Opportunity Title: Strengthening NASA Air Quality Observations with Low-Cost Sensor Data
Opportunity Reference Code: 0139-NPP-MAR25-ARC-EarthSci

Organization National Aeronautics and Space Administration (NASA)

Reference Code 0139-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 assistant with research interests in low-cost sensors and/or data fusion to join our Trace Gas measurement group. This will involve working with both hardware and data to improve our sensors' relevance to other NASA-sponsored air quality datasets. The successful candidate will help build, calibrate, and deploy low-cost air quality sensors and analyze data from our INSTEP network in conjunction with others. Sensor data fusion along with remote sensing instruments (Pandora, AERONET) and satellites (TROPOMI, TEMPO) will serve to validate satellite measurements of air quality events. This position will also afford opportunities to contribute to a NASA-sponsored sensor and remote sensing database, including work on ArcGIS mapping, geospatial interpolation (such as kriging), and other data visualization tools.

The ARC Trace Gas Group is enriched by the many experiences and perspectives that each individual brings to our group. Development of secondary projects which foster collaborations with other researchers both at NASA Ames and externally is also encouraged.

Field of Science: Earth Science

Advisors:

Kristen Okorn

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

Qualifications

PhD in engineering or the physical or data sciences, preferably Chemistry, Physics, or Atmospheric Sciences.

Previous laboratory and/or field experience.

Experience working with analytical instrumentation for atmospheric measurements.

Experience combining multiple data sources into scientific analyses.

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

Good written and verbal communication skills.

Occasional deployment travel may be necessary.

Additional Desired Qualifications:

Experience with a variety of data analysis software packages.

Demonstrated success in collaborative environments.

Experience with one or several of the following: machine learning, data assimilation, ArcGIS, NASA satellite datasets.

Point of Contact Mikeala

Eligibility Requirements

- **Citizenship:** LPR or U.S. Citizen
- **Degree:** Doctoral Degree.