Opportunity Title: Aviation Emissions & Aerosol Science
Opportunity Reference Code: 0035-NPP-JUL24-GRC-Interdisc

Organization National Aeronautics and Space Administration (NASA)

Reference Code 0035-NPP-JUL24-GRC-Interdisc

How to Apply All applications must be submitted in Zintellect

Application Deadline 7/1/2024 6:00:59 PM Eastern Time Zone

Description **Description:**

The primary focus of this research is to advance combustor technologies and increase our understanding of their overall impact on climate and human health. This includes the use of sustainable aviation fuels and understanding their role in the decarbonization of aviation fuels.Aviation particulate emissions impact human health and play a key role in contrail formation. Understanding the overall impact on emerging combustor technologies is of critical importance. Our team is seeking someone with background in Aerosol Science with an interest in Aviation and the Atmospheric Impact of Aviation.

This candidate will participate in combustion flame tube experiments through extractive aerosol measurements and gain hands on experience with aviation aerosols. The candidate will collect, analyze, and research the results from the combustion tests and collaborate with NASA Researchers and external partners. The candidate will be responsible for optimization of extractive sampling techniques in various high- and low-pressure environments. There will be the opportunity to participate in NASA GRC collaborations with industry and academia, as well as our On-Wing Emissions team at NASA LaRC. Combustor and engine emissions measurements will be made on the ground, in high-pressure combustor test cells, in simulated altitude environments, and possibly in flight.

The work includes partnerships with industry and other government agencies with combustor, engine, aircraft ground and flight tests and supports the U.S. Climate Action Plan and Sustainable Flight National Partnership.

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Field of Science: • Interdisciplinary/Other

Advisors:

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Eligibility Requirements

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