

Postdoctoral Researcher and/or PhD Candidates in
Mechanical Engineering
Southern Methodist University

Direct Link: <https://www.AcademicKeys.com/r?job=244753>

Downloaded On: Nov. 21, 2024 6:27pm

Posted Sep. 12, 2024, set to expire Jan. 12, 2025

Job Title	Postdoctoral Researcher and/or PhD Candidates in Mechanical Engineering
Department	Lyle School of Engineering https://www.smu.edu/lyle/departments/me
Institution	Southern Methodist University Dallas, Texas
Date Posted	Sep. 12, 2024
Application Deadline	Open until filled
Position Start Date	Available Immediately
Job Categories	Post-Doc
Academic Field(s)	Chemical/Petroleum Civil Engineering Mechanical Engineering

Apply By Email

Job Description

Key Responsibilities:

- Develop and implement finite element models to simulate various aspects of geothermal energy systems, including heat transfer, fluid dynamics, and material stress analysis.
- Previous experience in high pressure and temperature environment and working with related equipment
-

Postdoctoral Researcher and/or PhD Candidates in
Mechanical Engineering
Southern Methodist University

Direct Link: <https://www.AcademicKeys.com/r?job=244753>

Downloaded On: Nov. 21, 2024 6:27pm

Posted Sep. 12, 2024, set to expire Jan. 12, 2025

Conduct research to enhance the understanding of geothermal reservoir behavior, wellbore integrity, and energy extraction efficiency.

- Collaborate with faculty, graduate students, and industry partners on interdisciplinary projects aimed at advancing geothermal energy technology.
- Prepare and publish high-quality research papers in peer-reviewed journals and present findings at national and international conferences.
- Contribute to grant writing efforts to secure funding for ongoing and future research projects.

Qualifications:

- **PhD position:** MSc in Mechanical Engineering, Civil and Petroleum Engineering, or a related field with strong background in finite element modeling
- **Post-doc Position:** Ph.D. in Mechanical Engineering, Civil and Petroleum Engineering, or a related field with strong background in finite element modeling.
- Previous experience working in the laboratory
- Expertise in using finite element software (e.g., ANSYS, COMSOL, Abaqus) for complex simulations.
- Familiarity with geothermal applications, including reservoir simulation, geothermal drilling, and heat transfer in subsurface environments.
-

Postdoctoral Researcher and/or PhD Candidates in
Mechanical Engineering
Southern Methodist University

Direct Link: <https://www.AcademicKeys.com/r?job=244753>

Downloaded On: Nov. 21, 2024 6:27pm

Posted Sep. 12, 2024, set to expire Jan. 12, 2025

Strong analytical and problem-solving skills, with the ability to work independently and as part of a team.

- Proven track record of publications in peer-reviewed journals, demonstrating the ability to conduct high-quality research.

Application Requirements:

- Cover letter detailing your research experience and interest in this position.
- Curriculum vitae (CV) with a list of publications.
- A sample of a recent publication showcasing expertise in finite element modeling and/or geothermal applications.
- Contact information for three professional references.
- Eligibility for work authorization in the United States

How to Apply:

Interested candidates should submit their application materials to salehis@smu.edu. Review of applications will begin immediately and continue until the position is filled. For questions regarding the position please contact Professor Saeed Salehi (salehis@smu.edu).

SMU is an equal opportunity employer and encourages applications from underrepresented groups.

About RESILIENT Lab

Research in Energy Sustainability and Innovative Low-Impact Environmental Technologies

**Postdoctoral Researcher and/or PhD Candidates in
Mechanical Engineering
Southern Methodist University**

Direct Link: <https://www.AcademicKeys.com/r?job=244753>

Downloaded On: Nov. 21, 2024 6:27pm

Posted Sep. 12, 2024, set to expire Jan. 12, 2025

The RESILIENT Lab is dedicated to advancing cutting-edge research in energy sustainability and developing innovative technologies that minimize environmental impact. Our mission is to create and implement solutions that support a sustainable energy future, focusing on reducing carbon footprints, improving energy efficiency, and promoting the use of renewable resources.

Contact Information

Please reference Academickeys in your cover letter when applying for or inquiring about this job announcement.

Contact Saeed Salehi
Lyle School of Engineering
Southern Methodist University
6425 Boaz Lane
Dallas, TX 75205

Contact E-mail salehis@smu.edu