

Opportunity Title: Technology Development for Integrated Photonics

Opportunity Reference Code: 0302-NPP-MAR25-GSFC-TechDev

Organization National Aeronautics and Space Administration (NASA)

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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:

Participant will develop integrated photonics technology for space-based applications. Integrated photonics is used for light creation, manipulation, processing and detection in a chip-based technology. It is compact, light-weight and efficient and has the potential for high reliability and complex functionality. Participation can include ideation, design, layout, modeling, analysis and testing of photonic chips and integrating chips into larger instruments. Applications include remote sensors like microwave photonics radiometers, compact lidar systems. We are interested in miniaturization of existing capabilities as well enabling new capabilities. The participant will work in collaboration with science and engineering team members to understand the context for the NASA application and the instrument measurement goals and how the novel technologies enable or improve existing capabilities.

Field of Science: Technology Development

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

Qualifications Doctoral degree in field relevant to integrated photonics

Eligibility Requirements • **Degree:** Doctoral Degree.