

Opportunity Title: EPA Water Quality Modeling and Economics Fellowship

Opportunity Reference Code: EPA-OW-IO-2020-0004

Organization U.S. Environmental Protection Agency (EPA)

Reference Code EPA-OW-IO-2020-0004

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

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

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

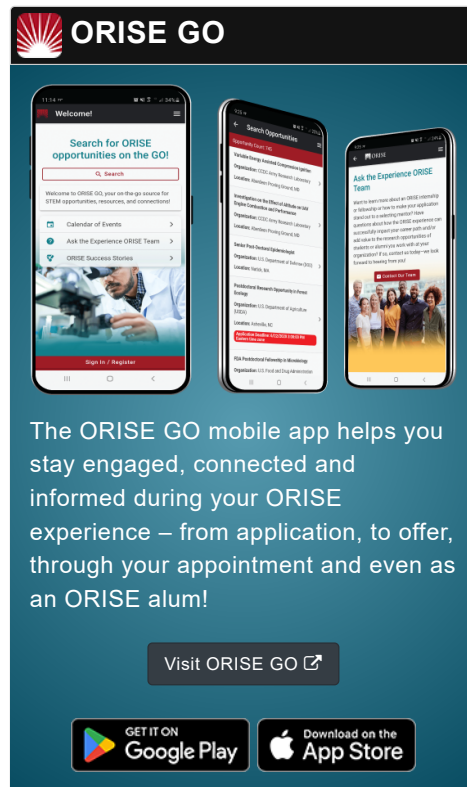
Description ***Applications may be reviewed on a rolling-basis and this posting could close before the deadline.** Click [here](#) for information about the selection process.

EPA Office/Lab and Location: One research opportunity in water policy and regulation is available at the Environmental Protection Agency (EPA), Office of Water (OW), in the Immediate Office (IO) of the Assistant Administrator for Water located in Washington, DC.

Research Project: The goal of this research project is to conduct research on water quality modeling and water quality valuation. This research may support the development of tools such as the Hydrologic and Water Quality System (HAWQS), a nationwide Soil and Water Assessment Tool (SWAT) based water quality modeling system, and the Benefits Spatial Platform for Aggregating Socioeconomics and H₂O Quality (BenSPLASH), a nationwide water quality valuation model.

With guidance from the mentor, the research participant may be involved in in the following training and team activities:

- Collect and analyze water quality data for model calibration and validation using statistical programs, GIS tools, and databases
- Conduct research to explore impacts and outcomes of policy choices and communicate results, including quantifying
- and valuing changes in water quality
- Collaborate on developing methodologies to incorporate and



Opportunity Title: EPA Water Quality Modeling and Economics Fellowship

Opportunity Reference Code: EPA-OW-IO-2020-0004

apply new or existing modeling and valuation approaches and data to HAWQS and BenSPLASH on a national scale

Learning Objectives:

- Learn and develop expertise on HAWQS (<https://epahawqs.tamu.edu/>) and SWAT (<https://swat.tamu.edu/software/>) hydrologic and water quality models through online documentation, training, and weekly HAWQS development meetings and discussions
- Learn and develop expertise on BenSPLASH (Benefits Spatial Platform for Aggregating Socioeconomics and H₂O Quality) through BenSPLASH development meetings and discussions

Mentor(s): The mentor for this opportunity is Joel Corona (corona.joel@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 [here](#) for detailed information about start dates.

Appointment Length: The appointment will initially be for one year and may be renewed up to three 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.

The current annual stipend rate for Master's degree is \$59,534 per year and doctoral degree is \$72,030 per year. 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.

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

Opportunity Title: EPA Water Quality Modeling and Economics Fellowship

Opportunity Reference Code: EPA-OW-IO-2020-0004

Qualifications

The qualified candidate should have received or be currently pursuing a master's or doctoral degree in one of the relevant fields. Degree must have been received within five years of the appointment start date.

Preferred skills:

- Skills or educational background in environmental modeling and/or environmental economics, preferably with interest/background in water-related issues
- Familiarity with one or more popular programming languages such as R, Python, and SQL

Eligibility Requirements

- **Citizenship:** U.S. Citizen Only
- **Degree:** Master's Degree or Doctoral Degree received within the last 60 months or currently pursuing.
- **Discipline(s):**
 - **Chemistry and Materials Sciences** (12 )
 - **Communications and Graphics Design** (1 )
 - **Computer, Information, and Data Sciences** (16 )
 - **Earth and Geosciences** (21 )
 - **Engineering** (27 )
 - **Environmental and Marine Sciences** (14 )
 - **Life Health and Medical Sciences** (45 )
 - **Mathematics and Statistics** (10 )
 - **Other Non-Science & Engineering** (5 )
 - **Social and Behavioral Sciences** (28 )
- **Veteran Status:** Veterans Preference, degree received within the last 120 month(s).