

AGENDA

Thursday, April 24, 2008

STEWART CENTER, ROOM 314

- 7:15–8:00 AM Registration (STEW 314) & Continental Breakfast (STEW 310)
- 8:00–8:05 AM Symposium Welcome
Symposium Chair: Mahdi Abu-Omar
- 8:05–8:20 AM Overview of Purdue's Energy Center at Discovery Park & Hydrogen Activities
Dr. Jay Gore, Director
- 8:20–8:25 AM **SESSION I: STORAGE**
Session Chair: Daniel Raftery, Purdue University
- 8:25–9:10 AM **KEYNOTE: Computational Approaches to the Prediction of Molecular Properties for Chemical Hydrogen Storage**
David Dixon, University of Alabama
- 9:10– 9:35 AM Solid State Chemical Hydrogen in NHxBH_x Materials
Tom Autrey, Pacific Northwest National Laboratory
- 9:35–10:00 AM An Overview of U.S. DOE Hydrogen Program R&D Activities in Hydrogen Storage Materials
John Kopasz, Argonne National Laboratory
- 10:00–10:25 AM Break–STEW 310
- 10:25–11:10 AM **KEYNOTE: Materials Aspect of Hydrogen Storage for Transportation Applications**
Gholam-Abbas Nazri, General Motors Research & Development Center
- 11:10–11:35 AM Chemical Hydrogen Storage Research at Los Alamos National Laboratory
John Gordon, Los Alamos National Laboratory
- 11:35 - 12:00 PM Hydrogen Storage Activities in the DOE Metal Hydride Center of Excellence
Ewa Ronnebro, Sandia National Laboratory
- 12:00–1:15 PM Luncheon–East & West Faculty Lounges, Purdue Memorial Union

AGENDA

Thursday, April 24, 2008 (continued)

STEWART CENTER, ROOM 314

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| 1:30 - 1:35 PM | SESSION II: CATALYSIS & FUEL CELL RESEARCH
<i>Session Chair: Fabio Ribeiro, Purdue University</i> |
| 1:35–2:20 PM | KEYNOTE: An Energy-Based Approach to the Development of Molecular Catalysts for H₂ Oxidation and Production
<i>Daniel DuBois, Pacific Northwest National Laboratory</i> |
| 2:20–2:45 PM | U.S. Fuel Cell Bus Evaluation
<i>Leslie Eudy, National Renewable Energy Laboratory</i> |
| 2:45–3:10 PM | Fundamental Studies of Model Electrocatalysts for Fuel-Cell Cathodes
<i>Hoydoo You, Argonne National Laboratory</i> |
| 3:10–3:40 PM | Break–STEW 310 |
| 3:40–4:05 PM | Non-Precious Metal Catalysts for PEM Fuel Cell
<i>Radoslav Atanasoski, 3M</i> |
| 4:05–4:30 PM | Electrode Materials For Solid Oxide Fuel Cells
<i>Scott Barnett, Northwestern University</i> |
| 4:45–5:00 PM | Bus Transport from Stewart Center to Ross-Ade Stadium |
| 5:00–6:30 PM | Reception and Poster Session–Buchanan Room, Ross-Ade Stadium |
| 6:30–9:00 PM | Dinner and H.C. Brown Award Banquet–Buchanan Room, Ross-Ade Stadium |
| 9:00–9:15 PM | Bus Transport from Ross-Ade Stadium to Purdue Memorial Union |

AGENDA

Friday, April 25, 2008

STEWART CENTER, ROOM. 314

- 7:15–7:55 AM Continental Breakfast and Coffee (STEW 314)
- 7:55–8:00 AM Opening Remarks
Symposium Chair: Mahdi Abu-Omar
- 8:00–8:05 AM **SESSION I: MATERIALS FOR FUEL CELLS**
Session Chair: Kyoung-Shin Choi, Purdue University
- 8:05–8:50 AM **KEYNOTE: Low Temperature Functionalization of Small Molecules and Applications to Energy Storage**
Roy Periana, Scripps Research Institute-Florida
- 8:50–9:15 AM Novel Proton Conductive Membranes Derived from 1,3-Cyclohexadiene
Jimmy Mays, University of Tennessee
- 9:15–9:40 AM New High Temperature Polymer Electrolyte Membranes: Influence of the Chemical Structure on Their Properties
Morton Litt, Case Western Reserve University
- 9:40–10:05 AM The Nanostructure of Nafion from Small-Angle Scattering and NMR Analysis
Klaus Schmidt-Rohr, Iowa State University
- 10:05–10:30 PM Materials Issues for Photoelectrochemical Water Splitting: Chalcopyrite Thin-Films and III-V Nitrides
John Turner, National Renewable Energy Laboratory
- 10:30–10:45 AM Break–STEW 314
- 10:45–10:50 AM **SESSION II: PRODUCTION & DELIVERY**
Session Chair: Steve Son, Purdue University
- 10:50–11:15 AM Hydrogen Production from Bio-derived Liquids
Yong Wang, Pacific Northwest National Laboratory
- 11:15–11:40 AM Hydrogen Supply Options Including the Development of an On-Site Hydrogen Production System for Vehicle Fueling Stations
Tim Aaron, Praxair, Inc.
- 11:40–12:05 PM Multi-Layered Polymer and Polymer/Metal Materials for Large- and Small-Scale Hydrogen Delivery
James Blencoe, Hydrogen Discoveries, Inc.
- 12:05–1:30 PM Boxed Lunch Option for Lab Tour Participants (please register)
- 1:30–4:00 PM **Scheduled Lab Tours–Meet Bus Outside Purdue Memorial Union**
- 1:30–2:30 PM Maurice J. Zucrow Laboratories
- 3:00–4:00 PM Birck Nanotechnology Center