

**Opportunity Title:** Polymer matrix composite manufacture and mechanical test

**Opportunity Reference Code:** 0032-NPP-NOV23-GRC-TechDev

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

**Reference Code** 0032-NPP-NOV23-GRC-TechDev

**Application Deadline** 11/1/2023 6:00:59 PM Eastern Time Zone

**Description** Thermoplastic composites have gained considerable attention for aeronautic and aerospace structural applications. Of specific interest to this project is the manufacture and testing of TuFF (Tailored Universal Feedstock for Forming) composites, which are novel materials composed of highly aligned, short carbon fibers throughout a thermoplastic matrix. NASA GRC is in need of a post-doctoral fellow to assist primarily with conducting research into the mechanical properties of TuFF composite coupons and analysis of the data generated. The applicant will have experience with polymer matrix composite materials, failure modes, coupon preparation and conditioning, ASTM standard test methods and equipment maintenance/trouble shooting. Research will also involve measuring temperature changes during mechanical and impact tests using a state-of-art high speed infra-red camera. It is expected that the candidate will publish research results in conference proceedings and refereed journals. Experience in composite manufacturing would be beneficial.

**Location:**

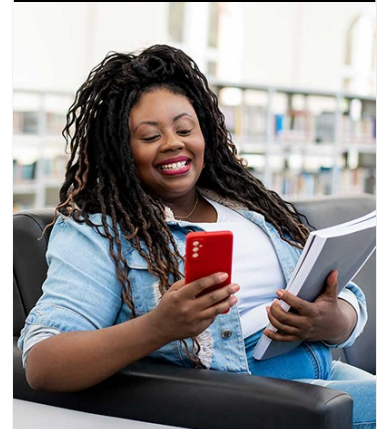
Glenn Research Center  
Cleveland, Ohio

**Field of Science:** Technology Development

**Advisors:**

Mark David Kankam  
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- Eligibility Requirements**
- **Citizenship:** LPR or U.S. Citizen
  - **Degree:** Doctoral Degree.



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