

Electrochemical Engineering and Energy Conversion Workshop

Sponsored by:
*Center for Electrochemical Science and Engineering
Department of Chemical and Biological Engineering
AI Cell Technologies*

Location: Hermann Hall- Alumni Lounge; Time: October 25th 2007; 8:30 AM to 5:00 PM

8:30 AM – 9:00 AM: Breakfast and registration

9:00 AM – 9:05 AM: *Welcome+ Introduction* (Prof. Fouad Teymour, Chairman, Dept. of Chemical and Biological Engineering; IIT)

9:05 AM – 9:15 AM: *Electrochemical center overview* (Prof. Jai Prakash; Director, CESE; IIT)

9:15 AM – 10:00 AM: *Li-Ion Batteries for Transportation Applications* (Gary Henriksen; Argonne National Laboratory)

10:00AM – 10:45 AM: *Developments in Solar Energy Technology and Activities at ECN* (Prof. Bert Plomp, ECN, The Netherlands))

10:45 AM – 11:05 AM: Discussion + Coffee Break

11:05 AM – 11:25 AM: *Electrochemical Impedance Spectroscopy (EIS) modeling for Core-Shell type cathode material in Li-Ion Cells* (Shabab Amiruddin and Jai Prakash; IIT)

11:25 AM – 11:45 PM: *Closed-Loop Control Of A PEMFC: The Impact And Control Of Vehicle Loads* (Syed Ahmed and D. J. Chmielewski; IIT)

11:45 AM – 12:05 PM: *Pt/MOx/C electrocatalysts for degradation mitigation in PEM fuel cells* (Panagiotis Trogadas and Vijay Ramani; IIT)

12:05 PM – 2:00 PM: Lunch + Posters

2:00 PM – 2:45 PM: *Fundamental Studies of Platinum Electrocatalyst Degradation and Non-Platinum Bimetallic Cathode Electrocatalysts* (Debbie Myers; Argonne National Laboratory)

2:45 PM – 3:05 PM: *SOFc synthesis using Electrostatic Spray Deposition* (Ray Losch, Said Al-Hallaj, and R. Selman; IIT)

3:05 PM – 3:25 PM: Discussion + Coffee Break

3:25 PM – 3:45 PM: *A Comparative Study of Oxygen Reduction Reaction on Carbon Supported Pd-Ni Alloys in Acidic and Alkaline Media* (Bing Li and Jai Parkash; IIT)

3:45 PM – 4:05 PM: *A Novel Flow Field Design for the effective water transportation in polymer electrolyte fuel cells* (Shabab Amiruddin and Jai Prakash; IIT)

4:05 AM – 4:25 PM: *Nonlinear Model Predictive Control of An Autothermal Reforming Reactor* (Yongyou Hu and D. J. Chmielewski; IIT)

4:25 PM – 4:45 PM: *IIT Plug-in Conversion Project with the City of Chicago* (Peter Sveum, Mohammed Khader and Said Al-Hallaj; IIT)

4:45 PM – 5:05 PM: *Effect of IEC of cathode SPEEK binder on kinetic and transport properties of all-SPEEK MEAs* (Satheesh Sambandam and Vijay Ramani; IIT)

5:05 PM – 5:10 PM: Concluding remarks

Directions:

Hermann Hall (see map below) is located close to 33rd and Federal. The Alumni Lounge (Alumni Dining Hall) is located in the lower level. Parking lots are also identified in the map below. A map, with much better resolution, is available online at http://www.iit.edu/about/main_campus_map.html.

Further info about parking and driving directions are available at http://www.iit.edu/about/directions_main.html#parking

