

EEE Research Seminar

Date: February 15, 2022 at 10:30 AM

Location: via Zoom

<https://purdue-edu.zoom.us/j/97143383773>

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Geosciences and Geological Engineering**

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Offsetting greenhouse gas emissions with carbon capture, mineralization, utilization and sequestration

Abstract

To achieve the massive decarbonization needed to mitigate climate change, greenhouse gas emissions will need to be offset with negative emissions technologies (NETs). NETs remove carbon from point sources and from the atmosphere and utilize it or sequester it.

In this seminar, I will share with you some very promising strategies of negative emissions technologies. This includes sequestering CO₂ underground as a promising way of managing the vast quantities of carbon that need to be removed from our industries and our atmosphere.

In the 21st century, we will vastly expand the use of the subsurface to positively affect the climate.

Bio

CATHERINE PETERS is the George J. Magee Professor of Geosciences and Geological Engineering, Chair of the Department of Civil & Environmental Engineering, and Director of the undergraduate Geological Engineering Program at Princeton University. Dr. Peters is an expert in environmental chemistry and geochemistry, known for her leadership in sustainable energy technologies. She is a Fellow of the Association of Environmental Engineering and Science Professors (AEESP), and served as president in 2002. In 2020 she was awarded Honorary Board Certification by Eminence in AAEEES, and received a Distinguished Alumnus Award of CEE at Carnegie Mellon University. She is Editor-in-Chief of Environmental Engineering Science. She earned her PhD in civil engineering from Carnegie Mellon University and her BSE in chemical engineering from the University of Michigan. She teaches courses in environmental chemistry, energy and the environment, and sustainable design.