Opportunity Title: Human Exposure Model Research Associate at EPA
Opportunity Reference Code: EPA-SSP-0010-10

Organization	U.S. Environmental Protection Agency (EPA)
Reference Code	EPA-SSP-0010-10
How to Apply	**How to apply:**

Submit application and supporting documents by clicking on Apply Now button.

For more information, contact EPAjobs@orau.org. *Do not contact EPA directly.*

Description
The EPA Environmental Research and Business Support Program has an immediate opening for a Human Exposure Model Research Associate with the Office of Research and Development at the EPA's Research Triangle facility in Raleigh-Durham, NC.
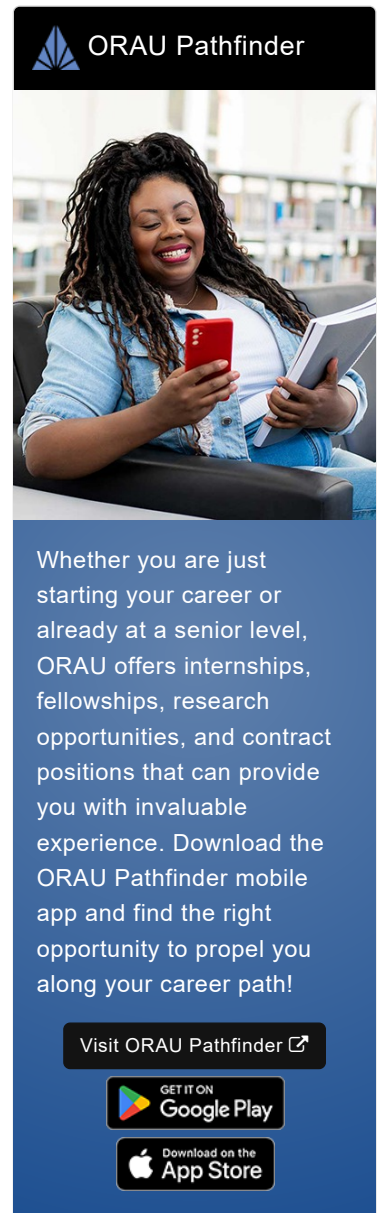
The Office of Research and Development at the EPA supports high-quality research to improve the scientific basis for decisions on national environmental issues and help EPA achieve its environmental goals. Research is conducted in a broad range of environmental areas by scientists in EPA laboratories and at universities across the country.

EPA's National Exposure Research Laboratory (NERL) protects human health and the environment by developing and applying innovations in exposure science. NERL provides scientific leadership, understanding, and tools necessary to quantify exposure for humans and ecosystems. NERL's Computational Exposure Division (CED) develops & evaluates data, decision support tools & models to be applied to media-specific or receptor-specific problem areas. Scientists use modeling-based approaches to characterize exposures, evaluate fate & transport, & support environmental diagnostics/forensics with input from multiple data sources.
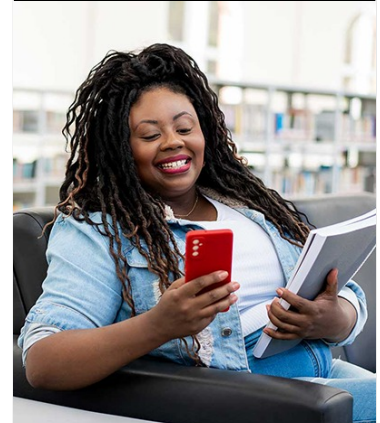
The selected candidate will support the Life Cycle-Human Exposure Model (LC-HEM) project (http://pubs.acs.org/doi/pdf/10.1021/acs.est.6b02277). This project is developing the Human Exposure Model (HEM) to assess exposures to chemicals from the use of consumer products. He/she shall assist with developing datasets and decision rules for various modules of HEM, and assist in the testing or evaluation of the HEM model and data bases of product composition information. The selected candidate's work may include gathering additional datasets from online sources, formatting datasets into standard templates and uploading into databases, applying out-of-the-box thinking to determine rules to parametrize models of human behavior and product usage, and testing and evaluating ease-of-use of software.

