

Opportunity Title: Environmental Chemistry and Toxicology Internship

Opportunity Reference Code: NOAA-NCCOS-2022-06



Organization National Oceanic and Atmospheric Administration (NOAA)

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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. Click [Here](#) for detailed information about acceptable transcripts.
- A current resume/CV
- Two educational or professional recommendations

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

Application Deadline 4/20/2022 3:00:00 PM Eastern Time Zone

Description **Applications will be reviewed on a rolling-basis.*

NOAA Office/Lab and Location: A research opportunity is currently available with the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), National Centers for Coastal Ocean Science (NCCOS), Stressor Detection and Impacts Division (SDI), Ecotoxicology Branch located in Charleston, South Carolina. The appointment may be eligible for remote participation.

The National Oceanic and Atmospheric Administration (NOAA) formed the National Centers for Coastal Ocean Science (NCCOS) in 1999 as the focal point for NOAA's coastal ocean science efforts. NCCOS helps NOAA meet its coastal stewardship and management responsibilities, and provides coastal managers with the scientific information necessary to decide how best to protect environmental resources and public health, preserve valued habitats, and improve the way communities interact with coastal ecosystems.

The Ecotoxicology Branch characterizes the lethal and sublethal effects of chemical contaminants on estuarine fish and invertebrates. This research includes laboratory based toxicity testing as well as mesocosm and field level assessments. The contaminants of interest include chemicals of emerging concern such as PFAS and pharmaceuticals, persistent organic pollutants such as organochlorines and PCBs, and oil and oil spill mitigation chemicals. The ecotoxicology data generated are intended to support coastal resource managers, regulatory agencies, researchers, and the public.

Research Project: This internship with NCCOS will provide an opportunity for the selected participant to develop skills and gain experience in the field of environmental chemistry. The environmental chemists and toxicologists within the Ecotoxicology Branch of NCCOS have served as professional mentors and are interested in helping scientists learn and enhance their technical proficiencies in environmental sample handling and extraction; theoretical and applied LCMS instrumental analysis, data analysis, data management, and the interpretation and communication of project data. Current laboratory efforts that the intern will participate in include research that focuses on the measurement of petroleum/oil products in coastal samples and measurement of aqueous film forming foams that are targeted to replace PFAS products in fire-fighting applications. This research will be in support of the NCCOS priority of Detecting, Monitoring, and Mitigating Impacts of Chemical and Biological Stressors.

Learning Objectives: Under the guidance of a technical mentor, the selected participant will gain experience

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in:

- Environmental sample handling and chemical extraction techniques
- LCMS instrumental analysis
- Data analysis, interpretation, and communication
- Aquatic animal husbandry and ecotoxicity testing

Mentor: The mentor for this opportunity is Ed Wirth (ed.wirth@noaa.gov). If you have questions about the nature of the research please contact the mentor.

Anticipated Appointment Start Date: May 2022. Start date is flexible and will depend on a variety of factors.

Appointment Length: The appointment will initially be for one year, but may be renewed upon recommendation of NOAA and is contingent on the availability of funds.

Level of Participation: The appointment is full-time.

Participant Stipend: The participant will receive a monthly stipend commensurate with educational level and experience.

Citizenship Requirements: This opportunity is available to U.S. citizens only.

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 NOAA. Participants do not become employees of NOAA, 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: If you have questions about the application process please email NOAA@orau.org and include the reference code for this opportunity.

Qualifications The qualified candidate should have received a bachelor's degree in one of the relevant fields., or be currently pursuing the degree with completion by the end of May 2022.

Preferred skills/experience:

- Interest in environmental chemistry; pollution or water quality
- Course work in general chemistry; organic chemistry and instrumental/quantitative analytical chemistry, introduction to statistics, general biology, and physiology
- Experience working in a laboratory setting, using pipettes, and maintaining a clean laboratory workspace
- Ability to communicate well with others in oral and written formats
- Ability to perform research independently and in a group setting

**Eligibility
Requirements**

- **Citizenship:** U.S. Citizen Only
- **Degree:** Bachelor's Degree.
- **Discipline(s):**
 - **Chemistry and Materials Sciences** (4 )
 - **Environmental and Marine Sciences** (4 )
 - **Life Health and Medical Sciences** (3 )