Stanford

Hailun Ni

Ph.D. Student in Energy Resources Engineering

Bio

BIO

Hailun Ni obtained her B.S. degree with honor and M.S. degree from Energy Resources Engineering department at Stanford University and is currently a third year Ph.D. student in the Benson Lab. Her thesis focuses on characterizing and predicting the amount of CO2 capillary heterogeneity trapping as well as CO2 snap-off trapping through both experiments and simulation. She conducts CO2/water coreflooding experiments at realistic reservoir conditions in order to see how different degrees and types of heterogeneity in a rock core affect its post-imbibition CO2 trapping ability. She is also in the process of developing a reduced physics simulator in Matlab based on macroscopic percolation algorithm in order to match and predict experimental results.

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Geologic CO2 storage