Opportunity Title: USDA-ARS Chemistry Assessments of Soil, Water and Plant Samples in the Lower Mississippi River Basin
Opportunity Reference Code: USDA-ARS-SEA-2024-0368

Organization U.S. Department of Agriculture (USDA)

Reference Code USDA-ARS-SEA-2024-0368

How to Apply ***To submit your application, scroll to the bottom of this opportunity and click APPLY.***

A complete application consists of:

- An application
- Transcript(s) – For this opportunity, an unofficial 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.
- A current resume/CV, including academic history, employment history, relevant experiences, and publication list
- Two educational or professional recommendations

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

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Application Deadline 1/31/2025 3:00:00 PM Eastern Time Zone

Description ***Applications are reviewed on a rolling-basis.**

ARS Office/Lab and Location: A research opportunity is currently available with the U.S. Department of Agriculture (USDA), Agricultural Research Service (ARS), located in Oxford, Mississippi.

The Agricultural Research Service (ARS) is the U.S. Department of Agriculture's chief scientific in-house research agency with a mission to find solutions to agricultural problems that affect Americans every day from field to table. ARS will deliver cutting-edge, scientific tools and innovative solutions for American farmers, producers, industry, and communities to support the nourishment and well-being of all people; sustain our nation's agroecosystems and natural resources; and ensure the economic competitiveness and excellence of our agriculture. The vision of the agency is to provide global leadership in agricultural discoveries through scientific excellence.

The research mission of the USDA-ARS Water Quality and Ecology Research Unit is to study impacts of agricultural practices and conservation measures on water and soil quality, as well as ecosystem services. The research is expected to advance knowledge of water and soil chemistry from samples within the Lower Mississippi River Basin. Research will improve knowledge of soil and water nutrients and pesticides, as well as their transport to improve water quality in the Gulf of Mexico.

Research Project:

1. The participant will collaborate with USDA-ARS research scientists and

support scientists to collect, prepare, and analyze soil and water samples from several field research sites.
2. The participant will be trained to properly dispose of hazardous waste generated from the analyses of nutrients and pesticides in water, soil, and plant samples.
3. The participant will be trained on analytical techniques and equipment for extraction of chemicals from water, soil, and plant samples.

Learning Objectives:

1. The participant will gain valuable experience collaborating with an interdisciplinary research team addressing the sustainability and environmental aspects of water and soil.
2. The participant will develop skills in experimental design, data collection, and data management in chemistry, biogeochemistry, and ecology.

Mentor(s): The mentor for this opportunity is Matt Moore (matt.moore@usda.gov). If you have questions about the nature of the research, please contact the mentor(s).

Anticipated Appointment Start Date: January 21, 2025. Start date is flexible and will depend on a variety of factors.

Appointment Length: The appointment will initially be for one year, but may be renewed upon recommendation of ARS and is contingent on the availability of funds.

Level of Participation: The appointment is part time (12-20 hours).

Participant Stipend: The participant will receive a monthly stipend commensurate with educational level and experience.

Citizenship Requirements: This opportunity is available to U.S. citizens only.

ORISE Information: This program, administered by 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 ARS. Participants do not become employees of USDA, ARS, DOE or the program administrator, and there are no employment-related benefits. Proof of health insurance is required for participation in this program. Health insurance can be obtained through ORISE.

Questions: Please visit our Program Website. After reading, if you have additional questions about the application process, please email ORISE.ARS.Southeast@orau.org and include the reference code for this opportunity.

Qualifications The qualified candidate should be currently pursuing an associate's or

bachelor's degree in the one of the relevant fields

Preferred skills:

- Time management: Punctual and able to devote hours to assigned tasks.
- Dependable: Thorough, trustworthy, and provide a high level of attention to detail. Able to perform independently.
- Willing and capable of being trained in appropriate analytical techniques and instrumentation.

Eligibility Requirements

- **Citizenship:** U.S. Citizen Only
- **Degree:** Currently pursuing an Associate's Degree or Bachelor's Degree.
- **Discipline(s):**
  - **Chemistry and Materials Sciences** (3 👁)
  - **Engineering** (1 👁)
  - **Life Health and Medical Sciences** (2 👁)