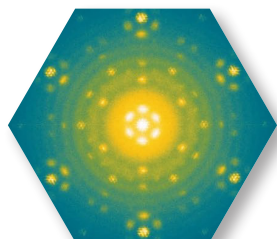


Electrochemical CO₂ Conversion Technologies

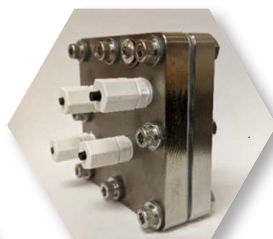
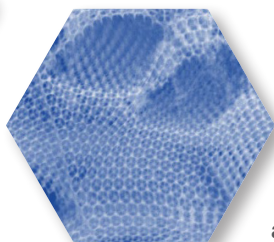
Research and Development of electrochemical processes for the conversion of CO₂ to chemicals and fuels



R&D ACTIVITIES



Enhancing performance and design of electrochemical cells, catalysts, gas diffusion layers, electrolytes, & ion exchange membranes



Advancing electrochemical technologies from lab and bench scale to larger integrated systems



Improving Life Cycle Analysis to evaluate environmental impacts of electrochemical technologies

Electrochemical reactors utilize electrons to convert CO₂ to chemicals and fuels.

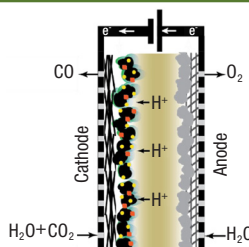


ADVANTAGES

Advantages include mild operating conditions and the ability to use off-peak electricity via rapid cycling.

CHALLENGES

- ✓ Improve stability, current density, selectivity, and faradaic efficiency
- ✓ Optimize the electrochemical cell design
- ✓ Maximize yield, and overall energy efficiency



PARTNERS

The program is leveraging experience and expertise from academia, industry and national labs.



Dioxide Materials
The CO₂ Recycling Company™



— opus 12



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