DEPARTMENT OF GEOLOGICAL SCIENCES
JACKSON SCHOOL OF GEOSCIENCES

2275 Speedway • Stop C9000 • Austin, TX 78712-1722 • 512 471 5172 • FAX 512 471 0959
http://www.geo.utexas.edu

12/20/2022

The UT Austin Planetary Surface Processes (PSP) Group, headed by Dr. Tim Goudge, is advertising an opening for a **Postdoctoral Fellow**. This position is primarily funded by a NASA grant entitled "*Constraining the nature of Noachian surface environments and climates using clay stratigraphies on Mars*". This grant is led by PI Dr. Briony Horgan (Purdue University), and there will be opportunities for collaboration with Dr. Horgan's research group, as well as other proposal team members. The broad goal of this project is to use clay mineral-bearing strata (commonly Al-bearing clay minerals overlying Fe/Mg-smectites) that outcrop in Noachian terrains across Mars to constrain the paleoclimate of the early martian surface environment.

The PSP Group Postdoctoral Fellow will contribute to this project through analysis of satellite remote sensing data aimed at constraining the paleolandscape on which these clay mineral-bearing strata formed. This will involve integrated analyses of spectroscopic (e.g., CRISM), image (e.g., CTX, HiRISE) and topographic (e.g., HiRISE stereo-derived DEMs) data of the surface of Mars. The available funding also provides room for the Postdoctoral Fellow to pursue other topics of interest in the broad field of planetary surface processes. More information about research of the PSP group can be found here: https://www.jsg.utexas.edu/goudge/.

Researchers with experience in any of the following areas will be preferred for this position: analysis of remote sensing data, particularly topography, visible to near-infrared spectroscopy, and/or planetary mission data; interaction between physical sediment transport and chemical weathering processes (on Earth and/or Mars); and/or quantitative data analysis, including familiarity with one or more computer coding language(s) (e.g., Python, ENVI/IDL, MATLAB).

The position will be for two years, with a preferred start date between May and July of 2023. The position will have an annual salary of $65,000 (plus benefits), as well as $3000 in relocation funds, and $1500 per year for travel to a professional conference. The Postdoctoral Fellow will have their appointment in the Department of Geological Sciences within the Jackson School of Geosciences at The University of Texas at Austin. Austin, the capitol of Texas, is a city of nearly 1 million people, and has a wide array of attractions, including excellent music, food, and outdoor activities.

Dr. Goudge is committed to building an inclusive research group with members that have a diverse set of perspectives and backgrounds. Applicants from historically underrepresented groups in STEM fields, with non-traditional backgrounds, and/or with a demonstrated interest in efforts to improve equity and inclusion in STEM are especially encouraged to apply. Members of the PSP Group are housed in the E. P. Schoch building, which has a power assisted door for accessibility.

Applicants should submit: (1) a 1–2 page cover letter outlining their interest in the position, their relevant qualifications, and a brief description of any additional research topics they would like to pursue as part of this appointment; and (2) their current CV (including the names/email addresses for 3 professional references). Documents should be submitted as PDFs via Workday: https://tinyurl.com/UTPSPPostdoc2023 prior to Feb. 15, 2023 for full consideration. Review of applications will continue until the position is filled. Please feel free to contact Dr. Goudge (tgoudge@jsg.utexas.edu) with any questions about this position.

[Many thanks to Professor Sarah Hörst, Johns Hopkins University, for helpful tips on writing a more inclusive advertisement]