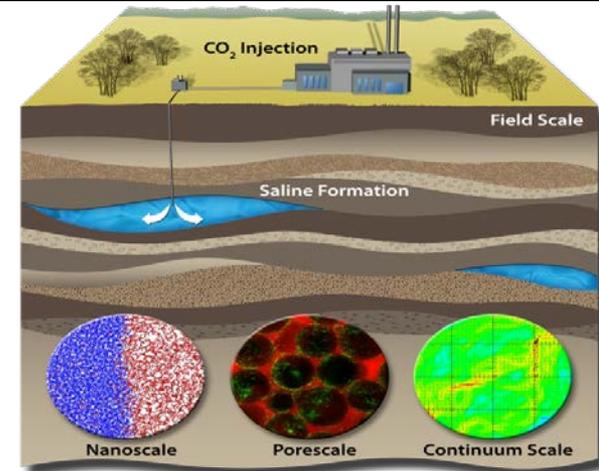


The Center for Frontiers of Subsurface Energy Security (CFSES) is pursuing scientific understanding of multiscale, multiphysics processes to successfully predict the behavior of CO<sub>2</sub> and other byproducts of energy production stored in the subsurface.



## RESEARCH PLAN AND DIRECTIONS

**Challenges and approaches:** Integrate and expand our knowledge of subsurface phenomena across scientific disciplines using both experimental and modeling approaches to better understand and quantify behavior far from equilibrium.

**Unique aspects:** The uncertainty and complexity of fluids in geologic media from the molecular scale to the basin scale.

**Outcome:** Better understanding of long term behavior of subsurface storage.