

## **Monday, October 5, 2020**

Moderator: Lynn Brickett, U.S. Department of Energy

- 10:00 AM     Introductory Remarks**  
Angelos Kokkinos, U.S. Department of Energy
- 10:30 AM     Carbon Capture Program Overview**  
Dan Hancu, National Energy Technology Laboratory
- 11:00 AM     Energy Efficient GO-PEEK Hybrid Membrane Process for Post-Combustion Carbon Dioxide Capture (FE0026383)**  
Shiguang Li, Gas Technology Institute
- 11:30 AM     Electrochemically-Mediated Amine Regeneration in CO<sub>2</sub> Scrubbing Processes (FE0026489)**  
T. Alan Hatton, Massachusetts Institute of Technology
- 12:00 PM     Rapid Design and Testing of Novel Gas-Liquid Contacting Devices for Post-Combustion CO<sub>2</sub> Capture Via 3D Printing: Modular Adaptive Packing (FE0031530)**  
Nathan Fine, ION Clean Energy, Inc
- 12:30 PM     Lunch**

Moderator: Andrew Jones, National Energy Technology Laboratory

- 1:00 PM     Flue Gas Aerosol Pretreatment Technologies to Minimize PCC Solvent Losses (FE0031592)**  
Devin Bostick and Krish Krishnamurthy, Linde, LLC
- 1:30 PM     A Process with Decoupled Absorber Kinetics and Solvent Regeneration through Membrane Dewatering and In-Column Heat Transfer (FE0031604)**  
Kunlei Liu, University of Kentucky
- 2:00 PM     Inexpensive and Sustainable Anti-Corrosion Coating for Power Generation Applications (FE0031659)**  
John Watkins, LumiShield Technologies, Inc.
- 2:30 PM     Break**
- 2:45PM     Validation of Transformational CO<sub>2</sub> Capture Solvent Technology with Revolutionary Stability (FE0031727)**  
Erik Meuleman, ION Clean Energy, Inc

**3:15 PM**      **Molecular Refinement of Transformational Solvents for CO<sub>2</sub> Separations (FWP-72396)**  
David Heldebrant, Pacific Northwest National Laboratory

**3:45 PM**      **Demonstration and Validation of Additively Manufactured Intensified Device for Enhanced Carbon Capture (FWP-FEAA375)**  
Costas Tsouris, Oak Ridge National Laboratory

**4:15 PM**      **Day 1 Concluding Remarks**

## **Tuesday, October 6, 2020**

Moderator: Katharina Daniels, National Energy Technology Laboratory

**10:30 AM**      **FLECCS Program**  
Scott Litzelman, ARPA-E

**11:00 AM**      **Advanced Structured Adsorbent Architectures for Transformative CO<sub>2</sub> Capture Performance, (FE0031732)**  
Deborah Jelen and Joel Cizeron, Electricore

**11:30 AM**      **Amine-Appended Metal-Organic Frameworks as Switch-Like Adsorbents for Energy Efficient Carbon Capture (FWP-FP0006194)**  
Jeffrey Long, Lawrence Berkeley National Laboratory

**12:00 PM**      **High Performance Thin Film Composite Membranes for Post-Combustion Carbon Capture**  
Lingxiang Zhu, National Energy Technology Laboratory

**12:30 PM**      **Lunch**

Moderator: Naomi O'Neil, National Energy Technology Laboratory

**1:00 PM**      **CCSI<sub>2</sub> Overview**  
Benjamin Omell, National Energy Technology Laboratory

**1:05 PM**      **Machine Learning Approaches to Accelerate CFD Analyses**  
Dave Widemann and Brenda Ng, Lawrence Livermore National Laboratory, Grigorios Panagakos, National Energy Technology Laboratory

**1:30 PM**      **MTR Pilot Support: Modeling Framework Capturing Non-Idealities in Membrane Module Performance**  
Glenn Lipscomb, University of Toledo

- 2:00 PM Sorbent Based Post-Combustion CO<sub>2</sub> Slipstream Testing (FE0012870)**  
Jeannine Elliott, TDA Research Inc.
- 2:30 PM Break**
- 2:45 PM Pilot Testing of a Highly Effective Pre-Combustion Sorbent-Based Carbon Capture System (FE0013105)**  
Gokhan Alptekin, TDA Research, Inc.
- 3:15PM Gap Analysis for Modular Scale Pre-Combustion Carbon Capture**  
Kathryn Smith, National Energy Technology Laboratory
- 3:45 PM Alkanolamines for Acid Gas Removal in Gasification Processes (FWP-725646)**  
Phillip Koech, Pacific Northwest National Laboratory
- 4:15 PM Concluding Remarks: Day 2**

## **Wednesday, October 7, 2020**

Moderator: Isaac “Andy” Aurelio, National Energy Technology Laboratory

- 10:00 AM Engineering Scale Testing of Transformational Non-Aqueous Solvent- Based CO<sub>2</sub> Capture Process at TCM (FE0031590)**  
Marty Lail, Research Triangle Institute
- 10:30 AM Scale-Up and Testing of Advanced Polaris Membrane CO<sub>2</sub> Capture Technology (FE0031591)**  
Tim Merkel, Membrane Technology and Research
- 11:00 AM Membrane-Sorbent Hybrid System for Post Combustion Capture (FE0031603)**  
Gokhan Alptekin, TDA Research

Moderator: José Figueroa, National Energy Technology Laboratory

- 11:30 AM Global Thermostat: Direct Air Capture Update**  
Miles Sakwa-Novak, Global Thermostat
- 12:00 PM Climeworks: Direct Air Capture Update**  
Christoph Beuttler, Climeworks
- 12:30 PM Lunch**

- 1:00 PM**      **Government Panel on Direct Air Capture (DAC)**  
Moderator: José Figueroa, National Energy Technology Laboratory  
-Heather Willhauer, Naval Research Laboratory  
-Dan Matuszak, Office of Science  
-Devinn Lambert, Bioenergies Technology Office  
-Zara L'Heureux, ARPA-E  
-Lynn Brickett, Office of Fossil Energy
- 2:15 PM**      **Update on Carbon Capture Techno-Economic Analysis at NETL**  
Tim Fout, National Energy Technology Laboratory
- 2:45 PM**      **Life Cycle Analysis at NETL**  
Derrick Carlson, National Energy Technology Laboratory
- 3:15 PM**      **Break**
- 3:30 PM**      **FOA 2187 & FOA 2188 Selections**  
Lynn Brickett, U.S. Department of Energy
- 4:00 PM**      **Concluding Remarks**
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