

**Opportunity Title:** Postdoctoral Research Opportunity in Food Chemistry **Opportunity Reference Code:** ARS-DKIUSPBARC-2018-550-0008

**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. Click <u>Here</u> for detailed information about acceptable transcripts.
- A current resume/CV
- Two references While two references are requested, applications will be considered without reference information. It is preferred that a complete application package contains a minimum of one reference.

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

**Description** A postdoctoral research opportunity in food chemistry is available with the U.S. Department of Agriculture (USDA) Agricultural Research Service (ARS) Daniel K. Inouye US Pacific Basin Agricultural Research Center (DKIUSPBARC) in Hilo, Hawaii.

The postdoctoral scientist will participate in a research program to enhance shelf life, flavor, nutrients, and other quality attributes of tropical fruit, vegetable, and nut crops for local and export markets; develop biochemical or physiological analyses to understand the postharvest and processing impacts on tropical crop quality; and identify and quantify the various compositional, flavor, nutritional, and bioactive components of diverse tropical crops. Specific activities may include quantifying distinctive odor profiles of coffee beans with common defects using gas chromatographymass spectroscopy; analyzing organic acids, polyphenolic, and carbohydrate contents in coffee, cacao, taro, or tropical fruits using high pressure liquid chromotagraphy. The participant will be involved in planning, experimental design, method development, validation, implementation, and data analysis of these investigations.

The appointment is full-time for 12 months, and may be renewed based upon recommendation of the ARS and availability of funding. The selected applicant will receive a yearly stipend in the amount as support for their living and other expenses during this appointment. 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-appointment 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.

For more information about the ARS Research Participation Program, please visit the <u>Program Website</u>.

**Qualifications** Candidates should have a PhD in food science, food chemistry, chemistry, plant biochemistry, plant science, or horticulture with a emphasis in plant and food biochemical and compositional analysis.

Preferred Skills:

- Experience in postharvest research with fresh and processed fruits, nuts, and vegetables.
- Advanced knowledge of complex laboratory methods and procedures related to plant and food analysis, postharvest physiology, plant biochemistry, and food science.
- Experience with extraction and analysis for a variety of plant or food materials using liquid chromatography, gas chromatography, and mass spectroscopy.
- Ability to independently operate, calibrate, and maintain specialized instruments (GC-MS, HPLC).
- Experience with method development, data analysis, report writing, and scientific presentations.

## Eligibility • Degree: Doctoral Degree.

- Requirements Discipline(s):

  - Life Health and Medical Sciences (5.)