

SAE 2011 Hybrid Vehicle Technologies Symposium

February 9-10, 2011
Hilton Anaheim
Anaheim, California, USA

Event Updates
Enclosed

plus a one-day Electric
Vehicle Symposium

February 11, 2011

See agenda on page 4.

Some Critical Topics Being Addressed:

- Customer expectations of hybrids; EVs
- Electric Vehicles - technology development & market analysis
- Energy management strategies & storage design
- Fuel economy and environmental impacts; Government regulations/ Industry standards
- Future State of hybrids; Future State of EVs



SAE 2011 Hybrid Vehicle Technologies Symposium plus one-day Electric Vehicle Symposium*

Innovation and Application in Vehicle Electrification

Hybrid and electric vehicle technologies are evolving to meet the needs of a multi-dimensional consumer. As these vehicles advance, discussions around corporate strategies, implementation of cutting edge technology and global acceptance become even more pertinent. The *SAE Hybrid Vehicle Technologies Symposium* and *Electric Vehicle Symposium* provide a forum for the delivery on the latest technical innovations with real-world data in electric drives, motors, energy storage, and system engineering from the innovators and OEMs of hybrid and EV technology. The unique format of these symposia gives attendees a mix of presentations and panel discussion to provide a more interactive experience with leading experts in their field. Not only will you get technical perspective but you will hear these experts express their views on topics of energy storage and future trends within the industry.

By attending these symposia you can:

- Gain critical insight on the customers' perspective and expectations of hybrid vehicles
- Learn more about the challenges and innovations in battery technology and energy storage systems design
- Hear about the latest advancements in plug-in hybrid technology
- Network with the leading OEMs and energy storage providers and discuss items most critical to hybrid development and cost reduction via panel discussions

Symposium Organizers



Craig Childers
Air Resources Engineer, Zero
Emissions Vehicle (ZEV),
California Air Resources
Board
(Hybrid & Electric Vehicle)



John M. German
Senior Fellow/
Program Director, ICCT
(Hybrid)



Robert Larsen
Director Emeritus, Center
for Transportation Research,
Energy Systems Division,
Argonne National Laboratory
(Hybrid & Electric Vehicle)



Ming Kuang
Technical Leader, Vehicle
Controls, Hybrid and
Fuel Cell Technologies
Development, Research and
Innovation Center,
Ford Motor Company
(Hybrid & Electric Vehicle)



Owen Thunes
Electric & Fuel Cell Vehicle
Engineer,
Nissan Motors
(Hybrid & Electric Vehicle)



Justin Ward
Advanced Powertrain
Program Manager,
Advanced Powertrain - FC &
HV Groups, Toyota Technical
Center
(Hybrid & Electric Vehicle)

***Separate registration is required for the one-day Electric Vehicle Symposium; see registration information on page 5 for details**

HYBRID SYMPOSIUM FEATURES

Networking Receptions

Following the presentations on Wednesday and Thursday, take the opportunity to socialize with organizers, speakers, panelists and fellow attendees in networking receptions surrounded by companies exhibiting technology and products that are at the forefront of industry advancement. This is a great opportunity to mingle with some of the greatest minds developing hybrids and EVs in an informal and relaxed environment.

Exhibition – This exhibition has sold out the last 3 years!

Visit the tabletop displays to learn about the newest Hybrid and Electric Vehicle technology solutions from around the globe.

Exhibitors (as of 12-03-10):

Arens Controls Company LLC

AVL

The Bergquist Company

CD-adapco

D&V Electronics Ltd.

DG Technologies

Delphi

DSM Engineering Plastics

dSPACE Inc.

ebmpapst Automotive & Drives Inc.

ETAS Inc.

FEV Inc.

Horiba

IFP Energies nouvelles

Infineon Technologies

Intertek

KOSTAL Kontakt Systeme

Leoni Cable Inc.

LG Chem Power Inc.

LMS North America

Opal-RT Technologies Inc.

Ricardo Inc.

SBE Inc.

