

**DOE-EERE Durability Working Group Meeting
October 10, 2010**

Agenda

- 6 pm Welcome and introductory comments
Debbie Myers (Argonne) and Rod Borup (Los Alamos) – co-chairs
- 6:15 pm Overview of electrocatalyst and support degradation mechanisms
Sarah Ball, Johnson Matthey Fuel Cells
- 6:45 pm Discussion/presentations by project PIs/representatives (5-10 minutes each)
- Overview of electrocatalyst and support degradation aspects of projects
 - Protocols/testing procedures/diagnostics used to resolve the electrocatalyst and support degradation mechanisms

 - Ballard, Nuvera, LANL-Borup, Argonne, DuPont, UTC Power, LANL-Mukund, NREL, HNEL, 3M
- 8:15 pm Discussion on relevance and impact of degradation studies of each stack component
Led by Rod Borup
- Discussion on standardized generic start-up and shut-down protocols encompassing air-air start-ups
Led by Ballard
- 8:50 pm Wrap-up, discussion of future action items
- 9:00 pm Adjourn

Action Items

- 1. PEFC start-up protocol**
Assigned to:
Greg James (Ballard) – lead
Rod Borup (LANL)
Mike Perry (UTRC)

- 2. Accelerated stress test for non-carbon supports (e.g., metal oxides)**
Proposed by: Shyam Kocha (NREL)
Assigned to:
Shyam Kocha (NREL) - lead
Mahlon Wilson and Eric Brosha (LANL)

- 3. Aqueous electrolyte accelerated stress test protocols for PGM-based ORR catalysts, uniformity of Go/No-Go decisions within catalyst development projects, relevance of aqueous electrolyte stress tests to MEA**
Proposed by: Plamen Atanassov (UNM)
Assigned to:
Debbie Myers (ANL) - lead
Plamen Atanassov (UNM)
Radoslav Atanasoski (3M)
Jerzy Chlistunoff (LANL)

- 4. Accelerated stress test protocol development for Non-PGM Catalysts (aqueous and MEA)**
Proposed by: Plamen Atanassov (UNM)

Assigned to:

Jerzy Chlistunoff (LANL) - lead
Plamen Atanassov
Piotr Zelenay (LANL)

5. List of evidence of decay of components and of specific decay mechanisms either published or data from DOE durability projects

Proposed by: Mike Perry (UTRC)

Assigned to:

D. Myers (ANL) to request information from durability working group by e-mail and to establish folder on SharePoint site. D. Myers to request copies of presentations from ECS presenters in this topic area
Entire DWG

6. Prioritization of component degradation studies

Proposed by: Rod Borup (LANL)

Note: Spreadsheet has been drafted by R. Borup, preliminary prioritization in R. Borup's Las Vegas DWG meeting presentation

Assigned to:

R. Borup to circulate draft of spreadsheet for input from DWG members

- **Suggest coordination between groups assigned to Action Items 3 and 4.**
- **Results of action items to be reported at Spring, 2011 DWG meeting (Washington D.C., May 9-13).**