

CO₂ Mineralization for *in situ* Storage and *ex situ* Enhanced Metals Recovery

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Dante is an assistant professor in the Department of Chemical and Biomolecular Engineering and Institute for Carbon Management at the University of California, Los Angeles (UCLA). His research expertise is in the area of catalytic and chemical reaction synthesis, adsorptive separation processes, and process integration and intensification, and he holds multiple patents in these areas. Prior to UCLA, Dante was an R&D project leader at UOP-Honeywell, working in oil and gas processing and refining.

Technology or focus area

- Exploiting chemical reaction synthesis to leverage precipitation reactions as a means of CO₂ removal and metals recovery

Ideas, Interests, Concepts to be Explored

Using thermal, electrical, and/or acoustic gradients along reactors to selectively remove elements from aqueous streams as carbonates and/or hydroxides

