

### **AGENDA**

Sheraton Grand Phoenix, 340 N. 3<sup>rd</sup> St, Phoenix, AZ 85004 Rooms: Estrella (Main), Ahwatukee A and B (Breakouts)

Organized by National Renewable Energy Laboratory and Los Alamos National Laboratory Sponsored by U.S. Department of Energy Fuel Cell Technologies Office

### **OBJECTIVE:**

The Alkaline Membrane Fuel Cell Workshop will share information and identify the current status and the research and development needs for Alkaline Membrane Fuel Cell (AMFC) technology. The goals, building on prior workshop efforts, include assessing the current state of AMFC technology; identifying limitations, performance potential, and key research and development needs for AMFC technology; identifying early market and longer-term applications; and discussing test protocols, milestones and metrics for cells and components.

# **WORKSHOP ACTIVITIES INCLUDE:**

- Expert presentations on the status of the field and key technical issues and challenges
- Breakout sessions to identify and discuss:
  - Research challenges and R&D needs
  - o Technology status, protocols, and milestones

## **DESIRED OUTCOMES INCLUDE:**

- Summary of key technical challenges and research and development needs to develop cost competitive AMFCs.
- Summary of current status of AMFC technology as well as potential test protocols and metrics to assist in guiding AMFC development.
- A workshop report to publicly disseminate the findings

### FRIDAY, APRIL 1, 2016

8:00 - 8:15 am Welcome and Opening Remarks: Dimitrios Papageorgopoulos (DOE)

8:15 - 8:30 am Workshop Overview: Bryan Pivovar (NREL)

# Alkaline Membrane Fuel Cell Workshop

8:30 - 8:50 am	AMFC Challenges-Anion Exchange Membrane: Chulsung Bae (RPI)
8:50 - 9:15 am	AMFC Challenges-Electrocatalysis: Yushan Yan (U. Delaware)
9:15 - 9:30 am	BREAK
9:30 - 10:00 am	AMFC Challenges-Membrane Electrode Assembly: Yu Seung Kim (LANL)
10:00 -10:20 am	AMFC Challenges-System/Other Issues (Water/Carbonate): Miles Page (Elbit Energy)
10:20 -12:00	BREAKOUT SESSION Session 1: Research Challenges/R&D Needs AEM – Leader: Michael Hickner, Penn State University (Estrella Main Room) MEA/System – Leader: Adam Weber, LBNL (Ahwatukee A Room) Catalysts – Leader: Jacob Spendelow, LANL (Ahwatukee B Room)
12:00 -1:20 pm	LUNCH – ON YOUR OWN
1:20 – 2:20 pm	Joint Session – Out Brief from Breakout Session 1
2:20 – 2:45 pm	AMFC Status: Dario Dekel (Technion – IIT)
2:45 - 3:00 pm	BREAK
3:00 – 4:10 pm	BREAKOUT SESSION  Session 2: Status, Protocols, Milestones  AEM – Leader: Michael Hickner, Penn State University (Estrella Main Room)  MEA/System – Leader: Adam Weber, LBNL (Ahwatukee A Room)  Catalysts – Leader: Jacob Spendelow, LANL (Ahwatukee B Room)
4:10 – 5:00 pm	Joint Session – Out Brief from Breakout Session 2
5:00 pm	Concluding Remarks: David Peterson (DOE)