

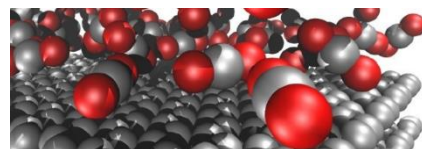
**American Institute of Chemical Engineers,
Cleveland Section**

Visit our Web Page at:

<https://www.aiche.org/community/sites/local-sections/cleveland>

Join our LinkedIn Group called:

[AIChE Cleveland Section](#) and let colleagues know it is available



Wednesday, September 16, 2020,

Joint Meeting with ACS

An Overview of Negative Emission Technologies

By Dr. Peter Psarras, Assistant Professor, Cuyahoga Community College.

[linkedin.com/in/peterpsarras](https://www.linkedin.com/in/peterpsarras) ; pete.psarras@gmail.com

Abstract: It is widely accepted that conventional mitigation efforts, e.g., fuel switching, energy efficiency, and carbon capture and storage, are not enough to protect us from the irreversible effects of climate change. The inescapable reality of a continued atmospheric rise in heat trapping gases necessitates that other solutions must enter the fray, solutions that drawdown atmospheric CO₂ into other reservoirs. This talk will provide an overview of several “negative emission technologies”: solutions that are designed to drawdown and reliably store more CO₂ than they emit. Some solutions are quite simple in theory –for instance planting a tree (or a few!) – but complex in long-term management. Other engineered systems are cleverly integrated with existing low carbon heat and electricity to maximize removal potential. A discussion of the benefits and challenges of carbon removal will follow.

Bio: Pete Psarras received his Ph.D. in Chemistry from Cleveland State University in 2014 where he worked on computational modeling of catalysts used in Fischer-Tropsch synthetic fuel processing. His work since has focused mainly on climate change mitigation, mainly carbon capture, utilization, and – more recently – atmospheric carbon removal. Dr. Psarras joined Cuyahoga Community College in 2018 at the level of Assistant Professor in Chemistry, where he continues research work as a consultant conducting life cycle assessments and techno-economic analyses of hydrogen production and carbon management systems.

Dr. Psarras’s Zoom presentation was originally arranged by ACS, and AIChE members interested in attending will make their arrangements through the ACS attached link below. Also, please notify Joseph Yurko if you plan to attend so AIChE may have a record of our attendance to this event. Thank you!

Meeting Location: *Zoom link to be emailed ahead of the meeting by ACS*

6:30 pm: Executive Committee Meeting
7:30 pm: Social time
8:00 pm: Talk

Cost: (no cost)

Menu: (Zoom Virtual Meeting, no meal)

RSVP by September 11th with ACS at <https://www.acscleveland.org/event/sept-15-2020>

RSVP notice also to Joseph Yurko with AIChE: j.yurko@sbcglobal.net

