

FY11 Advanced Fuels Peer Review



**Waterfront Place Hotel
Morgantown, WV
October 18-22, 2010**

AGENDA

Monday, October 18, 2010 – Salon D

- 7:00 – 8:00 a.m. **Registration – Foyer D**
- 8:00 – 9:00 a.m. **Peer Review Panel Kick Off Meeting – Open to NETL and ASME staff only**
- Review of ASME Process – Michael Tinkleman/Ross Brindle, ASME
 - Role of Panel Chair – Daniel J. Kubek, ASME
 - Role of NETL – José Figueroa, NETL
 - Meeting logistics/completion of forms – Justin Strock/Nicole Ryan, NISC/IBM
- 9:00 – 9:45 a.m. **Overview – Open to NETL and ASME staff only**
- Advanced Fuels Technology Manager – Daniel Driscoll, National Energy Technology Laboratory (NETL)
- 9:45 – 10:00 a.m. **BREAK – Foyer D**
- 10:00 – 10:45 a.m. **01 - Project # FE0004001.410.01.22 – Analysis of Coal to Hydrogen Systems – Larry Rath, National Energy Technology Laboratory (NETL) / Booz Allen Hamilton (BAH)**
- 10:45 – 11:15 a.m. Q&A
- 11:15 – 11:55 a.m. Discussion, evaluation, and written comments
- 11:55 – 12:55 p.m. **Lunch (on your own)**
- 12:55 – 1:40 p.m. **02 - Project # NT42469 – Scale-Up of Hydrogen Transport Membranes for IGCC and FutureGen Plants – Carl R. Evenson, Eltron Research Inc.**
- 1:40 – 2:10 p.m. Q&A
- 2:10 – 2:50 p.m. Discussion, evaluation, and written comments

Monday, October 18, 2010 – Salon D

- 2:50 – 3:05 p.m. **BREAK – Foyer D**
- 3:05 – 3:50 p.m. **03 - Project # FE0004908** – Advanced Hydrogen Transport Membranes for Coal Gasification –
Joseph Schwartz, Praxair
- 3:50 – 4:20 p.m. Q&A
- 4:20 – 5:00 p.m. Discussion, evaluation, and written comments
- 5:00 – 5:15 p.m. **BREAK – Foyer D**
- 5:15 – 6:00 p.m. **04 - Project # NT43058** – Composite Pd and Alloy Porous Stainless Steel Membranes for
Hydrogen Production and Process Intensification –
Yi Hua Ma, Worcester Polytechnic Institute (WPI)
- 6:00 – 6:30 p.m. Q&A
- 6:30 – 7:10 p.m. Discussion, evaluation, and written comments

Tuesday, October 19, 2010 – Salon D

- 7:00 – 8:00 a.m. **Registration – Foyer D**
- 8:00 – 8:45 a.m. **05 - Project # FE0004967** – Advanced Palladium Membrane Scale-up for Hydrogen Separation –
Sean C. Emerson, United Technologies Research Center (UTRC)
- 8:45 – 9:15 a.m. Q&A
- 9:15 – 9:55 a.m. Discussion, evaluation, and written comments
- 9:55 – 10:10 a.m. **BREAK – Foyer D**
- 10:10 – 10:55 a.m. **06 - Project # FY10.MSE.1610884.663** – Coal & Biomass Derived Fuels –
Charles E. Taylor, National Energy Technology Laboratory (NETL)
- 10:55 – 11:25 a.m. Q&A
- 11:25 – 12:05 p.m. Discussion, evaluation, and written comments
- 12:05 – 1:05 p.m. **Lunch (on your own)**
- 1:05 – 1:50 p.m. **07 - Project # FWP-49601** – Development of Dense Ceramic Membranes for Hydrogen
Separation –
U. (Balu) Balachandran, Argonne National Laboratory (ANL)
- 1:50 – 2:20 p.m. Q&A
- 2:20 – 3:00 p.m. Discussion, evaluation, and written comments
- 3:00 – 3:15 p.m. **BREAK – Foyer D**
- 3:15 – 4:00 p.m. **08 - Project # FE0000507** – Demonstration of Pressurizing Coal/Biomass Mixtures Using
Posimetric Solids Pump Technology –
Tiffany E. Westendorf, GE Global Research
- 4:00 – 4:30 p.m. Q&A
- 4:30 – 5:10 p.m. Discussion, evaluation, and written comments

