



Department of Petroleum Engineering
Texas Tech University

Dr. Qingwang Yuan
The Hope Group
www.TheHopeGroup.Tech



PhD position on geochemical modeling for GeoH₂ production

A funded PhD student position is available in the Department of Petroleum Engineering at Texas Tech University, Texas, USA.

Research project:

- Pore- and reservoir-scale geochemical modeling of hydrogen generation and transport from the reactions of iron-rich rocks and water with integrated CO₂ sequestration in the Earth's subsurface.

Scholarship:

- \$29,000/year

Expected starting time:

- Fall 2024 or Spring 2025

Preferred qualifications:

- Strongly self-motivated with critical thinking ability;
- M.Sc. in Petroleum Engineering or Chemical Engineering;
- Have at least one journal paper accepted or published;
- GPA > 3.5/4.0;
- Research experiences in ANY of the following areas will be given priority: natural hydrogen generation and migration, CO₂ sequestration, reservoir simulations, pore- or reservoir-scale modeling of fluid flows in subsurface porous media, geochemical modeling, discrete fracture network (DFN) modeling, or hydraulic fracturing;
- Familiar with CMG, Eclipse, ToughReact, or MRST;
- Strong background with mathematics or one of the computer programming languages: Fortran, C++, Python, or MATLAB;
- TOEFL, IELTS, or Duolingo score.

Application:

Interested applicants please send your CV, transcripts, and at least two recommendation letters to Dr. Qingwang Yuan at Qingwang.Yuan@ttu.edu. More information about Dr. Yuan's group can be found at www.TheHopeGroup.Tech.