Scuderi Air-Hybrid Engine

Semikron Inc.

Solvay Advanced Polymers LLC

TM4 Inc.

Tridus Magnetics & Assemblies

Tyco Electronics Corp.

Victrix Polymer Solutions

Supplier Discussions

Each supplier will address a specific technology development and demonstrate what that advancement means to the development of the HEV/PHEV industry. Attendees will come away with a deeper appreciation of a specific issue and new knowledge of how it can be addressed by a given technology.

Technology focus for 2011:

E-Motors, Power Electronics, Powertrain



HYBRID SYMPOSIUM FEATURES

Panel Discussions

The SAE 2011 Hybrid Vehicle Technologies Symposium will again feature two panel discussions addressing key issues effecting hybrid development and market penetration.

Energy Storage Systems

The focus of this panel will be those issues most critical to advancing the current state of energy storage. Among these are technology, lowering costs, improved performance, energy use, material and component supply for the pipeline. Panelists will also discuss business cases being made for manufacturing in the United States versus other parts of the world. Finally, discussion of regulatory and warranty issues and customer expectations will be included.

Moderator: **John German**, Senior Fellow/Program Director, ICCT

Theme: **Are Energy Storage Systems Ready for Prime Time?**

Confirmed panelists (as of 12-03-10):

Khalil Amine, Argonne National Laboratory

Menahem Anderman, Advanced Automotive Batteries

Prabhakar Patil, CPI

Tom Watson, JCI

Hidetoshi Kadota, Nissan

A123 - Speaker TBD

OEM

Hear leading OEMs in PHEV and HEV as they address audience's questions and discuss the issues most pertinent to producing higher volume, lower cost vehicles. Hear their opinions on regulations, standards, system designs and energy storage. Finally, listen as the panelists discuss what needs to happen to ensure the success of this technology in today's marketplace. Come prepared with questions for these experts.

Moderator: **Robert Larsen**, Director Emeritus, Center for Transportation Research, Energy Systems Division, Argonne National Laboratory

Theme: **Challenges of a Complex Marketplace**

Panelists (as of 12-03-10):

Neil Armstrong, Daimler AG

Chuck Gray, Ford

Pete Savagian, GM

Takeo Nishibori, Honda

Seok Joon Kim, Hyundai

Speaker TBD – Nissan

Speaker TBD – Toyota



HYBRID SYMPOSIUM AGENDA

Consumer and Journalist Observations on Hybrids

Consumer Magazine Perspective—Dennis Simanaitis, Road & Track Magazine

Focus Group Studies—Stephen Popiel, Synovate Motoresearch

Consumer Behavior and Risk Aversion—David Greene, ORNL

Consumer Response to HEVs and PHEVs: Real World Result—Ken Kurani, University of California-Davis

PHEV and HEV Technology

PHEV MPG: Standard Test Results versus Expectations of Real-World Results—Michael Duoba, Argonne National Laboratory

Legislation & International Trends Affecting Development of Hybrids—
Speaker TBD

What has Toyota Learned from the PHEV Prius—Speaker TBD, Toyota,

Vehicle Electrification / Energy Storage Technology

Thermal Management—Speaker TBD, Ford Motor Company

Automotive High Power Semiconductor and Packaging Trends for Future E-Mobility Applications—Jochen Hanebeck, Infineon Automotive Division

The Plug-In Hybrid and Electric Vehicle Opportunity—A Critical Assessment of the Emerging Market and its Key Underlying Technology: Li-Ion Batteries – Menahem Anderman, Advanced Automotive Batteries

Li-Air Batteries, Long-Term Durability Testing of Li-Ion Batteries—Khalil Amine, Argonne National Laboratory

Automotive High Power Semiconductor and Packaging Trends for Future E-Mobility Applications—Jochen Hanebeck, Infineon Automotive Division

Energy Storage Systems Panel Discussion—Are Energy Storage Systems Ready for Prime Time?

