

Opportunity Title: Power Systems Development
Opportunity Reference Code: 0006-NPP-MAR24-GRC-AeroEng

Organization National Aeronautics and Space Administration (NASA)

Reference Code 0006-NPP-MAR24-GRC-AeroEng

Application Deadline 3/1/2024 6:00:59 PM Eastern Time Zone

Description Opportunity Restricted to US Citizens Only

Research focuses on the improvement of aerospace power management and distribution systems. This work concentrates on developments in the areas of power distribution architecture, power distribution components and intelligent power control. The area of power distribution architecture includes work in power quality, power system fault control, and power system stability for both space and hybrid electric aero-propulsion applications. In the area of power components, research focuses on the development of high power, high voltage power converters as well as high voltage switchgear for applications in both hybrid electric propulsion as well as power converter technology applied to ion propulsion for space. In addition, there is a thrust in the application of digital signal processing technology to improved converter and switch gear performance as well as enabling the development of modular switchgear and converter technology to accommodate a range of input and output voltages at different power levels. The intelligent power management area comprises; dynamic power system simulation, incipient and multiple failure detection and identification technologies, automated energy management, load scheduling and management, power network security and contingency management and reconfiguration.

Location:

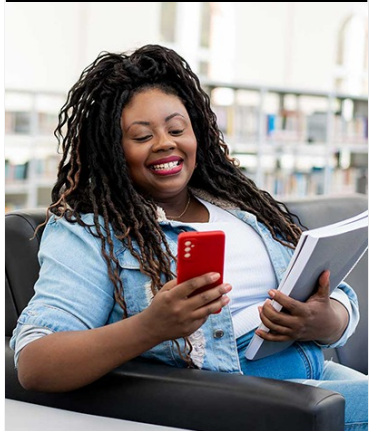
Glenn Research Center
Cleveland, Ohio

Field of Science: Aeronautics, Aeronautical or Other Engineering

Advisors:

Robert J. Scheidegger
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216-433-8342

- Eligibility Requirements**
- **Citizenship:** U.S. Citizen Only
 - **Degree:** Doctoral Degree.



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