Advances in CO₂ Injection and Storage in Geologic Formations

Cross disciplinary, project-based course in new technology for greenhouse gas emissions reductions (see www.gulfcoastcarbon.org for more information on UT’s field research).

Four instructors teach from their research expertise:

Farzam Javadpour — multiphase fluid flow, pore scale studies, imaging micromodels, pore to reservoir upscale, capillary and viscous processes. Farzam brings this course material from University of Calgary to UT.

Susan Hovorka — project development. Susan has led four of the world’s premier field research teams injecting CO₂ and monitoring reservoir and ecosystem response.

Tip Meckel — Structure and sedimentology. Evaluation of elevated pressure effects — seal and structure. Integration of field observations and theory.

Jean-Philippe (J.-P) Nicot — introduction to multiphase fluid flow modeling using GEM and other models, rock-water interaction. J.P. started his career as a mining geologist in North Africa and has worked on a variety of fluid flow problems.

Class will meet in the evening (tentatively M &Th 5:30-7:30) at the Bureau building 130, PRC (http://www.beg.utexas.edu/info/maps.php), VR room 1.116A. Eight labs will teach students the techniques to complete the term project, developing the complete plan for a real-world CCS project. Project can be aligned with thesis or other research.

Sign up for GEO391 unique number 27140. Kick off class meeting Thursday August 26, 5:30-7:30 PM BEG VR room 1.116A. Class evenings will be selected by class. More information contact susan.hovorka@beg.utexas.edu