Supplier Discussions - Technology Advances for HEV/PHEV Development

Electric Powertrain Assembly (EPA) module as a Compelling Technical Solution—Bob Storc, Magna E-Cars

Other Suppliers and Topics TBD

PHEV/ HEVs – OEM Case Studies

Ford Hybrid—Chuck Gray, Ford Motor Company

GM Hybrid—Pete Savagian, GM LLC

Honda Hybrid—Takeo Nishibori, Honda

Mercedes-Benz Hybrid—Neil Armstrong, Daimler AG

Toyota Hybrid—Speaker TBD

Nissan Hybrid—Speaker TBD

Hyundai Hybrid—Speaker TBD

OEM Panel Discussion—Challenges of a Complex Marketplace



ELECTRIC VEHICLE SYMPOSIUM AGENDA HIGHLIGHTS*

February 11, 2011

What will the automotive industry look like in 2020? For most experts the question isn't if, but when will this technology become economically viable for mass usage? Industry experts estimate that between 3-10% of all vehicles on the road will either be extended-range or pure electric vehicles in 2020. The importance of making electric vehicle technologies cost effective and capable of delivering quantifiable improvements in vehicle efficiency becomes a critical tipping point for mass implementation. This event will combine state-of-the-art technology, economic tipping point presentations with technical panel discussions - all designed to give attendees face-to-face networking opportunities with leading professionals associated with this technology. Come participate in this inaugural event that is a natural complement to the Hybrid Symposium.

Technology Presentations

Market Analysis Mini-e—Tom Turrentine, University of California - Davis

PHEV/EV Overview—Mark Duvall, EPRI

Can America Plug In?— Speaker TBD

Successfully Implementing EV Vehicles into Fleet Applications— Speaker TBD

Idaho/Ecotality—John Smart, Idaho National Laboratory

Codes and Standards—Ted Bohn, Argonne National Laboratory

OEMs' Technology/Strategy Case Studies Regarding EV

Ford—Chuck Gray, Ford Motor Company

GM—Pete Savagian, GM LLC

Nissan—Hidetoshi Kadota, Nissan

Mitsubishi—David Patterson, Mitsubishi

Toyota—Speaker TBD

Tesla—Speaker TBD

BMW—Speaker TBD

OEM Panel Discussion: EV Perspective - Competing in the Automotive Market

Join experts from leading Electric Vehicle OEMs as they address your questions and discuss the challenges associated with making EVs a viable part of the transportation landscape. Hear their opinions on regulations, standards, system designs and infrastructure development and what needs to happen to ensure the success of this technology in today's marketplace. Come prepared with questions for these experts.

Moderator: **Craig Childers**, Air Resources Engineer, Zero Emissions Vehicle (ZEV), California Air Resources Board

Planned panelists represent: **Ford, GM, Nissan, Tesla, Mitsubishi, Toyota**

Progressive Insurance Automotive X-PRIZE Keynote Luncheon



Presented by: Steve Wesoloski, Director of Technical Operations, Progressive Insurance Automotive X-PRIZE

The Progressive Insurance Automotive X-PRIZE competition was held over the spring and summer of 2010 with the objective of finding the best vehicles which could achieve at least 100 MPGe (miles-per-gallon of gasoline or the energy equivalent) while meeting a rigorous set of performance and utility metrics based on real-world driving.

*Separate registration is required for the one-day Electric Vehicle Symposium; see registration information on page 5 for details.

REGISTRATION

Registration Categories and Fees

Hybrid Vehicle Technologies Symposium (Feb. 9-10, 2011)		
Category	By 1/21/11	After 1/21/11
SAE Classic Member	\$895	\$995
SAE Premium Member	\$870	\$970
SAE Elite Member	\$845	\$945
Non-Member	\$1,295	\$1,395
Participant (includes moderator, organizer, panelist, presenter)	FREE	FREE
Exhibitor Booth Personnel (Limit 1 per booth) Exhibitor ID# required	FREE	FREE
Electric Vehicle Technologies Day ONLY (Feb. 11, 2011)		
Category	By 1/21/11	After 1/21/11
SAE Member (all levels) (when added to Hybrids Symposium)	\$100	\$100
SAE Member (all levels) – EV Day Only	\$395	\$395
Non-Member	\$495	\$495
Participant (includes moderator, organizer, panelist, presenter)	FREE	FREE
Exhibitor Booth Personnel (Limit 1 per booth) Exhibitor ID# required	FREE	FREE

