

DOE CATALYSIS WORKING GROUP MEETING

January 21, 2015

Los Alamos National Laboratory, Los Alamos, New Mexico
Quantum Institute Room, MPA-11, Building SM-40, Technical Area 3 (TA-3)

Co-Chairs: Piotr Zelenay (LANL) and Nancy Garland (DOE)

Agenda

- 8:30 - 9:00** **Arrival; coffee, soft drinks, bagels & doughnuts**
- 9:00 - 9:05 *Welcome and Introduction*
Nancy Garland (DOE) and Piotr Zelenay (LANL)
- 9:05 - 11:15 Final Discussion of Non-Precious Metal Catalyst Performance
Targets and Protocols
- 9:05 *Summary of the Process to Date*
Piotr Zelenay (LANL)
- 9:35 *Discussion*
Plamen Atanassov (UNM)
Scott Calabrese Barton (Michigan State)
Nilesh Dale (Nissan)
Barr Halevi (Pajarito Powder)
Di-Jia Liu (ANL)
Sanjeev Mukerjee (Northeastern)
Other participants welcome
- 11:00 *Summary and Path Forward*
Nancy Garland (DOE)
- 11:15 - 11:55 *Microstructural Characterization of Non-PGM ORR Catalysts*
Karren More (ORNL)
- 11:55 - 13:15** **Lunch in LANL Cafeteria (short walk)**
- 13:15 - 13:55 *Catalysts with Ultra-Low PGM Content*
Vojislav Stamenkovic (ANL)
- 13:55 - 14:20 *Improving Stability and Activity of Pt Monolayer in Non-Pt
Core-Shell Electrocatalysts*
Radoslav Adzic (BNL)

- 14:20 - 15:00 *Microstructural Characterization of Extended Surface PGM Catalysts by Advanced Electron Microscopy Methods*
David Cullen (ORNL)
- 15:00 - 15:15 *Challenge of Catalyst Scale-up for MEA Integration*
Madeleine Odgaard (IRD Fuel Cells)
- 15:15 - 15:45 *Scale-up Challenges of Novel (Pt-centric) Catalysts*
Bryan Pivovar (NREL)
- 15:45 - 16:10 *Engendering Poison Tolerance in PGM Catalysts; Possible New Directions in Electrocatalysis*
Sanjeev Mukerjee (Northeastern University)
- 16:10 - 16:20 *Very Brief Account from Electrocatalysis-Relevant Discussion at Durability Working Group in Chicago Last December*
Rod Borup (LANL)
- 16:20 - 16:40 Catalysis Working Group – Near-Future Tasks
- 16:40 - 17:00 Miscellaneous items; wrap-up
- 17:00 Adjourn

19:00 Dinner in a Santa Fe restaurant (TBD; no host)