

Geochemist raises questions about carbon sequestration

June 16 2010

As carbon dioxide levels in the atmosphere rise, policy makers and scientists are looking at new ways to tackle the problems associated with the greenhouse gas.

One method under much discussion is carbon capture and storage (CCS), otherwise known as carbon sequestration. CCS, a newly developing technology, involves injecting carbon dioxide underground to remove it from the Earth's atmosphere.

Donald J. DePaolo, a distinguished geochemist from the University of California, Berkeley and the Lawrence Berkeley National Laboratory, raised new questions about carbon sequestration today during the Goldschmidt Conference hosted by the University of Tennessee, Knoxville, and Oak Ridge National Laboratory.

DePaolo's presentation focused on the significance of geochemistry in analyzing the effectiveness of proposed carbon sequestration. He examined how current plans for carbon storage could benefit by paying more attention to the critical role of underground [chemical reactions](#). For instance, when carbon dioxide comes into contact with water in underground aquifers, it can form a weak acid that will start to dissolve minerals in the rocks. According to DePaolo, research is needed to analyze how fast such reactions proceed and which minerals are affected to better gauge the efficiency of carbon storage projects.

DePaolo's presentation, entitled "[Carbon sequestration](#) geochemistry,"

aims to open encouragement for other geochemists to start addressing the importance of geochemical questions in [carbon storage](#) programs.

Provided by University of Tennessee at Knoxville

Citation: Geochemist raises questions about carbon sequestration (2010, June 16) retrieved 23 April 2024 from <https://phys.org/news/2010-06-geochemist-carbon-sequestration.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.