

Opportunity Title: Engineering Research - Computational, Mathematics,
Materials: ERDC-Environmental Laboratory
Opportunity Reference Code: ERDC-EL-2025-0003

Organization U.S. Department of Defense (DOD)

Reference Code ERDC-EL-2025-0003

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

Description The Environmental Laboratory (EL) is one of the seven laboratories of 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.

What will I be doing?

Under the guidance of a mentor, you will be an essential component of the Materials and Surface Science Team (MASS) dedicated to discovering, developing, and delivering solutions to challenges faced by the Army Corps of Engineers. You will have the opportunity to develop your skills on a number of cross-cutting projects bridging the gap between computer science and AI/ML with materials science. You will learn in a multi-disciplinary environment to design and execute experiments, collect and analyze data, and publish in peer-reviewed journals.

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? Vicksburg, Mississippi

What is the anticipated start date?

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

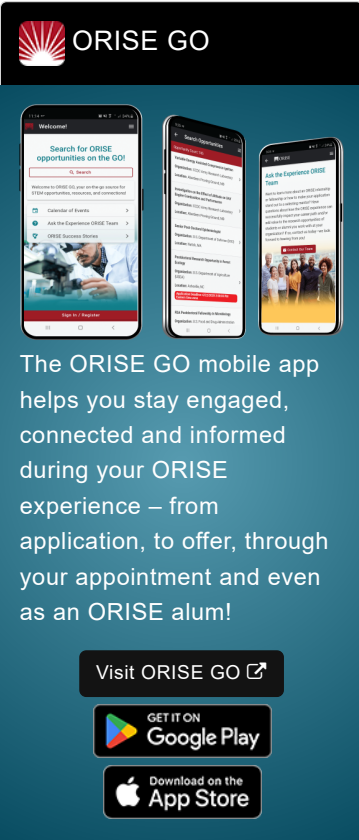
What is the appointment length?

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

What are the provisions?


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 provisions may include the following:


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




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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 Currently pursuing or received an associate's, bachelor's, or master's degree in chemistry, materials science, materials engineering, computer science, mathematics, physics, data science or a closely related field.

The ideal candidate will be strongly motivated to contribute and have strong background in computer programming and exposure to one or more of the following skill sets are desirable: Python, R, materials optimization, design of experiments, materials structure-property relationships, statistics and probability, applied mathematics, data science, or machine learning.

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. We encourage you to contact your recommender(s) as soon as you start your application to ensure they are able to complete the recommendation form and to let them know to expect a message from Zintellect. Recommenders will be asked to rate your scientific capabilities, personal characteristics, and describe how they know you. You can always log back in to your Zintellect account and check the status of your application.

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.

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experience and beyond!

Point of Contact [Debbie](#)

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

Requirements • **Degree:** Associate's Degree, Bachelor's Degree, or Master's Degree
received within the last 60 months or currently pursuing.

• **Discipline(s):**

- **Chemistry and Materials Sciences** ([12](#) 👁)
- **Computer, Information, and Data Sciences** ([17](#) 👁)
- **Engineering** ([27](#) 👁)
- **Life Health and Medical Sciences** ([2](#) 👁)
- **Mathematics and Statistics** ([11](#) 👁)
- **Physics** ([16](#) 👁)

• **Age:** Must be 18 years of age

• **Veteran Status:** Veterans Preference, degree received within the last
120 month(s).