Department of Geology
Franklin College of Arts and Sciences
UNIVERSITY OF GEORGIA

PhD Position in Multiphase Flow and Mineral Dissolution

Start Date: Fall 2027
Application Deadline: December 31, 2026

Project Description

The Porous Media Flow Lab at the University of Georgia seeks a highly motivated and qualified Ph.D. student to join our research team. The successful candidate will work on an NSF-funded project on the interplay between multiphase flow dynamics and mineral dissolution in geologic formations with application to water resources, subsurface energy systems and critical mineral extraction. The project involves core-flooding experiments, in situ x-ray micro-CT imaging, and reactive multiphase flow simulations. The specific research direction will be tailored to the strengths of the selected candidate.

Funding and Benefits

- Financial Support: 12-month Research Assistantship
- Tuition: Full tuition waiver (student pays only nominal institutional fees)
- Benefits: Access to UGA health insurance and graduate student resources

Qualifications

- Degree: B.S. or M.S. degree in Geoscience, Engineering (civil, environmental, mining, petroleum) or a closely related field
- Academic standing: Strong academic record
- Background / Skills:
  - Solid knowledge of flow and transport processes
  - Experience in laboratory experiments, image analysis, pore-scale simulations or reactive transport modeling
  - Demonstrated research experience: publications, conference presentations, etc.
- Language (for international applicants): Meet UGA Graduate School English proficiency requirements (TOEFL or IELTS scores)

Application Procedure

Interested applicants should complete the following steps:

1. Initial Inquiry: Email Dr. Charlotte Garing at charlotte.garing@uga.edu with your updated CV, academic transcripts, and writing/publication samples.
2. Formal Application: **After you've contacted Dr. Garing, and if she encourages you**, apply through the UGA Graduate School Admission.

About the University of Georgia

The birthplace of public higher education in America, the University of Georgia is a powerhouse in academics and athletics. Comprising more than 40k students and 10k faculty and staff, UGA ranks in the top 20 among the nation's best public universities and has for eight straight years. UGA is located in Athens, Georgia, consistently ranked as one of the best college towns in America and a great place to live and work.

About the Porous Media Flow Lab

Dr. Charlotte Garing and her team of undergraduate and graduate students combines laboratory flow experiments, advanced characterization methods, numerical modeling and field data collection to investigate complex coupled flow processes in subsurface environments across a range of scales.

Website: charlottegaring.com

Instagram: porousmediaflowlab