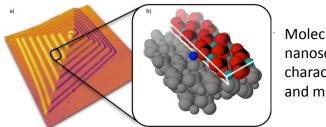
Center for Nanoscale Controls on Geologic CO₂ (NCGC) Donald J. DePaolo (LBNL)

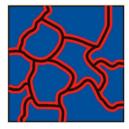
NCGC Mission Statement

Enhance the performance and predictability of subsurface storage systems by understanding the molecular and nanoscale origins of CO₂ trapping processes, and developing computational tools to translate to larger-scale systems

esd1.lbl.gov/research/facilities/ncgc/

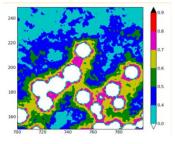


Molecular-tonanoscale characterization and models



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Calibration of computer simulations to experiments



RESEARCH PLAN

Experimental investigations will probe nanoscale fluid-fluid and fluid-mineral interactions and their effects on subsurface CO_2 trapping. Characterization and experiments will be integrated with mesoscale chemical-mechanical-hydrologic modeling and simulation to achieve a transformational predictive capability for stratigraphic- and reservoir CO_2 trapping efficiency and long-term reliability.

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