

Opportunity Title: Postgraduate Research Opportunity - Physical Science

Opportunity Reference Code: ARS-RPTRU-2015-0139

Organization U.S. Department of Agriculture (USDA)

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How to Apply A complete application package consists of:

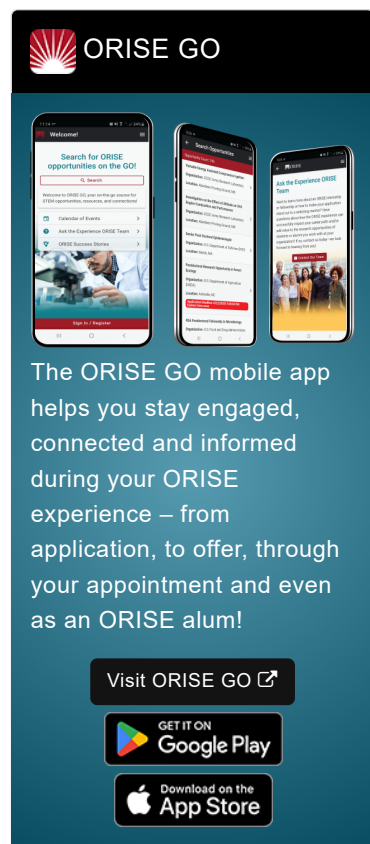
- An application
- Transcript(s) – For this opportunity, an unofficial transcript or copy of the student academic records printed by the applicant or by academic advisors from internal institution systems may be submitted. Selected candidate must provide proof of completion of the degree before the appointment can start. Proof must be sent to ORISE directly from the academic institution including graduation date and degree awarded. All transcripts must be in English or include an official English translation.
- A current resume/CV

If you have questions, send an email to USDA-ARS@orau.org. Please include the reference code for this opportunity in your email.

Description A postgraduate research opportunity is available with the U.S. Department of Agriculture (USDA) Agricultural Research Service (ARS) Renewable Product Technology Research Unit (RPTRU) in Peoria, Illinois.

Participant typically, but not all-inclusively, assists in one or more phases of the research process by carrying out organic chemical processes to synthesize organic chemicals; performs a variety of technical opportunities such as using isolated enzymes to perform catalytic reactions with oils and lipids; isolating, purifying and analyzing the resultant structured lipids; and performing air and water sensitive manipulations in a laboratory environment. The participant will perform routine and recurring techniques and studies using a variety of specialized equipment. S/he will Maintain, calibrate and modify equipment and automated systems used for test and evaluation procedures. The participant will collect, prepare, evaluate, and verify samples and supporting records; maintains records and locates and compiles data and other information from various sources. S/he will keep detailed records of experimental data. The participant will tabulate, statistically analyze and summarize data using personal computers and software packages. S/he will maintain inventory of chemicals, prepare solutions and reagent for use in the laboratory, and safely disposes of waste material (both chemical and biological).

The appointment is full-time for one year and may be renewed based upon recommendation of the ARS and availability of funding. The selected applicant will receive a stipend as support for their living and other expenses during this appointment. Stipend rates are determined by ARS officials, and are based on the applicant's academic and professional background. The participant must show proof of health and medical insurance. Health insurance can be obtained through ORISE. The participant will not enter into an employee/employer relationship with ORISE, ORAU, USDA, ARS, or any other office or agency. Instead, the participant will be affiliated with ORISE for the administration of the



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appointment through the ORISE appointment letter and Terms of Appointment.

While participants will not enter into an employment relationship with ARS, this position requires a pre-employment check and a full background investigation.

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.

This is an equal opportunity program open to all qualified individuals without regard to race, color, age, religion, sex, sexual orientation, gender identity, national origin, mental or physical disability, covered veteran's status or genetic information.

For more information about the ARS Research Participation Program, please visit the [Program Website](#).


Qualifications To be eligible, applicants must have received a bachelor's degree within five years of the desired starting date. Coursework should include:

- major study in an appropriate field of physical science, or
- at least 24 semester hours in any combination of courses such as physical science, engineering or any branch of mathematics, except financial and commercial mathematics, or
- one year of specialized experience equivalent to the GS-4 grade level in the Federal Service.

Preferred skills include:

- Knowledge of the basic principles and techniques of physical or chemical science.
- Ability to perform air and water sensitive manipulations of samples using a nitrogen and/or vacuum double manifold.
- Skill in using and maintaining specialized laboratory equipment including gas and liquid chromatography, UV/V, NMR, and inert atmosphere dry box, etc.
- Skill in analyzing, collecting and summarizing experimental data and generating detailed reports using personal computers and software packages.

Eligibility Requirements

- **Degree:** Bachelor's Degree.
- **Discipline(s):**
 - **Chemistry and Materials Sciences** ([4](#) )