Opportunity Title: EPA Fellowship - Techno-Economic & Fuel Lifecycle Analyst
Opportunity Reference Code: EPA-OAR-OTAQ-2024-02

Organization U.S. Environmental Protection Agency (EPA)

Reference Code EPA-OAR-OTAQ-2024-02

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 10/25/2024 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: Two research opportunities are available in the U.S. Environmental Protection Agency's (EPA) Office of Air and Radiation (OAR), Office of Transportation and Air Quality (OTAQ), located in Ann Arbor, Michigan or Washington, D.C.

Research Project: The research participant will join a team developing and operating modeling tools to assess opportunities to reduce air pollution from transportation. The participant will have the opportunity to:

- Analyze the costs and lifecycle greenhouse gas emissions associated with renewable fuel production technologies and GHG mitigation strategies (for example, the project will include TEA of GHG mitigation strategies deployed by renewable fuel producers, such as carbon capture and sequestration (CCS) at ethanol production facilities, use of low-carbon hydrogen and renewable natural gas (RNG) in renewable diesel and jet fuel production, and use of renewable electricity at biofuel facilities).
- Consider incentives for renewable fuels.
- Review and evaluate definitions for products, coproducts, byproducts and wastes and how these terms relate to LCA allocation methods.
- The participant may identify and pursue related areas of interest.

Learning Objectives: Under the guidance of a mentor, the participant will:

- Gain experience in lifecycle analysis, technoeconomic analysis and policy analysis, as well as literature review, the development of models, data collection and data visualization.
- Study the emissions and costs associated with renewable fuel production technologies, CCS projects, GHG mitigation strategies, markets for energy attribute certifications for

commodities such as RNG and renewable electricity.
- Expand their knowledge of several interdisciplinary cross-cutting scientific issues including transportation technology, energy use and GHG emissions.
- Have opportunities to present their findings to Agency personnel and non-Agency partners through briefings, government publications, and, potentially, peer-reviewed journal papers.

Mentors: The mentor for this opportunity is Aaron Levy (levy.aaron@epa.gov). If you have questions about the nature of the research, please contact the mentor.

Anticipated Appointment Start Date: October 2024. All start dates are flexible and vary depending on numerous factors. Click **here** for detailed information about start dates.

Appointment Length: The appointment may 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.

The successful applicant(s) will be required to comply with Environmental, Safety and Health (ES&H) requirements of the hosting facility.

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

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.

Eligibility Requirements

- **Degree:** Master's Degree or Doctoral Degree received within the last 60 months or currently pursuing.
- **Discipline(s):**
  - **Chemistry and Materials Sciences** (3 👁)

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- **Computer, Information, and Data Sciences** (3 👁)
- **Engineering** (27 👁)
- **Environmental and Marine Sciences** (3 👁)
- **Mathematics and Statistics** (11 👁)
- **Social and Behavioral Sciences** (3 👁)