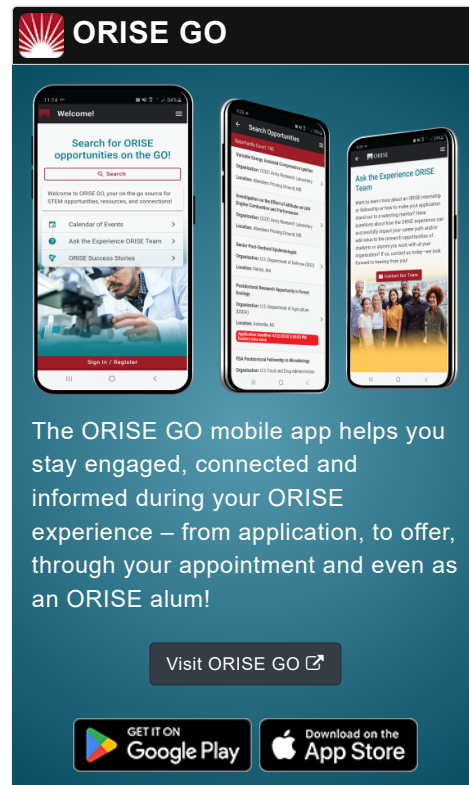
Submitted documents must have all social security numbers, student identification numbers, and/or dates of birth removed (blanked out, blackened out, made illegible, etc.) prior to uploading into the application system.

If you have questions, send an email to USACE@orise.ora.gov. Please 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 Environmental Laboratory (EL) provides relevant, value-added technology supporting the environmental mission of the US Army Corps of Engineers, the Department of Defense (DoD), and the Nation. Headquartered in Vicksburg, Mississippi, EL's interdisciplinary staff of over 220 engineers, scientists, technicians, and support personnel plans and executes all phases of the technology development process, from basic research to field implementation to commercialization. The EL staff consists of problem solvers who use research, development, experimentation, special studies, and technical support to address the needs of national and international business development partners. Partnering with Federal and State agencies, academia, and the private sector, the EL uses its distinctive technical capabilities to resolve complex, multi-disciplinary environmental sustainability problems. The EL website can be accessed at: <http://el.erd.usace.army.mil/>

Under the guidance of a mentor, the participant will collaborate with federal employees and contractors on research projects utilizing state-of-the-art equipment and instrumentation to investigate and solve challenges in the environmental chemistry and geochemistry. The research involves development, optimization, and application of advanced analytical methodologies to ultra-low detection of compounds of interest and potential degradation products in complex environmental media, with an emphasis on understanding the biogeochemistry of metals and target organic compounds in natural systems. Instrumentation the incumbent should be familiar with during their appointment include HPLC and GC with UV, MS, and MS/MS detectors, ICP-AES, ICP-MS, GF-AAS, and Colorimetry/UV-vis, among others. Knowledge in method development, complex matrix analysis, and interference reduction/removal methods is beneficial. The results from the research projects will be presented at national conferences, detailed in peer-reviewed manuscripts, and final reports to funding sponsors.



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Appointment Length

This appointment is a twelve month research appointment, with the possibility to be renewed for additional research periods. Appointments may be extended depending on funding availability, project assignment, program rules, and availability of the participant.

Participant Benefits

Participants will receive a stipend to be determined by ERDC-EL. 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.

Qualifications

The candidate should be currently pursuing or received a Masters or Doctorate degree in Chemistry, Geochemistry, or a closely related field, with emphasis on analytical and environmental chemistry preferred. Prior experience with instrumentation or the chemistry-related fields listed in the project description will be considered.

Eligibility Requirements

- **Citizenship:** U.S. Citizen Only
- **Degree:** Master's Degree or Doctoral Degree received within the last 60 months or currently pursuing.
- **Academic Level(s):** Post-Bachelor's, Postdoctoral, or Post-Master's.
- **Discipline(s):**
 - **Chemistry and Materials Sciences** (12 )
 - **Earth and Geosciences** (21 )
 - **Engineering** (22 )
 - **Environmental and Marine Sciences** (9 )
 - **Life Health and Medical Sciences** (29 )
 - **Mathematics and Statistics** (7 )
 - **Physics** (16 )