zintellect
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**Opportunity Title:** OPTICAL DESIGN AND MODELING FOR THE HABITABLE WORLDS OBSERVATORY
**Opportunity Reference Code:** 0277-NPP-MAR26-GSFC-Astrophys

**Organization** National Aeronautics and Space Administration (NASA)

**Reference Code** 0277-NPP-MAR26-GSFC-Astrophys

**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:**

Research and development opportunities exist at NASA in the optical design and modeling of advanced space flight instrumentation for the Habitable Worlds Observatory. Mission support involves performing optical design trades, detailed optical system and component design, tolerancing, performance analyses and modeling, and specifying optical components for fabrication. Current interests include the design and modeling of centered and unobscured all-reflective and catadioptric optical systems, freeform optics, lens system design, coronagraph and star-shade design and modeling, spectroscopic instrumentation design and analysis, wavefront sensing and control of active optical systems, and polarization ray tracing including birefringent materials. Additional research topics consist of gradient index optics, holograms and holographic optical elements design, wave propagation, optomechanical design, stray light design and analysis, edge sensors, laser metrology trusses and in-process optical testing. Extensive computational resources and metrology test facilities are available for post-doc work here at NASA's Goddard Space Flight Center.

**Field of Science:** Astrophysics

**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

**Point of Contact** Mikeala

**Eligibility Requirements**

- **Degree:** Doctoral Degree.