Opportunity Title: Dredging Research: Integrating Resilience - Graduate Students, Master's, or Doctoral Degree
Opportunity Reference Code: ERDC-EL-2024-0010

Organization U.S. Department of Defense (DOD)

Reference Code ERDC-EL-2024-0010

How to Apply Click on *Apply* now to start your application.

Description The Environmental Laboratory (EL) is one of the seven laboratories 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 Nation through environmental science and engineering research and development. Researchers in EL 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, computational chemistry, environmental chemistry and environmental security. For more information about the US Army Engineering Research and Development Center (ERDC) Environmental Laboratory (EL), please visit https://www.erdc.usace.army.mil/.

The Dredging Operations and Environmental Research (DOER) Program supports the U.S. Army Corps of Engineers Operation and Maintenance Navigation Program. Research is designed to balance operational and environmental initiatives and to meet complex economic, engineering, and environmental challenges of dredging and disposal in support of the navigation mission. Research results will provide dredging project managers with knowledge and technology for cost-effective operation, evaluation or risks associated with management alternatives, and environmental compliance.

What will I be doing?

Under the guidance of a mentor, you will engage in review of the economic, engineering, and environmental challenges of dredging and disposal and will look for opportunities to integrate resilience into these facets in order to optimize USACE performance. You will gain experience by assisting in a gap analysis and use your building/infrastructure resilience knowledge and civil engineering skill set to build a framework of proxy information to inform the data gaps. A decision framework will be developed to assess alternatives for project selection to address these data gaps.

Why should I apply?

This fellowship provides the opportunity to independently utilize your skills and engage with experts in innovative ideas to move the proposed research forward.

Where will I be located? Boston, Massachusetts

What is the anticipated start date?

Exact start dates will be determined at the time of selection and in coordination with the selected candidate.

What is the appointment length?

This appointment is a seven-month research appointment. Appointments may be extended depending on funding availability, project assignment, program rules, and availability of the participant.

What are the benefits?

Opportunity Title: Dredging Research: Integrating Resilience - Graduate Students, Master's, or Doctoral Degree
Opportunity Reference Code: ERDC-EL-2024-0010

You will receive a stipend to be determined by ERDC-EL. Stipends are typically based on a 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

About ORISE

This program, administered by Oak Ridge Associated Universities (ORAU) through its contract with the U.S. Department of Energy (DOE) to manage the Oak Ridge Institute for Science and Education (ORISE), was established through an interagency agreement between DOE and DoD. Participants do not enter into an employee/employer relationship with ORISE, ORAU, DoD or any other office or agency. Instead, you will be affiliated with ORISE for the administration of the appointment through the ORISE appointment letter and Terms of Appointment. Proof of health insurance is required for participation in this program. Health insurance can be obtained through ORISE. For more information, visit the ORISE Research Participation Program at the U.S. Department of Defense.

Qualifications

Graduate student or received a master's or doctoral degree. The ideal candidate will have specific skills in resilience modeling, advanced statistical analyses, weighting scheme development, value of information analysis, and multi-criteria decision analysis.

Application Requirements

A complete application consists of:

- Zintellect Profile
- Educational and Employment History
- Essay Questions (goals, experiences, and skills relevant to the opportunity)
- Resume (PDF)
- Transcripts/Academic Records - For this opportunity, an official transcript or copy of the student academic records printed by the applicant or by academic advisors from internal institution systems may be submitted. Click here for detailed information about acceptable transcripts.
- One recommendation. Applicants are required to provide contact information for at least one recommendation. You are encouraged to request a recommendation from a professional who can speak to your abilities and potential for success as well as your scientific capabilities and personal characteristics. Recommendation requests must be sent through the Zintellect application system. Recommenders will be asked to complete a recommendation in Zintellect. Letters of recommendation submitted via email will not be accepted.

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. All documents must be in English or include an official English translation. If you have questions, send an email to USACE@orise.orau.gov. Please list the reference code of this opportunity in the subject line of the email. Please understand that ORISE does not review applications or select applicants; selections are made by the sponsoring agency identified on this opportunity. All application materials should be submitted via the "Apply" button at the bottom of this opportunity listing. Please do not send application materials to the email address above.

Opportunity Title: Dredging Research: Integrating Resilience - Graduate Students, Master's, or Doctoral Degree
Opportunity Reference Code: ERDC-EL-2024-0010

Connect with ORISE...on the GO! Download the new ORISE GO mobile app in the Apple App Store or Google Play Store to help you stay engaged, connected, and informed during your ORISE experience and beyond!

Eligibility Requirements

- **Citizenship:** U.S. Citizen Only
- **Degree:** Master's Degree or Doctoral Degree received within the last 60 months or currently pursuing.
- **Discipline(s):**
  - **Chemistry and Materials Sciences** (12)
  - **Communications and Graphics Design** (2)
  - **Computer, Information, and Data Sciences** (16)
  - **Earth and Geosciences** (21)
  - **Engineering** (27)
  - **Environmental and Marine Sciences** (14)
  - **Life Health and Medical Sciences** (45)
  - **Mathematics and Statistics** (10)
  - **Other Non-Science & Engineering** (2)
  - **Physics** (16)
  - **Science & Engineering-related** (2)
  - **Social and Behavioral Sciences** (27)
- **Age:** Must be 18 years of age