

Battery Congress

TENTATIVE PROGRAM

BATTERY CONGRESS - ANN ARBOR

www.batterycongress.org

April 11-12, 2011

University of Michigan

Michigan League

ANN ARBOR

Michigan, USA

Monday, April 11, 2011

Program: Keynote Session: Towards Carbon Neutral Vehicles

8:30 am to 12:45 pm, Room: **Vandenberg**

SESSION CHAIR

MaryAnn Wright, Vice President Technology and Innovation

Johnson Controls

- 8:30 am **Introduction & Opening Remarks**
MaryAnn Wright, Vice President Technology and Innovation
Johnson Controls
- 8:45 am **The Road to Mass Commercialization of Energy Efficient Vehicles: Today's Full Spectrum of Technology**
MaryAnn Wright, Vice President Technology and Innovation
Johnson Controls
- 9:15 am **U.S. Army's Ground Vehicle Energy Storage R&D Programs**
Sonya Zanardelli, Energy Storage Team Leader
TARDEC
- 9:45 am **Diversified Markets for A123 Nanophosphate Lithium Ion Batteries**
TBD, Vice President
A123 Systems
- 10:15 am **Break**
- 11:00 am **GM Volt Roll-Out**
Warren Parsons
General Motors

11:30 am **Nissan LEAF – D & D**
Kimohiro Nishinura
Nissan

12:00 pm **Q & A PANEL DISCUSSION**

12:30 pm **SESSION ADJOURNED**

12: 30 pm **LUNCH**

Program: Plenary Session: Enabling Technology for Energy Efficient Vehicles

1:30 pm to 7:00 pm, Room: **Vandenberg & Concourse**

SESSION CO – CHAIRS:

Christian Mohrdieck, PhD, Director, Fuel Cell & Battery Drive Development
Daimler

Kimihiro Nishimura, Director,
Nissan

1:30 pm **Start-Stop: A Global Solution for Energy Efficiency Today**
Craig Rigby, Vice President Global Product Engineering,
Johnson Controls

2: 00 pm **Towards Virtual Prototyping of Li-ion Batteries-Challenges in Mechanical Modeling of Electrode/Separator Assembly**
Lallit Anand, PhD
Tom Wierzbicki, PhD, Professor
Massachusetts Institute of Technology

2:30 pm **The Importance of Usable Energy and Efficiency in Lithium Ion Batteries**
Michael Wixom, Sr. Technical Director
A123 Systems

3:00 pm **BREAK**

3:30 pm **TBD**
David Howell, PhD, Vehicle Technologies Program
U.S. Department of Energy

4:00 pm **Thermodynamics and Kinetics of Intrinsic Defects in Lithium Peroxide: Relevance for Non-Aqueous Li-Air Batteries**
Maxwell Radin, PhD
Jill Rodrigues, PhD
Donald Siegel, PhD
University of Michigan

4:30 pm **Q & A – Panel Discussions**

5:00 pm **RECEPTION AT EXHIBITS**

7:00 pm **ADJOURNED**

Tuesday, April 12, 2011

Program: Battery & Vehicle Modeling

8:30 am to 12:30 pm, Room: **Vandenberg**

SESSION CO-CHAIRS

Chi Paik, PhD, Technical Leader

Ford Motor Company

Yi Ding, PhD, Ground Vehicle Power & Mobility Engineer

US Army RDECOM-TARDEC

Warren Parsons, Engineering Group Manager

General Motors

- 8:30 am **Modeling of Batteries for Automotive Propulsion**
Dawn Bernardi, PhD Ford Motor Company
Rajeswari Chandrasekaran, PhD
Ford Motor Company
- 9:00 am **Stresses In a Li-ion Battery Cell**
Xinran Xiao, PhD,
Wei Wu, PhD
- 9: 30 am **Modeling of Lithium-ion Batteries for Crash Safety**
Elham Sahraei, PhD
George Washington University
Rich Hill, PhD,
Massachusetts Institute of Technology
Tomasz Wierzbicki, PhD
Massachusetts Institute of Technology
- 10:00 am **U.S EIS Modeling of Batteries Subjected to Interfacial Process Stimulation**
Bernard Nolan, PhD
UMASS-Dartmouth
Victor Stancovski, PhD
Clean Energy Innovations
- 10:30 am **Break**
- 11:00 am **Test and Modeling of the Electrode/Separator Assembly**
Tomasz Wierzbicki, PhD
Lallit Anand, PhD
Rich Hill, PhD
Massachusetts Institute of Technology
Elham Sahraei, PhD
George Washington University
- 11:30 am **Integration of Battery and Vehicle Model**
Simon Xu, Manager
General Motors

