

Opportunity Title: Geochemistry Postdoctoral Research

Opportunity Reference Code: USACE-EL-1829709278

Organization U.S. Department of Defense (DOD)

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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](#)
- References

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

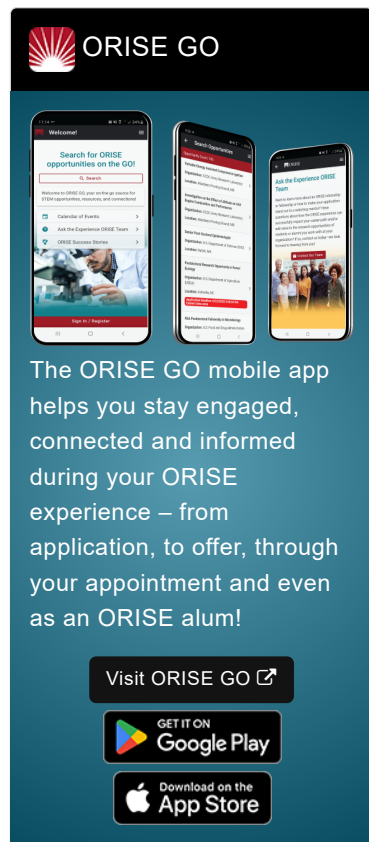
If you have questions, send an email to usace@orau.org. Please list the reference code of this opportunity in the subject line of the email.

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

Description The Environmental Laboratory (EL) is part of the U.S. Army Engineer Research and Development Center (USACE-ERDC), which is the Army Corps of Engineers' integrated research and development (R&D) organization. EL provides solutions to environmental challenges for the U.S. Army, the Department of Defense and the United States through environmental science and engineering research and development. Researchers in the Environmental Laboratory conduct research in ecosystem science and technology, environmental resiliency, environmental sensing, ecological modeling and forecasting, risk and decision science, environmentally sustainable material, systems biology, climate change, and environmental security. For more information about the US Army Engineering Research and Development Center (ERDC) Environmental Laboratory (EL), please visit <https://www.erdcl.usace.army.mil/>.

The US Army Engineering Research and Development Center (ERDC), Environmental Laboratory (EL), Environmental Processes and Engineering Division (EPED), Environmental Chemistry Branch (EPC), Analytical Geochemistry Team conducts research in several areas, including metal speciation and method development.

Our group is seeking a postdoctoral Geochemist to aid research relating to metal speciation and geochemistry in complex natural environments. Specifically, this opportunity requires experience in development of metal speciation methods using High Performance Liquid Chromatography interfaced to Inductively Coupled Plasma Mass Spectrometry, to detect, characterize, and quantify metals in tissue, soils, and other complex environmental media. These methods will then be applied to understanding the fate and transport of metals in environmental systems, such as quantifying the complexation of metals with humic materials, and the effect



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on sorption and bioavailability. Expertise in metal redox species transformation and complexation is critical, as well as understanding of analytical interferences in quantitation of trace and ultra trace levels of metals in complex matrices. Under the direction of the mentor, the participant will be responsible for data collection from these activities, including developing any necessary analytical techniques, and processing that data for publication.

Appointment Length

This is a twelve month research appointment with the option to be renewed pending additional terms. 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 and 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 will require a suitability investigation/background investigation. Any offer made is considered tentative pending favorable outcome of the investigation.

Qualifications Candidate should have completed a doctoral degree in geochemistry. To qualify, candidates must have completed their degree within the past five years.

- Eligibility Requirements**

- **Citizenship:** U.S. Citizen Only
 - **Degree:** Doctoral Degree received within the last 60 months or currently pursuing.
 - **Discipline(s):**
 - **Earth and Geosciences** ([1](#)👁)