Carbon Capture Technology

Carbon capture and sequestration technology is being advanced by Southwest Research Institute® (SwRI®) engineers and scientists. SwRI offers clients scientific know-how and process development expertise in carbon capture and sequestration to assist in the development of technologies to respond to climate change regulation.

Capabilities

Development capabilities include:

• CO₂ capture pilot plant design/integration/operation
• Capture technology selection and evaluation
• Process and flue gas automated sampling and analysis
• CO₂ separation membrane technologies
• Capture system simulation and energy consumption evaluation
• Use of regenerated CO₂ as a process feedstock
• Site monitoring/control
• Complete system analysis and process simulation
• Process component integration
• CO₂ absorption-enhanced reforming process development

Experience

Recent areas of work include:

• Gas/liquid equilibrium testing – vapor liquid equilibria (VLE) data
• Greenhouse gas-to-fuel technology
• Geological sequestration testing
• Chemical absorption and physical separation systems
• High-temperature CO₂ separation ceramic membrane development
• Greenhouse gas monitoring
• Alternative energy (fuel cells, hydrogen production, chemical batteries)
We welcome your inquiries.  
For more information, please contact:

Michael P. Hartmann  
Manager  
210.520.6927  
michael.hartmann@swri.org

Eloy Flores  
Director  
210.522.2547  
eloy.flores@swri.org

Chemical Engineering Department  
Chemistry & Chemical Engineering Division  
carboncapture.swri.org