TEXAS A&M UNIVERSITY
College of Arts & Sciences

**Postdoctoral Researcher Position in Enhanced Rock Weathering and Downstream Carbon Cycling at Texas A&M University**

The CArbon Cycle and Earth Environment (CACEE) Lab (https://www.caceelab.space/) in the Department of Oceanography at Texas A&M University is seeking a Postdoctoral Researcher to work on modeling river networks and biogeochemical processes following enhanced rock weathering.

The postdoc will collaborate with Dr. Shuang Zhang as part of the "Global Ocean and Land Alkalinization (GOAL-A)" project, a new Department of Energy (DOE) Earth Shot collaborative initiative involving scientists from Yale, Georgia Tech, Princeton, and Texas A&M. At Texas A&M University, the Postdoctoral Researcher will conduct in-depth investigations into how rivers and lakes respond to enhanced rock weathering. The scope of the research will encompass shifts in river geochemical and ecological dynamics, alterations in carbon cycling within the interconnected river-lake-atmosphere-sediment system, and the modulation of elemental fluxes to the ocean. More info can be found here: https://environment.yale.edu/news/article/yale-awarded-energy-earthshot-study-natural-carbon-capture

A solid understanding of basic hydrology and water quality is required. Experience with various hydrology, hydraulic, sediment transport, and water quality models, especially public domain models, is a plus. This includes the simulation of carbon, nitrogen, and phosphorus cycling in the water column and sediments of rivers, lakes, and reservoirs. Common examples include, but are not limited to, QUAL2K, CE-QUAL-W2, HEC-RAS, HEC-HMS, NSMII, and SWAT.

A Ph.D. in related fields is required. Postdoctoral appointment is initially for two years, with the possibility of renewal for subsequent years based on satisfactory performance and continued funding. Applications will be reviewed on a rolling basis until the position is filled.

Applicants should prepare a cover letter and curriculum vitae. Please direct general inquiries to: shuang-zhang@tamu.edu.