

Wednesday, September 2, 2020

*All times are Eastern Standard Time E.S.T.

9:30 AM **Welcome Remarks and Gasification Systems Portfolio Overview**
Dave Lyons, NETL

Air Separation Technologies to Assist Modular Gasification

Moderator Venkat Venkataraman, NETL

Co-Moderator Diane Revay Madden, NETL

9:45 AM **Advanced Oxygen Separation from Air Using a Novel Mixed Matrix Membrane,**
FWP-B000-18-061
Frederick Stewart, Idaho National Laboratory (INL)

10:15 AM **Radically Engineered Modular Air Separation System Using Tailored Oxygen Sorbents,**
FE0031521
Fanxing Li, North Carolina State University

10:45 AM **Pilot Testing of a Modular Oxygen Production System Using Oxygen Binding**
Adsorbents, FE0031527
John Carpenter, Research Triangle Institute (RTI)

11:15 AM **Modularization of Ceramic Hollow Fiber Membrane Technology for Air Separation,**
FE0031473
Xingjian (Chris) Xue, University of South Carolina

11:45 AM **Break**

12:00 PM **Pressure Driven Oxygen Separation, FWP-73130**
David Reed, Pacific Northwest National Laboratory (PNNL)

12:30 PM **High Selectivity and High Throughput Carbon Molecular Sieve Hollow Fiber Membrane**
Based Modular Air Separation Unit for Producing High Purity O₂,
FWP-FE-1049-18-FY19
Raj Singh, Los Alamos National Laboratory (LANL)

1:00 PM Oxygen Production for Gasification , NETL FWP 1022405, Task 5.1
Jonathan Lekse, NETL-RIC\

1:30 PM **Magnetocaloric Cryogenic System for High Efficiency Air Separations, FWP-73143** John
Barclay, Pacific Northwest National Laboratory (PNNL)

2:00 PM **Break**

Gasification with Mixed Feedstocks & Flexible Operations

Moderator Diane Revay Madden, NETL

Co-Moderator Steve Markovich, NETL

- 2:15 PM Experimental Validation of Coal Gasification with Neutron Imaging, FWP-FEAB325**
James Parks II, Oak Ridge National Laboratory (ORNL)
- 2:45 PM Advanced Gasifier Design, NETL FWP 1022405, Task 3**
William Rogers, NETL-RIC
- 3:15 PM Making Coal Relevant for Small Scale Applications: Modular Gasification for Syngas/Engine
CHP Applications in Challenging Environments, FE0031601**
Brent Sheets, University of Alaska - Fairbanks
- 3:45 PM Advanced Manufacturing Technologies for Gasification, NETL FWP 1022405, Task 4**
Jinichiro Nakano, NETL-RIC
- 4:15 PM Small-Scale Engineered High Flexibility Gasifier, FE0031531**
Mikhail Granovskiy, Southern Research Institute
- 4:45 PM Conversion of Coal Wastes and Municipal Solids Mixtures by Pyrolysis Torrefaction and
Entrained Flow Gasification, SC0018580**
Nicholas Schwartz, Mainstream Engineering Corporation
- 5:15 PM Adjourn**



**2020 GASIFICATION
PROJECT REVIEW MEETING
Virtual Agenda
Thursday, September 3, 2020**

Thursday, September 3, 2020

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Enabling Technologies for Affordable Small Scale Gasifiers

Moderator Steven Markovich, NETL
Co-Moderator Venkat Venkataraman, NETL

- 9:30 AM Microwave Reactions for Gasification, NETL FWP 1022405, Task 2**
Mark Smith, NETL-RIC
- 10:00 AM Advance Syngas Cleanup for Radically Engineered Modular Systems (REMS), FE0031522**
Atish Kataria, Research Triangle Institute (RTI)
- 10:30 AM Staged Opposed Multi Burner (OMB) for Modular Gasifier/Burner, FE0031506**
Kunlei Liu, University of Kentucky Research Foundation
- 11:00 AM Integrated Water-Gas-Shift (WGS) / Pre-Combustion Carbon Capture Process, FE0023684**
Gokhan Alptekin, TDA Research, Inc.
- 11:30 AM Warm Gas Multi-Contaminant Removal System, SC0008243**
Gokhan Alptekin, TDA Research, Inc.
- 12:00 PM Adjourn**