

Ph.D. Position in Experimental Subsurface Fluid Flow

Department of Earth, Environmental, and Planetary Sciences, Rice University

Dr. Sahar Bakhshian invites applications for a Ph.D. position in her research group at Rice University, beginning Fall 2026. The successful candidate will join an interdisciplinary team working on subsurface fluid flow modeling and experiments applicable to geologic carbon and energy storage and mineral resource recovery. The student will have the opportunity to conduct experimental research using the state-of-the-art microfluidic system in Dr. Bakhshian's lab for pore-scale investigation of subsurface multiphase flow.

This position is open to **domestic applicants** (U.S. citizens and permanent residents) and to individuals who already hold a valid U.S. visa.

Required qualifications:

- Master's degree in Geoscience, Petroleum Eng., Chemical Eng., Mechanical Eng., Civil Eng., or closely related fields.
- Solid foundation in fluid mechanics and geochemistry
- Hands-on experience with microfluidics, microfabrication, microscopy, and image analysis
- Strong analytical and problem-solving skills
- Excellent written and verbal communication skills

Preferred (but not required) Skills

- Familiarity with reactive transport modeling
- Familiarity with computational tools (e.g., OpenFOAM, COMSOL, or similar)
- Experience with programming languages such as Python, C++, etc.

How to apply:

Please submit your application electronically through the graduate program's application portal. For more information, refer to the following link:

<https://eeeps.rice.edu/graduate/phd-program>

The deadline for Fall 2026 is January 9th, 2026 (10:59 p.m. CST/11:59 p.m. EST).

All required application materials must be received for your application to be considered complete. Missing materials may result in delayed consideration, so we strongly encourage applicants to complete their application before the deadline.