**SAE Members:
ADD Electric Vehicle
Technologies Day for
only \$100 more**

Save on your registration to both events! www.sae.org/join

Conditions of Sale: Registrations received after January 21, 2011 will automatically be charged the on-site price. NO CHILDREN UNDER THE AGE OF 16 PERMITTED. All cancellations must be received by SAE prior to January 21, 2011. A \$50 processing fee will be assessed for each canceled registration that results in a refund. Refunds for special event/meal tickets will not be processed after January 21, 2011. Refunds will not be issued if cancellation occurs on or after January 21, 2011.



SAE will do what is feasible to make its events reasonably accessible to attendees. If you have special accommodation needs, please let us know in advance by calling 1-877-606-7323 (1-724-776-4970 outside U.S. and Canada). Accommodations requested on site will be provided only if possible for us to do so on short notice.

TO REGISTER:

SAE Customer Service

Online: www.sae.org/hybrid

Toll-free: 1-877-606-7323 (U.S. and Canada)

Phone: 1-724-776-4970 (Outside U.S. & Canada)

Fax: 1-724-776-0790

Email: CustomerService@sae.org

Registration Hours:

Tuesday, February 8, 2011 4:00 - 6:00 p.m.

Wednesday, February 9, 2011 7:00 a.m. - 5:00 p.m.

Thursday, February 10, 2011 7:00 a.m. - 5:00 p.m.

Friday, February 11, 2011 7:00 a.m. - 3:00 p.m.



HOTEL INFORMATION

New Location!

Hilton Anaheim

777 Convention Way
Anaheim, California 92802
Phone: 1-714-750-4321

THIS EVENT HAS A HISTORY OF SELLING OUT! PLEASE MAKE YOUR HOTEL ROOM RESERVATIONS AS EARLY AS POSSIBLE.

SAE's group rate is \$155.00 per room per night, single or double occupancy plus applicable local, state and federal taxes. There is a small block at the Government rate of \$123.00. Rates include complimentary sleeping room internet each night.

Reservations can be made by calling the reservations line at 1-877-776-4932. Ask for the SAE International group or mention code SAE to receive the group rate or government rate.

To book your reservation on line, visit www.sae.org/hybrid, click on the **Hotel & Travel Information link** and then the **Hotel Reservation Page for Hybrid Technologies Symposium Attendees**.

- All attendees are responsible for their own lodging and travel arrangements.
- A block of sleeping rooms has been reserved at the Hilton Anaheim.
- A small percentage of rooms will be available at the prevailing U.S. Federal government per diem rate for military and government personnel.
- Reservations must be made directly with the hotel by Monday, January 24, 2011.

Cancellation Policy:

Reservations must be cancelled within 72 hours in advance or a penalty of one night's stay will be incurred.

Travel to the Hotel:

Super Shuttle - No reservations are needed from LAX or Orange County airport but are available if wanted and can be made online at www.supershuttle.com or by calling 1-800-BLUE VAN.

Her Majesty's Ride - Offers a variety of London Cabs, sedans, limousines, vans and motor coaches. Reservations can be made by email Ed.delgado@hilton.com or phone 1-714-444-4463.

Visit www.sae.org/hybrid for additional travel information and updates.

ADDITIONAL RESOURCES FROM SAE

Seminar Held in Conjunction with the Event

Safe Handling of High Voltage Battery Systems

February 8, 2011 - Instructor: Erik J. Spek

This seminar will introduce participants to the risks encountered in handling high voltage battery systems and their component parts. With the understanding of these risks, the seminar will then address how to raise risk awareness and then methods of dealing with those risks. The outcome of this seminar should be improved avoidance of personal injury, reduced risk of reputation loss and product liability actions and reduced risk of loss of property and time. Students will have an opportunity to participate in a real world battery handling case study scenario in which they will identify solutions for potential risk situations.

