Graduate Student Researcher Position (PhD) at the University of Virginia

The University of Virginia Laboratory for Astrophysics and Surface Physics (LASP-UVa) is looking for a self-motivated Ph.D. graduate student to enroll in Spring, Summer or Fall 2027 to join an experimental team (NASA Johnson Space Center; UC Berkeley; UVa) investigating the nano-/micro-scale effects of solar wind interaction with the Moon. The PhD student will begin research upon matriculation.

For this project, laboratory ion irradiation experiments will be conducted with subsequent microscopic analysis, to better understand the evolution of planetary surfaces exposed to the solar wind. The student will develop mastery in a wide variety of experimental techniques and characterization methods including: electron & optical microscopies, linear accelerator operation, vacuum fundamentals, X-ray photoelectron spectroscopy, and analytical data analysis/image processing methods. Computational simulations may supplement the experimental work. Travel to NASA Johnson Space Center for advanced HR-S/TEM of lunar samples is expected.

Laboratory details can be found at: https://engineering.virginia.edu/labs-groups/LASP

Students with strong science backgrounds [e.g., MSE, Geoscience, Physics, Engineering, Astronomy, Chemistry] are encouraged to apply to UVa's Department of Materials Science & Engineering (MSE) and identify an interest in: **Extraterrestrial Materials**.

The UVa MSE graduate program offers students a supportive yet rigorous environment designed to turn curiosity into mastery. Details about the MSE program can be found: https://tinyurl.com/MSE-Grad-Program

Applicants should plan to apply by **January 6, 2027** for the widest consideration. No application fees/ no GRE required. Program starts of **Spring, Summer, or Fall 2027** are possible.

Please direct project questions to: Catherine Dukes @ cdukes@virginia.edu
UVa MSE admissions inquiries: Maggie Rake @ uhh5wh@virginia.edu