Opportunity Title: EPA Pyrolysis and Advanced Recycling Research Internship
Opportunity Reference Code: EPA-OAR-2026-0012

Organization U.S. Environmental Protection Agency (EPA)

Reference Code EPA-OAR-2026-0012

How to Apply ***To submit your application, scroll to the bottom of this opportunity and click 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. Your application will be considered incomplete, and will not be reviewed until one recommendation is submitted.

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

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Application Deadline 8/28/2026 3:00:00 PM Eastern Time Zone

Description ***Applications may be reviewed on a rolling-basis and this posting could close before the deadline.**

EPA Office/Lab and Location: A research opportunity is currently available at the Environmental Protection Agency (EPA), Office of Air and Radiation (OAR), Office of Clean Air Programs (OCAP), Industrial Processing and Power Division (IPPD), located in Research Triangle Park, North Carolina.

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.

OCAP develops nationwide regulatory standards which cover a wide range of air pollution control strategies for industrial processing sectors, including waste management and chemical and fuel production. The Office leads

review and revision of New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Pollutants (NESHAP) as authorized by Clean Air Act sections 111 and 112, respectively. The rulemaking process includes consideration of available control technologies, current levels of hazardous air pollutant and criteria air pollutant emissions, public health protection, economic impacts, and legal requirements.

Research Project: The selected participant will complete their research internship with the Refining and Chemicals Production Branch (RCPB) within OCAP/IPPD.

The EPA has been approached by various companies regarding advanced recycling technologies such as gasification, pyrolysis, and other technologies for recycling plastics and other materials. Environmental groups have expressed concerns about potential emissions of air toxics and the associated public health risks from these types of processes. Research into these established and emerging technologies is needed to help the EPA better understand these processes and to inform potential development of appropriate policies and regulatory approaches. This research may include compiling summaries of available literature and other studies, visiting facilities, meeting with stakeholders and regulators, evaluating studies, developing inventories of sources, analyzing air quality data, and synthesizing evidence.

Specific research topics may include:

- Current and emerging advanced recycling processes.
- The resulting products of gasification and pyrolysis.
- Potential emissions of air pollutants from these processes (source, type, amount) and public health implications.
- Cost and feasibility of emission control devices and practices.
- Whether these types of sources may already be subject to existing air regulations and how those regulations might present barriers to advanced recycling technology development.
- Lifecycle analysis of plastic wastes and comparison of landfill or incineration disposal versus advanced recycling.
- Current scientific gaps in the understanding of these technologies.
- Prevalence of each type of technology.
- Future market outlook of the sector.

Learning Objectives: Under the guidance of the mentor, you will learn about Clean Air Act regulations, conduct research, and synthesize technical and policy information for presentation to diverse audiences. You will also gain an understanding of how scientific evidence is used to inform EPA decisions and rulemaking. You will observe, collaborate with, and gain knowledge from staff in the Refining and Chemicals Production Branch, IPPD, and other EPA offices. You will have opportunities to conduct quantitative or qualitative analyses that may inform EPA policy on advanced recycling and potentially result in conference presentations or peer-

reviewed publications.

Mentor(s): The mentor for this opportunity is Johanna Klein (klein.johanna@epa.gov). If you have questions about the nature of the research please contact the mentor.

Anticipated Appointment Start Date: 2026. All start dates are flexible and vary depending on numerous factors.

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. **The anticipated stipend range is $52,693 - $77,983 annually.**

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

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).

The successful applicant(s) will be required to comply with Environmental, Safety and Health (ES&H) requirements of the hosting facility, including but not limited to, COVID-19 requirements (e.g. facial covering, physical distancing, testing, vaccination).

Questions: Please see the FAQ section of our website. If you have additional questions about the application process please email ORISE.EPA.Other@orau.org and include the reference code for this opportunity.

Qualifications The qualified candidate should be currently pursuing or have received a bachelor's, master's, or doctoral degree in one of the relevant fields.

Preferred skills:

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- Relevant coursework, experience, and a strong interest in atmospheric science, air quality research, chemistry, chemical engineering, environmental engineering, industrial engineering, or public policy.
- Able to evaluate and synthesize information from published literature, regulations, stakeholder input, and other sources.
- Experience with quantitative data analysis.
- Proficient in writing and communicating scientific information for technical and non-technical audiences.
- Skilled at coordinating with multiple stakeholders and understanding different perspectives.
- Enjoys researching independently.
- Interested in learning from and collaborating with multidisciplinary teams.

Stipend $52,693.00 – $77,983.00 Yearly

Point of Contact Ashley

Eligibility Requirements

- **Citizenship:** U.S. Citizen Only
- **Degree:** Bachelor's Degree, Master's Degree, or Doctoral Degree.
- **Discipline(s):**
  - **Chemistry and Materials Sciences** (12)
  - **Earth and Geosciences** (3)
  - **Engineering** (11)
  - **Environmental and Marine Sciences** (2)
  - **Life Health and Medical Sciences** (1)
  - **Mathematics and Statistics** (1)
  - **Physics** (1)