

Opportunity Title: Space Science: The Environments of Early Complex Life

Opportunity Reference Code: 0053-NPP-NOV23-ARC-Astrobio

Organization National Aeronautics and Space Administration (NASA)

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

Description Description: The evolution of multicellular life occurred during a period of Earth history characterized by profound global change in the operation of Earth's biosphere. Geochemical records preserved in sedimentary rocks provide critical indicators of unprecedented shifts in the redox state of the ocean and atmosphere and the climate system at this time. To fully understand these changes and their potential influence on biology and global biogeochemical cycles requires detailed reconstructions of paleoenvironmental conditions from the rocks that are examined. The potential influence of post-depositional alteration must also be considered during interpretation of geochemical signals. To this end, this project involves developing mineralogical and geochemical tools for identifying the depositional conditions and environments of Precambrian sedimentary rocks and distinguishing primary versus secondary geochemical signals.

Location:

Ames Research Center
Moffet Field, California

Field of Science: Astrobiology

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/oiiir/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

Eligibility Requirements • **Degree:** Doctoral Degree.



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