Wednesday, October 20, 2010 – Salon D

- 7:00 – 8:00 a.m. **Registration – Foyer D**
- 8:00 – 8:45 a.m. **09 - Project # NT42465** – National Center for Hydrogen Technology –
Michael J. Holmes and Josh Stanislawski, University of North Dakota (UNDEERC)
- 8:45 – 9:15 a.m. Q&A
- 9:15 – 9:55 a.m. Discussion, evaluation, and written comments
- 9:55 – 10:10 a.m. **BREAK – Foyer D**
- 10:10 – 10:55 a.m. **10 - Project # FE0001009** – Nanoporous, Metal Carbide, Surface Diffusion Membranes for High
Temperature Hydrogen Separations –
J. Douglas Way, Colorado School of Mines (CSM)
- 10:55 – 11:25 a.m. Q&A
- 11:25 – 12:05 p.m. Discussion, evaluation, and written comments
- 12:05 – 1:05 p.m. **Lunch (on your own)**
- 1:05 – 1:50 p.m. **11 - Project # FE0001293** – Integrated Water Gas Shift Membrane Reactors Utilizing Novel, Non-
Precious Metal Mixed Matrix Membranes –
John P. Ferraris, University of Texas at Dallas (UTD)
- 1:50 – 2:20 p.m. Q&A
- 2:20 – 3:00 p.m. Discussion, evaluation, and written comments
- 3:00 – 3:15 p.m. **BREAK – Foyer D**
- 3:15 – 4:00 p.m. **12 - Project # NT42456** – Production and Storage of Hydrogen from Coal Using C1 Chemistry –
*Gerald P. Huffman, University of Kentucky - Consortium for Fossil Fuel Liquefaction
Science (CFFLS)*
Christopher Roberts and Mario Eden, Auburn University
- 4:00 – 4:30 p.m. Q&A
- 4:30 – 5:10 p.m. Discussion, evaluation, and written comments
- 5:10 – 5:25 p.m. **BREAK – Foyer D**
- 5:25 – 6:10 p.m. **13 - Project # FE0001248** – Yeager Airport Hydrogen Vehicle Test Project –
William A. Davis, West Virginia University Research Corporation (WVU)
- 6:10 – 6:40 p.m. Q&A
- 6:40 – 7:20 p.m. Discussion, evaluation, and written comments

Thursday, October 21, 2010 – Salon D

- 7:00 – 8:00 a.m. **Registration – Foyer D**
- 8:00 – 8:45 a.m. **14 - Project # NT0005988** – Coal Fuels Alliance: Design and Construction of Early Lead Mini
Fischer-Tropsch Refinery –
Rodney Andrews, University of Kentucky - Center for Applied Energy Research (CAER)
- 8:45 – 9:15 a.m. Q&A
- 9:15 – 9:55 a.m. Discussion, evaluation, and written comments

Thursday, October 21, 2010 – Salon D

- 9:55 – 10:10 a.m. **BREAK – Foyer D**
- 10:10 – 10:55 a.m. **15 - Project # NT42449** – Production of High-Hydrogen Content Coal-Derived Liquids –
Stephen P. Bergin and Burtron H. Davis, Integrated Concepts and Research Corporation (ICRC)
- 10:55 – 11:25 a.m. Q&A
- 11:25 – 12:05 p.m. Discussion, evaluation, and written comments
- 12:05 – 1:05 p.m. **Lunch (on your own)**
- 1:05 – 1:50 p.m. **16 - Project # NT42761** – Enhanced Hydrogen Economics Via Co-Production of Fuels and Carbon Products –
Elliot B. Kennel, West Virginia University (WVU)
- 1:50 – 2:20 p.m. Q&A
- 2:20 – 3:00 p.m. Discussion, evaluation, and written comments
- 3:00 – 3:15 p.m. **BREAK – Foyer D**
- 3:15 – 4:00 p.m. **17 - Project # FE0000435** – Methanol Economy –
G. K. Surya Prakash and Robert Aniszfeld, University of Southern California (USC)
- 4:00 – 4:30 p.m. Q&A
- 4:30 – 5:10 p.m. Discussion, evaluation, and written comments
- 5:10 – 5:25 p.m. **BREAK – Foyer D**
- 5:25 – 6:25 p.m. **18 - Project # NT42457 / FE0000699** – Continuation of Crosscutting Technology Development at CAST –
Rick Honaker, University of Kentucky Research Foundation (UKY)
Roe-Hoan Yoon and Christopher Hull, Virginia Polytechnic Institute & State University (VPI)
- 6:25 – 6:55 p.m. Q&A
- 6:55 – 7:35 p.m. Discussion, evaluation, and written comments

Friday, October 22, 2010 – Salon D

- 7:00 – 8:00 a.m. **Registration – Foyer D**
- 8:00 – 8:45 a.m. **19 - Project # NT42804** – Long-Term Environmental and Economic Impacts of Coal Liquefaction in China –
Jerald J. Fletcher, West Virginia University (WVU)
- 8:45 – 9:15 a.m. Q&A
- 9:15 – 9:55 a.m. Discussion, evaluation, and written comments
- 9:55 – 10:10 a.m. **BREAK – Foyer D**
- 10:10 – 12:10 p.m. **Meeting Wrap-up Session**

