NETL-DEVELOPED OXYGEN CARRIER SELECTED FOR CANADIAN GOVERNMENT-INDUSTRY CHEMICAL LOOPING **COMBUSTION PROJECT**

Advanced material with unparalleled durability was selected by Natural Resources Canada (NRCan) and industry collaborator Hatch for use in a novel chemical looping combustion (CLC) reactor.







CLC is an advanced energy technology that delivers affordable and dependable power, process heat, steam and synthesis gas while reducing environmental impacts due to in-situ carbon dioxide (CO_2) RESEARCH PRIORITY



separation and capture capability.

- Oxygen carrier durability is a major technical barrier to CLC success, but NETL has made significant strides toward mitigating this issue through its oxygen carrier research.
- The selection of NETL oxygen carriers for this project underscores the Lab's expertise in materials development.
- This project has the potential to push CLC technology closer toward commercialization, enabling higher power plant efficiencies while simultaneously mitigating CO₂ emissions.



PERFORMERS



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