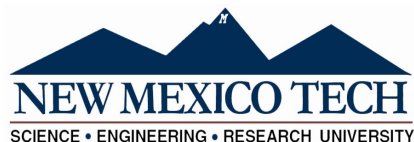


Posted: March 7, 2024



POSITION ANNOUNCEMENT

TITLE: POSTDOCTORAL FELLOW (2)

DEPT: PRRC

REG

TEMP

FULL TIME

PART TIME

STARTING RATE or SALARY RANGE \$54,000- \$65,437

Employees being promoted to a higher classified position receive the minimum for the position or a pay rate adjustment of 8% whichever is greater.

All regular positions also entitle the employee to several benefits including health, dental, vision, life insurance, and retirement which is largely paid by New Mexico Tech for the employee and dependents.

INTERNAL POSTING THROUGH: March 15, 2024*

CONSIDERATION WILL BE GIVEN FIRST TO TEMPORARY AND REGULAR TECH EMPLOYEES WHO APPLY WITHIN THE 7 DAY INTERNAL POSTING. APPLICATIONS RECEIVED AFTER THE 7 DAY POSTING MARGIN WILL BE CONSIDERED WITH OTHER OUTSIDE APPLICANTS.

JOB SUMMARY:

The Petroleum Recovery Research Center at New Mexico Tech invites applications for a postdoctoral position with a preferred start June 2024. A temporary contract for a 2-year period will be offered with a possibility of extension based on performance evaluation and funds availability. Main professional duties will require:

- 1) Conducting research on hydrogen generation from reservoir rocks (ultramafic) and subsurface flow with a focus on steady/unsteady state relative permeability studies (brine/steam/hydrogen) and rock-fluid interactions at lab scale (core flooding experiments) and computer modelling of the multiphase flow and dynamic behavior.
- 2) Performing analytical calculations and/or historical matching of experimental data using industry-recognized compositional simulator software or similar tool to model multiphase flow behavior in tight porous media.
- 3) Contributing to and/or leading aspects of scientific projects, including writing research reports, conference and peer-reviewed papers and willingness to help with other ongoing professional aspects e.g., writing grant proposals, techno-economic analysis and general help with industry-sponsored projects.

JOBS FUNCTIONS:

Performing laboratory experiments.	55%
Data analysis and computation.	15%
Writing activities e.g. reports, manuscripts, grant proposals or similar.	25%
Other duties as assigned.	5%

REQUIRED QUALIFICATIONS:

Ph.D. or other doctorate level equivalent in Petroleum Eng., Geoscience, Geochemistry or similar. Demonstrated skills and experience in performing core flooding experiments (relative permeability) specifically with gases e.g. CO₂, hydrogen injection in HPHT conditions. Proven track record in PVT modelling, with proficiency in analytical or commercial & industry software. Experience in developing and/or leading research activities within larger projects, including effectively managing resources and delivery of key outputs. Evidence of strong scientific output in reservoir engineering, porous media or a closely related field, through extensive publications in peer-reviewed journals.

DESIRED QUALIFICATIONS:

Knowledge of digital/analog electronics for calibration of pressure transducers. Control of lab instruments in Python, C++ and/or LabView. Development of core flooding setups from scratch. Skills in rock sample preparation i.e. cutting, drilling, sampling etc.

LIFTING REQUIREMENTS:

(f)requently, (o)ccasionally, or (s)eldom

0 - 15 pounds	F
15 - 30 pounds	F
30 - 50 pounds	O
50 - 100 pounds	
100 + pounds	

PHYSICAL DEMANDS:

Standing 10%	Sitting 45%	Walking 15%	Pulling 5%
Pushing 5%	Lifting 10%	Stooping	Kneeling 5%
Crawling	Climbing	Reaching 5%	Other

Apply to: nmtjobapps@npe.nmt.edu