

**Opportunity Title:** Coastal Acidification in the Eastern United States

**Opportunity Reference Code:** EPA-ORD-NHEERL-AED-2019-03



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**Organization** U.S. Environmental Protection Agency (EPA)

**Reference Code** EPA-ORD-NHEERL-AED-2019-03

**How to Apply** A complete application consists of:

- An application
- Transcripts – [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

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

If you have questions, send an email to [EPArpp@ornl.org](mailto:EPArpp@ornl.org). Please include the reference code for this opportunity in your email.

**Application Deadline** 9/30/2019 3:00:00 PM Eastern Time Zone

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

A research opportunity is available at the Environmental Protection Agency (EPA), Office of Research and Development (ORD), National Health and Environmental Effects Research Laboratory (NHEERL), Atlantic Ecology Division (AED) in Narragansett, Rhode Island.

The research participant will have the opportunity to gain experience in research concerning the drivers of and/or ecological responses to changes in coastal carbonate chemistry (i.e., coastal acidification). Specific learning objectives and opportunities to expand upon existing professional experience include:

- collecting seawater samples from shore and from EPA research vessels
- laboratory analysis of carbonate chemistry in these samples (via titration, infrared gas detection, and spectrophotometry)
- aquatic sensor deployment (e.g., salinity, temperature, dissolved oxygen, total pH)
- experiments involving aquarium populations of crustaceans or phytoplankton in our seawater laboratory
- manipulation and characterization of seawater carbonate, oxygen, and/or nutrient conditions in these experiments
- data synthesis and visualization (e.g., plots)

The balance among these activities will depend in part on the participant's specific interests and career goals. The research participant will have the opportunity to conduct their activities alongside other scientists with a shared interest in coastal acidification, but with different types of expertise, including quantitative ecology, nutrient cycling, estuarine ecology, mesocosm experimentation, and ecosystem dynamics. The research participant will be provided an opportunity to learn about emerging methods and instrumentation used in integrative studies of coastal acidification.

The mentor for this opportunity is Jason Grear ([rgear.jason@epa.gov](mailto:rgear.jason@epa.gov)).

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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. The initial appointment is for four months, but may be renewed upon recommendation of EPA and is contingent on the availability of funds. The participant will receive a monthly stipend commensurate with educational level and experience. Proof of health insurance is required for participation in this program. The appointment is full-time at EPA in the Narragansett, Rhode Island, area. Participants do not become employees of EPA, DOE or the program administrator, and there are no employment-related benefits.






## Qualifications

The qualified candidate should have received a master's degree in one of the relevant fields, or be currently pursuing the degree and will reach completion by the start date of the appointment. Degree must have been received within five years of the appointment start date. Candidates who have completed a master's degree but are currently enrolled in a doctoral program will be considered for part time appointment.

Preferred skills:

- Previous training or equivalent professional experience using laboratory and or field instruments for characterizing the seawater carbonate system
- Experience analyzing and visualizing these data using methods and software typically used by the marine research community
- Strong interest in gaining experience with the application of these skills in a collaborative research setting

## Eligibility Requirements

- **Degree:** Master's Degree or Doctoral Degree.
- **Discipline(s):**
  - **Chemistry and Materials Sciences** (3 )
  - **Earth and Geosciences** (1 )
  - **Environmental and Marine Sciences** (6 )
  - **Life Health and Medical Sciences** (7 )
  - **Mathematics and Statistics** (2 )

## Affirmation

I have received a master's degree within the past 60 months, OR am currently pursuing a master's degree and will reach completion by the start date of the appointment, OR am currently pursuing a doctoral degree.