Opportunity Title: Development of Multi-physics and Multiscale Methods
Opportunity Reference Code: 0028-NPP-NOV23-GRC-TechDev

Organization	National Aeronautics and Space Administration (NASA)
Reference Code	0028-NPP-NOV23-GRC-TechDev
Application Deadline	11/1/2023 6:00:59 PM Eastern Time Zone

Description The focus of this two year opportunity is to develop a generic multi-physics software package and integrate it into the existing NASA Multiscale Analysis Tool (NASMAT). This development will include (1) Theoretical development of the multi-physics micromechanics theories. (2) Programming the theoretical development. (3) Development of a multi-physics application program interface (API) for NASMAT (4) Integration of the multi-physics package into NASMAT (5) Verification of the new software. (6) Validation of the new software.

Experience with Fortran and micromechanics theoretical developments is required. Knowledge of other programming and scripting languages is highly desirable. Familiarity with finite element software and existing multiphysics commercial software is also beneficial.

Location:
Glenn Research Center
Cleveland, Ohio

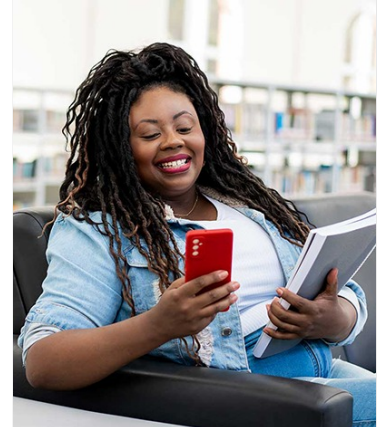**Field of Science:** Technology Development

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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

Eligibility Requirements
- **Degree:** Doctoral Degree.