

**Position 2: PhD position available for Fall 2026 on Biogeochemistry of the Cryosphere
University of Colorado - Boulder**

Responsibilities: The successful candidate will explore biologically driven darkening of the cryosphere (with a focus on Antarctica and Greenland) using cutting-edge laboratory analyses applied to collected snow and ice samples, as well as application of remote sensing mapping techniques. The student will be part of the Remote Sensing and Earth Observation focus area within the Aerospace Engineering Sciences Department (or Environmental Engineering Program) within the College of Engineering and Applied Sciences at CU-Boulder.

Benefits: The position will come with full tuition payment, 90% health care coverage, an academic year stipend with a minimum-monthly stipend around \$3,224/month, and a relocation scholarship to assist with moving expenses, that is typically around \$5,000. There is potential for fieldwork and data collection on federally funded awards with fieldwork in Antarctica and Greenland. Top applicants will be invited to a recruitment weekend - Feb 13th.

Minimum Qualifications

- A bachelor's degree in engineering or physical sciences, or a related field.
- Research experience in a wet lab environment.
- Research/coursework in environmental engineering, aquatic chemistry, biology, or environmental sciences.
- Strong writing skills.
- Valid Driver's License
- Ability to lift ~50 pounds and conduct fieldwork in low temperature environments.

Preferred Qualifications

- Strong analytical or environmental chemistry laboratory experience.
- Teaching/mentoring experience in an academic or experiential setting
- Ability/interest in contributing to connections with the Remote Sensing applications
 - o Scientific programming skills with languages such as Python, Matlab.
 - o Experience with geospatial data analysis, or demonstration of coursework
 - o Experience with ArGIS and/or ENVI
 - o Experience operating drones/UASs
- Previous field experience in snowy low-temperature environments
- Demonstrated experience leading or contributing to peer-reviewed publications.

CU Boulder's Department of Aerospace Engineering Sciences: The AES Department is consistently ranked among the top aerospace programs in the U.S. For more information on the PhD program, refer to the 2025-2026 [Graduate Handbook](#). Students will also be encouraged to pursue the other offerings within the College of Engineering for Applied Sciences, such as the [Graduate Certificate in Global Engineering](#) and [Environmental Engineering Program](#).

How to Apply: To learn more about the research, please visit this [site](#). To be formally accepted to the PhD program, a [full application](#) must be submitted by Dec. 1st. If interested in a Winter '26 start, schedule a Zoom meeting ahead of the application deadline, before Nov. 21st. Send

your CV and statement of interest addressing minimum and preferred qualifications listed above with the header 'Prospective PhD student - Winter 26, Position 2' to: alia.khan@colorado.edu. Please also note if you are available to begin research and fieldwork in summer 2026 and if you are interested in international polar fieldwork (pending physical qualification through the US Antarctic Program).

Zoom meetings for Fall '26 start dates will be scheduled after the application deadline.