

Opportunity Title: Surface-atmosphere fluxes of carbon and other trace gases

Opportunity Reference Code: 0138-NPP-MAR25-ARC-EarthSci

Organization National Aeronautics and Space Administration (NASA)

Reference Code 0138-NPP-MAR25-ARC-EarthSci

How to Apply All applications must be submitted in [Zintellect](#)

Please visit the NASA Postdoctoral Program website for application instructions and requirements: [How to Apply | NASA Postdoctoral Program \(orau.org\)](#)

A complete application to the NASA Postdoctoral Program includes:

1. Research proposal
2. Three letters of recommendation
3. Official doctoral transcript documents

Application Deadline 3/1/2025 6:00:59 PM Eastern Time Zone

Description About the [NASA Postdoctoral Program](#)

The [NASA Postdoctoral Program \(NPP\)](#) offers unique research opportunities to highly-talented U.S. and non-U.S. scientists to engage in ongoing NASA research projects at a NASA Center, NASA Headquarters, or at a NASA-affiliated research institute. These one- to three-year fellowships are competitive and are designed to advance NASA's missions in space science, Earth science, aeronautics, space operations, exploration systems, and astrobiology.

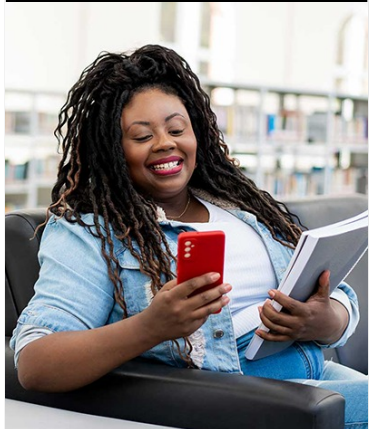
Description:

NASA Ames Research Center is looking for a postdoctoral candidate with research interests in tropospheric composition and carbon cycle science, with hands-on experience in instrument development, deployment, and calibration. The focus area of this research project includes using aircraft measurements to quantify the surface-atmosphere fluxes of CO₂ and CH₄ in urban and natural environments. Fluxes of water vapor, ozone, and other trace gases relevant for climate and air quality could also be investigated. The successful candidate would integrate in situ data, remote sensing observations, and advanced analytical tools to further our understanding of Earth System processes relevant to trace gas emissions and sinks. Several instruments are available for operation in the laboratory or field deployment, including CO₂/CH₄ (with isotopic species), OCS and CO instrumentation, and a 3D winds system.

Previous laboratory and/or field experience is required. Experience with a variety of data analysis software packages is advantageous. Development of secondary projects which foster collaborations with other researchers both at NASA Ames and externally is also encouraged.

Position Requirements:

PhD in the physical or biological sciences, preferably Chemistry, Physics,



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Atmospheric, or Ecosystem Sciences, or a relevant Engineering discipline.

Experience working with analytical instrumentation; experience with laser-based spectroscopic techniques is preferred.

Ability to work as a member of a team on various projects.

Strong written and verbal communication skills.

Deployment travel may be necessary

Field of Science: Earth Science

Advisors:

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Applications with citizens from Designated Countries will not be accepted at this time, unless they are Legal Permanent Residents of the United States. A complete list of Designated Countries can be found at: <https://www.nasa.gov/oiir/export-control>.

Eligibility is currently open to:

- U.S. Citizens;
- U.S. Lawful Permanent Residents (LPR);
- Foreign Nationals eligible for an Exchange Visitor J-1 visa status; and,
- Applicants for LPR, asylees, or refugees in the U.S. at the time of application with 1) a valid EAD card and 2) I-485 or I-589 forms in pending status

Questions about this opportunity? Please email npp@orau.org

Eligibility Requirements

- **Degree:** Doctoral Degree.