zintellect
climb higher

Opportunity Title: Mid-infrared Laser and Lidar Development
Opportunity Reference Code: 0015-NPP-MAR26-LRC-TechDev

Organization National Aeronautics and Space Administration (NASA)

Reference Code 0015-NPP-MAR26-LRC-TechDev

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 3/1/2026 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 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:

A research group in the laser remote sensing branch, engineering directorate at NASA Langley research center focus on laser and lidar developments that is relevant to NASA's earth science priorities. The research group develops solid state laser technology that is more efficient, compact and powerful to provide capabilities meeting the laser transmitter requirements called out in the missions by the recent Earth Science Decadal Survey. In particular, the group develops the state-of-the -art mid-IR lasers at 2-micron wavelength for global wind and CO2 measurements. In addition, the group also works on precisely laser wavelength tuning, wavelength locking, wavelength switching and laser wavelength conversion by non-linear optics techniques various remote sensing instrument needs.

The research group also develops lidar system for atmospheric wind and trace gas measurements in the ground and airborne platforms, that include design of telescope and aft optics, precisely beam controlling, detector characterization, signal processing algorism development. The field deployment of these lidars supports Earth science missions.

Location:
Langley Research Center
Hampton, Virginia

Opportunity Title: Mid-infrared Laser and Lidar Development
Opportunity Reference Code: 0015-NPP-MAR26-LRC-TechDev

Field of Science: Technology Development

Advisors:

Upendra Singh
Upendra.N.Singh@nasa.gov
757-864-1570

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

Point of Contact Mikeala

Eligibility Requirements

- **Degree:** Doctoral Degree.