- 12:00 pm **Chevrolet Volt Body: Structure and Energy Storage Package Design**
Monte Taylor, Lead Engineer
General Motors
- 12:30 pm **SESSION ADJOURNED**
- 12: 30 pm **LUNCH**

Program: Advanced Materials, Processes & Characterization

1:30 pm to 6:00 pm, Room: **Vandenberg**

SESSION CO - CHAIRS

Saemin Choi, PhD, Chief Technical Officer

Inmatech

Don Siegel, PhD, Professor

University of Michigan

Mike Wixom, Senior Director

A123 Systems

- 1:30 pm **High Energy Electrodes for Li-ion Batteries: Current Status and Challenges**
Jagjit Nanda, PhD, Staff Scientist
Oak Ridge National Laboratory
- 2: 00 pm **The Synthesis and Characterization of Lithium Titanate Aerogels**
Ryan Maloney, Graduate Assistant
Jeff Sakamoto, PhD, Professor
Michigan State University
- 2:30 pm **In-Situ Characterization of State-of-Charge Kinetics of High-Power Battery
by Neutron Diffraction Technique**
Zhili Feng, PhD, Group Leader
Ke An, PhD
Xun-Li Wang, PhD
Alexandru Stocia, PhD
Ling Yang, PhD
Haley Skorpenske
Wei Zhang, PhD
Kevin Rhodes, PhD
Stephen Nagler, PhD
Claus Daniel, PhD
David Wood, PhD
Oak Ridge National Laboratory
J. Kim, PhD
Dow Kokam
Steve Harris, PhD
General Motors
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- 3:00 pm **Application Driven Electrochemistry - A Systems Approach to Energy Storage**
Mike Andrew, Director of Global Affairs, Technology and Innovation,
Johnson Controls
- 3:30 pm **BREAK**
- 4:00 pm **Quantifying Lithium Concentration in a Li-Ion Battery Using Neutron Radiography**
Xinfan Lin, PhD
Jason Siegel, PhD
Anna Stefanopoulou, PhD
University of Michigan
- 4:30 pm **Focused-Ion-Beam Time-of-Flight Secondary Ion Mass Spectrometry (FIB TOF SIMS) Study of SEI Formation in Lithium Ion Batteries**
Peng Lu, PhD
Stephen Harris, PhD
General Motors
- 5:00 pm **Anodes for Batteries**
Timothy Mason, PhD
University of Missouri St. Louis
- 5:30 pm **Plasma Spray Synthesis of Nanostructured V₂O₅ Thin Films for Electrical Energy Storage**
B. C., Satishkumar
Vikram Varadarajan, PhD
Pravansu Mohanty
University of Michigan
Jagjit Nanda, PhD
Staff Scientist
Oak Ridge National Laboratory
- 6:00 pm **ADJOURNED**

[See next page for registration form and other details.](#)
[Fax registration form to: 1-734-418-2356](#)

[Advanced Registration: saving in registration ends February 25, 2011.](#)



GENERAL REGISTRATION FORM

PLEASE ATTACH BUSINESS CARD, PRINT OR TYPE

Name: _____
Title: _____
Company: _____
Mailing Address: _____
City: _____
State/Province: _____ Zip: _____ Country: _____
Daytime Phone: _____ Fax: _____
Email: _____

PLEASE INDICATE BY AN "X" IN THE APPROPRIATE BLANK BOX (ES)

FEES BEFORE FEBRUARY 25, 2011:

I will attend RECEPTION & DINNER on: April 11 (For Full Conference Registrants only)

I will attend CONFERENCE(S) on: April 11 April 12 Fees \$1295 per attendee

FEE SCHEDULE FOR GENERAL REGISTRANT

Registration Fee is \$1295 (**\$1595 after February 25, 2011**) per attendee for Conference

Additional Copies of Proceedings CD are: \$895 per Copy

PAYMENT METHODS: *(All checks must be drawn from U.S. banks in U.S. funds only)*

Make Check Payable to: **GAMC** (Global Automotive Management Council) in the amount of, **US\$**

For Credit Card Payment: AMOUNT _____ MasterCard VISA American-Express

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Signature: _____ Date: _____

Mail or Fax Registration Form by February 25, 2011 to: BATTERY CONGRESS, 5305 Plymouth Road, Ann Arbor, MI 48105, USA.

FAX: (734) 418-2356 PHONE: (734) 418-2365. **REFUND POLICY: NO REFUNDS** after February 25, 2011. There is a 45% service charge on cancellation (s) before February 25, 2011.

