

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

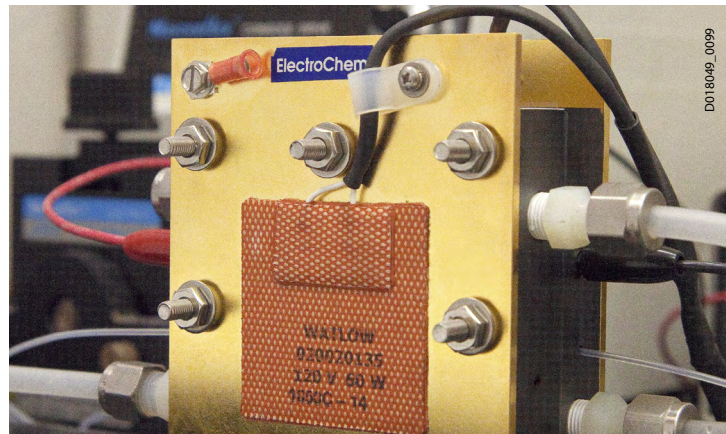
Experience

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

Southwest Research Institute is a premier independent, nonprofit research and development organization using multidisciplinary services to provide solutions to some of the world's most challenging scientific and engineering problems. Headquartered in San Antonio, Texas, our client-focused, client-funded organization occupies 1,500 acres, providing more than 2.3 million square feet of laboratories, test facilities, workshops, and offices for more than 2,600 employees who perform contract work for government and industry clients.

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