

**Opportunity Title:** Geology and Tectonics of Mars

**Opportunity Reference Code:** 0011-NPP-NOV23-JPL-PlanetSci

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

**Reference Code** 0011-NPP-NOV23-JPL-PlanetSci

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

**Description** The research will focus on the geologic interpretation of data returned by Mars orbiter and lander/rover missions. Areas currently being investigated include: the geology, geomorphology, rock distribution, and landscape development of the landing sites; the physical characteristics of the surface from remotely sensed data; the selection of landing sites for Mars landers and rovers currently under development; the geologic setting of layered sedimentary deposits; and the tectonics of structural features, regions and provinces. This research is closely tied to supporting the present Mars Exploration program in terms of selecting landing sites for landers and rovers using targeted orbital remote sensing data and understanding how the surfaces relate to remote sensing data.

References:

Golombek, M. P., et al., 2008, Martian surface properties from joint analysis of orbital, Earth-based, and surface observations: Chapter 21 in, *The Martian Surface: Composition, Mineralogy and Physical Properties*, J. F. Bell III editor, Cambridge University Press, p. 468-497.

Golombek, M. P., and Phillips, R. J., 2010, Mars Tectonics: Chapter 5 in *Planetary Tectonics*, T. R. Watters and R. A. Schultz, eds., Cambridge University Press, pp. 183-232.

Golombek, M. P., et al., 2006, Erosion rates at the Mars Exploration Rover landing sites and long-term climate change on Mars: *Journal of Geophysical Research, Planets*, v. 111, E12S10, doi:10.1029/2006JE002754.

**Location:**

Jet Propulsion Laboratory  
Pasadena, California

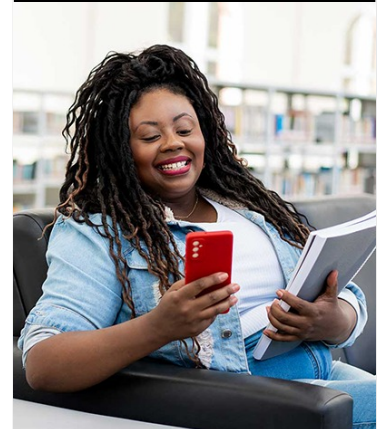
**Field of Science:** Planetary Science

**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/ojir/export-control>.

Eligibility is currently open to:



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- 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.