



Geomechanics and Damage Group
DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING
COLLEGE OF ENGINEERING
UNIVERSITY OF WISCONSIN-MADISON

PhD candidate in geomechanics/damage mechanics
Department: Civil and Environmental Engineering
Application deadline: open until filled
Start date: January 2021 or August 2021

Description:

The [Geological Engineering](#) program in the Department of Civil and Environmental Engineering at the University of Wisconsin-Madison is seeking a PhD candidate to join the [Geomechanics and Damage Group \(GeoD\)](#).

The successful candidate will participate in several projects relating to microcrack and damage evolution; work will be directly applicable to the areas of enhanced geothermal systems, oil and gas, mining, underground construction, and tunneling. The successful candidate for this position will be part of an interdisciplinary team that is involved with developing physical properties prediction methodologies for the purpose of reducing risk and uncertainty in underground operations in deep environments. Opportunities will be available for the successful candidates to contribute to a number of tasks in experimental, numerical, and data science disciplines.

Applications will be accepted until the positions are filled. Interested candidates please send (1) a brief cover letter, (2) a CV, and (3) contact information for 3 references **in a single PDF** to Prof. Jesse Hampton (jesse.hampton@wisc.edu).

Requirements:

- BS in engineering, physics, material science, or a related field at the time of hire
- Excellent independent problem-solving skills
- Excellent writing skills

Desired:

- MS in engineering, physics, material science, or a related field at the time of hire
- Experimental experience with high-pressure high-temperature laboratory equipment
- Demonstrated publication record
- Experience in data science and machine learning
- Field or industry experience in geothermal energy, oil and gas, mining, or other related laboratory settings