

Opportunity Title: USDA-ARS Research Opportunity in Energy and Water

Fluxes in Agroecosystems

Opportunity Reference Code: USDA-ARS-2020-0206

Organization U.S. Department of Agriculture (USDA)

Reference Code USDA-ARS-2020-0206

How to Apply *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!

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

Application Deadline 11/27/2020 3:00:00 PM Eastern Time Zone

Description **Applications may be reviewed on a rolling-basis and this posting could close before the deadline.*

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

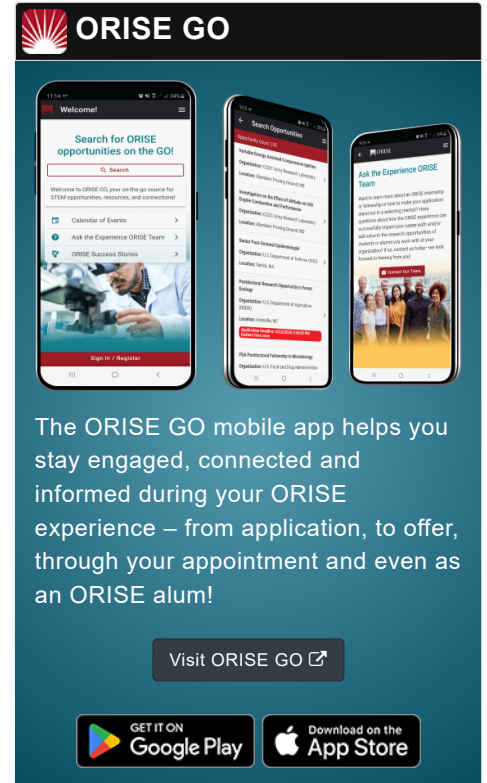
Research Project: This research project is expected to advance knowledge of water, carbon, and energy cycling in agricultural systems within Mississippi. Throughout the course of this appointment, the participant will participate in collecting field data in agricultural experiments and assisting researchers to maintain eddy covariance data collection systems in several locations.

Under the guidance of a mentor, activities will include:

- Collaborating with USDA-ARS research scientists for field data collection, such as biomass, soil samples, leaf area index, meteorological data, plant phenology, and energy balance measurements
- Assisting in managing and maintaining eddy covariance instruments in the field
- Processing and analyzing soil, plant and water samples in the laboratory
- Conducting basic data analysis with measurements collected in the field and results from laboratory analyses

Learning Objectives:

1. The participant will gain valuable experience collaborating with an interdisciplinary research team addressing the sustainability and environmental aspects of agriculture.
2. The participant will develop a variety of skills related to field data collection,



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field experimental management, laboratory analyses, and data management.

Mentor(s): The mentor for this opportunity is Lindsey Yasarer (lindsey.yasarer@usda.gov). If you have questions about the nature of the research please contact the mentor(s).

Anticipated Appointment Start Date: November 2020. 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 full-time.

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, Lawful Permanent Residents (LPR), and foreign nationals. Non-U.S. citizen applicants should refer to the [Guidelines for Non-U.S. Citizens Details page](#) of the program website for information about the valid immigration statuses that are acceptable for program participation.

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 USDA-ARS@ornl.gov and include the reference code for this opportunity.



Qualifications

The qualified candidate should have received a bachelor's degree in one of the relevant fields.

Preferred skills:






- Experience conducting field research; sampling soil, plant biomass, taking plant measurements related to leaf area index, chlorophyll, or phenology
- Experience with data loggers or power management (i.e. solar panels and batteries) for field devices
- Laboratory experience related to soil and water mediums and physical and/or biological measurements
- Use of Excel or other data management software
- Familiarity or willingness to learn a statistical analysis software/language

Eligibility Requirements

- **Degree:** Bachelor's Degree.
- **Discipline(s):**
 - **Chemistry and Materials Sciences** (2 )
 - **Earth and Geosciences** (12 )

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- **Engineering** (3 )
- **Environmental and Marine Sciences** (9 )
- **Life Health and Medical Sciences** (8 )
- **Physics** (2 )
- **Social and Behavioral Sciences** (1 )