

SOUTHWEST RESEARCH INSTITUTE



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

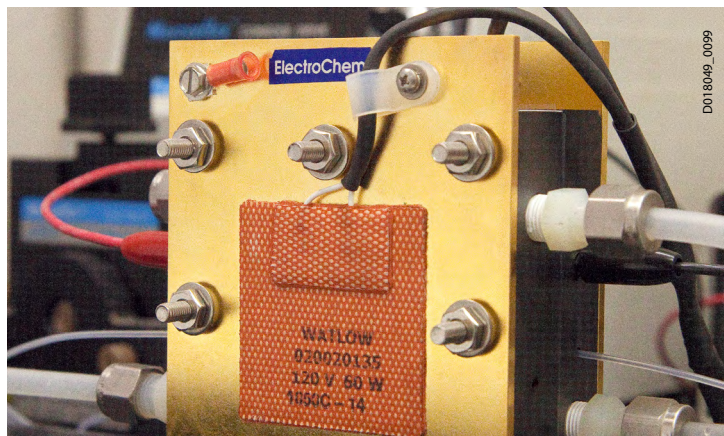
Experience

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)



CO₂ absorption in a bubble column reactor



Fuel cell development



High-temperature CO₂ separation membrane evaluation system



We welcome your inquiries.
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SOUTHWEST RESEARCH INSTITUTE

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