

Opportunity Title: EPA Drinking Water Corrosion Control Internship

Opportunity Reference Code: EPA-OW-OGWDW-2021-04

Organization U.S. Environmental Protection Agency (EPA)

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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 [here](#) for detailed information about recommendations.

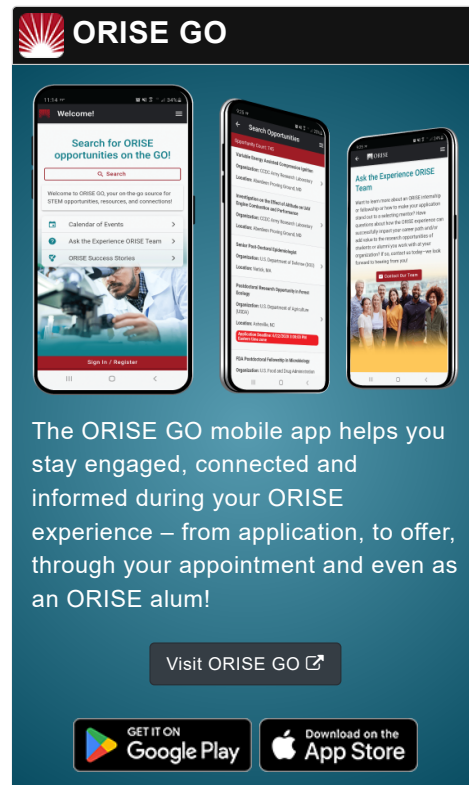
All documents must be in English or include an official English translation.

Application Deadline 10/24/2021 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 [here](#) for information about the selection process.

EPA Office/Lab and Location: An applied research opportunity is available at the U.S. Environmental Protection Agency's (EPA) Office of Water (OW), Office of Ground Water and Drinking Water (OGWDW) Technical Support Center (TSC) located in Cincinnati, Ohio. The overall mission of TSC is to provide technical support for EPA's responsibilities under the federal Safe Drinking Water Act.

The mission of EPA is to protect human health and the environment. EPA works to ensure that: Americans have clean air, land and water; National efforts to reduce environmental risks are based on the best available scientific information; Federal laws protecting human health and the environment are administered and enforced fairly, effectively and as Congress intended; Environmental stewardship is integral to U.S. policies concerning natural resources, human health, economic growth, energy, transportation, agriculture, industry, and international trade, and these factors are similarly considered in establishing environmental policy; All parts of society have access to accurate information sufficient to effectively participate in managing human health and environmental risks; Contaminated lands and toxic sites are cleaned up; and chemicals in the marketplace are reviewed for safety.



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The following Websites provide information on the Area-Wide Optimization Program:

- EPA: <https://www.epa.gov/sdwa/optimization-program-drinking-water-systems>
- ASDWA: <https://www.asdwa.org/awop/>

EPA is currently requesting additional input from stakeholders on the proposed Lead and Copper Rule Revisions (LCRR), with an effective date expected in December 2021. Strengthening drinking water treatment requirements is a key consideration of the proposed LCRR. Therefore, the corrosion control provisions of this regulation may create a significant amount of national interest in the outcome of this project and a potential for enhanced professional visibility for the participant.

The project will also include aspects of ensuring good data integrity during corrosion control treatment implementation. This will encompass the integrity of data from "sampling through reporting" at public water systems.

Research Project: Upcoming Lead & Copper Rule revisions have stimulated interest in corrosion control studies and application of optimized corrosion control treatment (CCT) at public water systems (PWSs). Primacy agencies will be required to review CCT strategies prior to application. Much CCT information exists, but effective treatment is often site-specific and identification of strategic information to optimize operations for effective CCT is challenging.

The Technical Support Center's Area-Wide Optimization Program provides treatment and distribution system optimization training to primacy agency and PWS personnel. This project will include conducting literature reviews, identifying knowledge gaps, assessing sampling/monitoring techniques, developing monitoring strategies, identifying optimization goals, and conducting bench-top, pilot and full-scale studies to develop CCT technical training material, workshops and presentations for primacy agency and PWS personnel.

Learning Objectives: The research participant will have opportunities to collaborate with EPA program office staff, EPA & other researchers, primacy agency and water industry personnel to improve implementation of effective corrosion control treatment. The participant's mentor will provide direction & facilitate direct access to members of the EPA team implementing the Area-Wide Optimization Program (AWOP). EPA team members will provide the participant with collaborative opportunities through AWOP for developing & demonstrating technical information to primacy agencies and utility personnel. This includes assistance in arranging field studies, support for purchasing equipment and supplies. Through this project, the participant will have the opportunity to:

- Review & compile literature

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- Design & conduct studies
- Collect & analyze data
- Present findings & develop communication skills
- Develop technical & facilitation skills
- Contribute to improved drinking water quality & public health protection

Mentor(s): The mentor for questions about this opportunity is Matthew Alexander (alexander.matthew@epa.gov). If you have questions about the nature of the research please contact the mentor(s).

Anticipated Appointment Start Date: December 2021. All start dates are flexible and vary depending on numerous factors. Click [here](#) for detailed information about start dates.

Appointment Length: 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.

Participant Stipend: The participant will receive a monthly stipend commensurate with educational level and experience. Click [here](#) for detailed information about full-time stipends.

EPA Security Clearance: 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.

ORISE offers all ORISE EPA graduate students and Postdocs a free 5 year membership to the National Postdoctoral Association (NPA).

Questions: Please see the [FAQ section](#) of our website. After reading, if you have additional questions about the application process please email ORISE.EPA.OW@ornl.gov and include the reference code for this opportunity.

Qualifications

The qualified candidate should have received a master's or doctoral degree in one of the relevant fields, or be currently pursuing one of the degrees with completion by the end of December 2021. Degree must have been received within the past five

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years.

Preferred skills:

- Good communication skills, both oral and written
- General knowledge of the Safe Drinking Water Act would assist in understanding of the context of the research
- Experience and/or knowledge in drinking water treatment, especially corrosion control
- Skill with computer software, especially the Microsoft Office products Word, Excel and PowerPoint

Eligibility Requirements

- **Citizenship:** U.S. Citizen Only
- **Degree:** Master's Degree or Doctoral Degree received within the last 60 months or anticipated to be received by 12/31/2021 11:59:00 PM.
- **Discipline(s):**
 - **Chemistry and Materials Sciences** (12 👁)
 - **Earth and Geosciences** (21 👁)
 - **Engineering** (27 👁)
 - **Environmental and Marine Sciences** (14 👁)
 - **Mathematics and Statistics** (10 👁)
 - **Physics** (16 👁)
- **Veteran Status:** Veterans Preference, degree received within the last 120 month(s).