

15th Annual SECA Workshop Sheraton-Station Square Pittsburgh, PA July 22-23, 2014

AGENDA

Tuesday July 22, 2014 – Grand Station II

- 7:30 – 9:00 a.m. Registration – Grand Station Foyer
Continental Breakfast – Grand Station III-V
- Plenary Talks Moderator: Travis Shultz, U.S. DOE, NETL**
- 9:00 – 9:05 am Welcome and Introduction
Heather Quedenfeld, Director of Advanced Energy Systems Division
U.S. Department of Energy, National Energy Technology Laboratory
- 9:05 – 9:30 am NETL’s Fuel Cell Program Overview
Shailesh Vora, Technology Manager for Fuel Cells
U.S. Department of Energy, National Energy Technology Laboratory
- 9:30 – 10:00 am Reliable Electricity Based on Electrochemical Systems (REBELS)
Lower Cost Devices with New Functionality
John Lemmon, U.S. Department of Energy, ARPA-E Program Director
- 10:00 – 10:30 am BREAK – Grand Station III-V**
- 10:30 – 11:00 am IGFC and NGFC Pathway Studies – Estimation of Stack Degradation
Costs and Salient Results
Arun Iyengar, Booz Allen Hamilton
- Industry Teams Moderator: Joseph Stoffa, U.S. DOE, NETL
National Energy Technology Laboratory**
- 11:00 – 11:45 am Solid Oxide Fuel Cell Power System Development
Rick Kerr, Delphi
- 11:45 – 1:00 pm LUNCH (on your own)**

- 1:00 – 1:45 pm LGFCS SOFC Technology and SECA Program Update
Rich Goettler, LG Fuel Cell Systems Inc.
- 1:45 – 2:30 pm Advances in Development of SOFC Technology at FuelCell Energy
Hossein Ghezeli-Ayagh, FuelCell Energy, Inc.

2:30 – 3:00 pm BREAK – Grand Station III-V

PNNL, ORNL, and NETL - ORD Support for SECA: Joseph Stoffa, U.S. DOE, NETL

- 3:00 – 3:45 pm Joint presentation from PNNL and ORNL on Engineered Glass Seal for SOFCs
Jeff Stevenson, Pacific Northwest National Laboratory
Edgar Lara-Curzio, Oak Ridge National Laboratory
- 3:45 – 4:15 pm SOFC Operational Degradation: Models and Diagnostic Tools
Kirk Gerdes, U.S. Department of Energy
National Energy Technology Laboratory

Cathodes Moderator: Briggs White, U.S. DOE, NETL

- 4:15 – 4:45 pm Revealing Cathode Surfaces under Operations
William Chueh, Stanford University

4:45 pm ADJOURN

- 5:00 – 6:45 pm Poster Session/Reception – Grand Station III-V

Wednesday July 23, 2014 – Grand Station II

- 7:00 – 8:00 am Registration - Grand Station Foyer
Continental Breakfast – Grand Station III-V**

Plenary Talks Moderator: Joseph Stoffa, U.S. DOE, NETL

- 8:00 – 8:30 am Interconnect Studies under the SECA program
Briggs White, Advanced Energy Systems Division,
U.S. Department of Energy, National Energy Technology Laboratory

Cathodes Moderator: Briggs White, U.S. DOE, NETL

- 8:30 – 9:00 am Enhancement of SOFC Cathode Electrochemical Performance Using Multi-Phase Interfaces
Dane Morgan, University of Wisconsin

- 9:00 – 9:30 am Carbon Dioxide Effects on LSCF Cathodes for Solid Oxide Fuel Cells
Srikanth Gopalan, Boston University
- 9:30 – 10:00 am Study of the Durability of Doped Lanthanum Manganite and Cobaltite
Based Cathode Materials under “Real World” Air Exposure Atmospheres
Prabhakar Singh, University of Connecticut
- 10:00 – 10:30 am **BREAK – Grand Station III-V**
- 10:30 – 11:00 am Mechanistic Enhancement of SOFC Cathode Durability
Eric Wachsman, University of Maryland Energy Research Center
- 11:00 – 11:30 am Understanding the Effect of Contaminants on Cathode Performance
Meilin Liu, Georgia Institute of Technology
- 11:30 – 12:00 pm Fundamental Understanding of Oxygen Reduction and Reaction
Behavior and Developing High Performance and Stable Hetero-
structured Cathodes
Xingbo Liu, West Virginia University
- 12:00 – 1:30 pm **LUNCH (on your own)**
- 1:30 – 2:00 pm Solid-Oxide Fuel Cell Cathode Enhancement Through a Vacuum-
Assisted Infiltration Technique
Greg Tao, Materials and Systems Research Inc.
- Core Technology Projects Moderator: Patcharin Burke U.S. DOE, NETL**
- 2:00 – 2:30 pm Modeling Tools for SOFC Design and Analysis
Brian Koeppel, Pacific Northwest National Laboratory
- 2:30 – 3:00 pm SOFC Protection Coatings Based on a Cost-Effective Aluminization
Process
Neil Kidner, NexTech
- 3:00 pm **WORKSHOP CLOSES**

