



Doctoral Research Assistantship Utah State University

Department of Civil and Environmental Engineering
and Utah Water Research Laboratory



PhD Position in Arctic Hydrology

Seeking a PhD student to work on a project funded by the Department of Energy. This project will study permafrost hydrological and biogeochemical processes in cold-region watersheds by advancing the state-of-the-art numerical models. The student will apply a model-data integrative approach that combines field, laboratory, and numerical models (i.e., process-based hydrologic models) leveraging the power of high-performance computing to improve understanding of the permafrost flow and reactive transport processes across the hillslope-riparian zone and through river systems. The student will have the opportunity to conduct field work in Alaska and collaborate with researchers from the University of Texas, Austin, University of Michigan, and Oakridge National Laboratory. This is a fully funded position (i.e., Research Assistantship) and will remain open until filled.

Qualifications:

- MS degree in civil and environmental engineering or other closely related field (e.g., hydrology, Geoscience, and environmental science) when the PhD program begins
- Strong quantitative skills and prior experience in hydrologic modeling and programming are preferred.
- Strong written and verbal communication skills

Application:

Email a **current curriculum vitae**, **unofficial transcripts**, and a **1-page research statement** that briefly discusses your research interests/experiences **as soon as possible** to the faculty contacts.

Apply for admission through the USU graduate school:

<https://gradschool.usu.edu/>

Faculty contacts:

Bethany Neilson
bethany.neilson@usu.edu

Pin Shuai
pin.shuai@usu.edu

Find more information about the PIs at:
<https://engineering.usu.edu/cee/people/faculty/index>

Start Date:
spring or fall
semester
2024

Additional information
and application instructions:

<https://uwrl.usu.edu/opportunities>