

Opportunity Title: EPA Lead in Drinking Water Research Fellowship Opportunity Reference Code: EPA-ORD-CESER-WID-2020-01

Organization U.S. Environmental Protection Agency (EPA)

Reference Code EPA-ORD-CESER-WID-2020-01

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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. Click <u>here</u> for detailed information about recommendations.

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

Application Deadline 10/9/2020 3:00:00 PM Eastern Time Zone

Description *Applications may be reviewed on a rolling-basis and this posting could close before the deadline. Click <u>here</u> for information about the selection process.

EPA Office/Lab and Location: A research opportunity is available at the Environmental Protection Agency (EPA), Office of Research and Development (ORD), Center for Environmental Solutions and Emergency Response (CESER), Water Infrastructure Division (WID) located in Cincinnati, Ohio.

<u>Research Project</u>: The goal of this project is to conduct research on lead contamination of drinking water. It includes assessing various sampling protocols and field analyzers to measure the lead concentration, as well as evaluating the impact of water quality parameters on lead release from plumbing materials.

Learning Objectives: The research participant will learn about ongoing EPA research on drinking water lead contamination and will have the opportunity to engage in a variety of rewarding activities which may include:

- Scientific Literature Review of mechanisms related to lead corrosion and how lead is released into the water, the risks of lead in plumbing systems, sampling methodologies and analytical methods for lead quantification, exposure and risk assessment.
- Developing an understanding of bench- and pilot-scale metal corrosion and solubility experiments.
- Gathering scientific knowledge and data related to different water sampling methodologies and field instruments to measure lead contamination.
- · Learning protocols on sampling projects in residences and other

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buildings.

- Learning the different instrumentation involved in the analysis of pipe scale materials.
- Use of Data Analytic tools to better understand the risks of lead in water systems.
- · Collaborative sharing of scientific reports through publication
- Presentation of data and research at regional or national conference
- Engagement in relevant meetings and communications between researchers and stakeholders.

<u>Mentor(s)</u>: The mentor for this opportunity is Simoni Triantafyllidou (triantafyllidou.simoni@epa.gov). If you have questions about the nature of the research please contact the mentor(s).

Anticipated Appointment Start Date: Fall 2020. All start dates are flexible and vary depending on numerous factors. Click <u>here</u> for detailed information about start dates.

<u>Appointment Length</u>: The appointment will initially be for one year and may be renewed three to four additional years upon EPA recommendation and subject to availability of funding.

Level of Participation: The appointment is full-time.

<u>Participant Stipend</u>: The participant will receive a monthly stipend commensurate with educational level and experience. Click <u>here</u> for detailed information about full-time stipends.

<u>EPA Security Clearance</u>: Completion of a successful background investigation by the Office of Personnel Management (OPM) is required for an applicant to be on-boarded at EPA.

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 EPA. Participants do not become employees of EPA, 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 see the <u>FAQ section</u> of our website. After reading, if you have additional questions about the application process please email <u>EPArpp@orau.org</u> and include the reference code for this opportunity.

Qualifications The qualified candidate should have received a doctoral degree in one of the relevant fields, or be currently pursuing the degree and will reach completion by October 2020. Degree must have been received within five years of the appointment start date.

Preferred skills:

- · Coursework related to chemistry and civil/environmental engineering principles
- · Lab coursework or other lab experience
- · Ability to analyze data using Microsoft Excel, SigmaPlot, or other tools
- · Experience writing technical documents or journal articles
- Experience preparing and delivering PowerPoint presentations



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• Experience with chemical equilibrium modeling (e.g., MINEQL, Geochemist's Workbench, PHREEQE)

Eligibility Requirements

- ty Citizenship: U.S. Citizen Only
 - **Degree:** Doctoral Degree received within the last 60 months or anticipated to be received by 10/30/2020 11:59:00 PM.
 - Discipline(s):
 - Chemistry and Materials Sciences (3_)
 - Earth and Geosciences (<u>3</u>)
 - Engineering (<u>4</u> [●])
 - Environmental and Marine Sciences (3. (*)
 - Veteran Status: Veterans Preference, degree received within the last 120 month(s).