Duties include but are not limited to:

- Collecting, curating, and organizing data (e.g. in databases) on exposure related factors and habits and practices related to use of consumer products;
- Manipulating information on chemicals stored in spreadsheets. Collecting, curating, and organizing data (e.g. in databases) on

composition of consumer products (chemical names and related information; and

- Assisting in the development of scientific modules that will be part of the HEM (e.g. modeling occupational exposure to chemicals, end-of-product-life exposures, etc.). This could also include developing user tools, such as a graphical user interface (GUI) for the HEM interface.

Communications-related responsibilities will include:

- Participating as a member of a multi-disciplinary research team;
- Interacting with other members of the development team as well as EPA scientists; and
- Documenting database development efforts.

The selected candidate may be asked to present work performed as a poster at a scientific conference.

Location: This job will be located at EPA's Research Triangle facility in Raleigh-Durham, NC.

Salary: The selected applicant will become a full time temporary employee of ORAU and will receive an hourly wage of $20.96 for hours worked.

Hours: Full Time.

Travel: Occasional overnight travel may be required.

Working Conditions: This position will involve work in an administrative setting and is not expected to involve exposure to hazardous elements.

The selected candidate shall be supervised by a mentor who will provide day-to-day direction, as well as coach, advise and counsel the selected candidate, and review his/her work.

Expected Start Date: The position start date is May 2017. The selected applicant will be a temporary employee of ORAU working as a contractor to EPA. The initial contract period is through May 14, 2018. EPA may elect to renew the contract for an additional two (2) 12-month optional periods.

For more information, contact EPAjobs@orau.org. Do not contact EPA directly.

Qualifications   **Eligible applicants must:**

- Be at least 18 years of age and
- Have earned at least a Bachelor's degree in physics, chemistry, biology, engineering, applied sciences, environmental health, public health, exposure science, computer sciences, information technology, or other closely related field from an accredited university or college within the last 24 months and
- Be a citizen of the United States of America or a Legal Permanent Resident.

EPA ORD employees, their spouses, and children are not eligible to

participate in this program.

Required Knowledge, Skills, Work Experience, and Education

Successful candidates shall have:

- General understanding of quantitative techniques, basic statistics, and use of spreadsheets,
- Strong reading comprehension skills and experience logically interpreting pieces of information from a variety of data source types,
- Experience integrating partial pieces of information and applying out-of-the box thinking to determine how to use limited available data to fill data gaps, and
- Experience with any computer programming language.

Desirable Knowledge, Skills, Work Experience, and Education

It is desirable for the candidates to have:

- Experience with databases,
- Experience applying knowledge of exposure assessment and/or computing and mathematical modeling to the assessment of chemical exposures, and
- Knowledge of organic and inorganic nomenclature.

Eligibility Requirements

- **Citizenship:** LPR or U.S. Citizen
- **Degree:** Bachelor's Degree, Master's Degree, or Doctoral Degree received within the last 24 month(s).
- **Discipline(s):**
  - **Chemistry and Materials Sciences** (12 👁)
  - **Computer, Information, and Data Sciences** (16 👁)
  - **Engineering** (27 👁)
  - **Environmental and Marine Sciences** (1 👁)
  - **Life Health and Medical Sciences** (45 👁)
  - **Physics** (16 👁)

Affirmation

- I certify that I am at least 18 years of age; have earned at least a Bachelor's degree in physics, chemistry, biology, engineering, applied sciences, environmental health, public health, exposure science, computer sciences, information technology, or other closely related field from an accredited university or college within the last 24 months; a citizen or a Legal Permanent Resident of the United States of America; and not a current employee of EPA ORD or the spouse or child of an EPA ORD employee.

ORAU is an Equal Opportunity Employer **(EOE AA M/F/Vet/Disability)**; visit the ORAU website for required employment notices.