I.D. C1019; Fees - List: \$725; SAE Members - Classic: \$653; Premium: \$616; Elite: \$580

For more information and the complete seminar content, visit www.sae.org/pdevent/C1019

Introducing Hybrid Technology Webinars from SAE International

Introduction to Hybrid Powertrains

February 15, 2011; 11:30 a.m. - 1:30 p.m. ET

(1, 120-minute session; I.D. C0903)

Basic Hybrid and Electric Vehicle Safety

February 17, 2011; 11:30 a.m. - 1:30 p.m. ET

(1, 120-minute session; I.D. C0904)

Plug-In Hybrids: Opportunities and Challenges

February 22, 2011; 11:30 a.m. - 1:30 p.m. ET

(1, 120-minute session; I.D. C0905)

Hybrid and Electric Vehicles: Current Production, Future Strategies

February 23, 2011; 11:30 a.m. - 1:30 p.m. ET

(1, 120-minute session; I.D. C0906)

For additional information or to register for these webinars visit www.sae.org/webinars

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EXHIBIT AND SPONSORSHIP OPPORTUNITIES

EXHIBITS

Tabletop Display..... \$3,000 (USD)

(first come, first served basis - limited space availability)

Exhibit includes:

- One tabletop display space - 6' x 30" table with two chairs
- One complimentary Symposium Registration - includes lunch, refreshment breaks, evening receptions and materials (\$1,595 value)
- Recognition in the Event Guide
- Corporate profile recognition on the Event Website

Tabletop Display PLUS Option..... \$3,800 (USD)

All benefits listed above PLUS: Additional complimentary Registration – includes lunch, refreshment breaks, evening receptions and materials

SYMPOSIUM SPONSOR – Collaborate with SAE to distinguish your company at this symposium. Choose one of the partner programs, an exclusive sponsorship or get creative with a customized package! Promote your company to top industry professionals and other attendees.

Executive Level Sponsor: \$15,000 (USD)

Includes:

- Recognition as an Executive Level sponsor and the exclusive host of the Networking Receptions
- Table top display space
- Complimentary registration for two (2) symposium participants
- Logo on signage at the event
- Recognition in the event Proceedings, on the SAE website and in the Event Guide
- Banner ad on the event page of the SAE website with a link to sponsor’s home page
- Recognition as a sponsor in all printed event promotional materials (provided sponsorship commitment is received within deadlines)

Diamond Sponsor: \$12,000 (USD)

(limited to two companies)

Includes:

- Recognition as a Diamond sponsor and exclusive sponsor of the symposium portfolio or totebags distributed to all attendees
- Table top display space
- Complimentary registration for one (1) symposium participant
- Display of logo on sponsor signage at the event
- Recognition in the Event Guide and on the SAE website with a link to the sponsor’s home page
- Recognition as a sponsor in all printed event promotional materials (provided sponsorship commitment is received within deadlines)

Gold Sponsor: \$8,000 (USD)

(limited to three companies)

Includes:

- Recognition as a Gold sponsor and as exclusive host of one of the daily lunches
- Complimentary registration for one (1) symposium participant
- Display of logo on sponsor signage at the event
- Recognition in the Event Guide and on the SAE website with a link to the sponsor’s home page
- Recognition as an event sponsor in all printed promotional materials (provided sponsorship commitment is received within deadlines)

Silver Sponsor: \$7,500 (USD)

(limited to 1 company)

Includes:

- Recognition as the Silver Sponsor and exclusive sponsor of the conference lanyards distributed to all attendees
- Company logo on sponsor signage at the event
- Recognition in the Event Guide and on the SAE website with a link to the sponsor’s home page
- Recognition as an event sponsor in all printed promotional materials (provided sponsorship commitment is received within deadlines)

Event at a Glance Badge Inserts: \$4,000 (USD)

Afternoon Refreshment Social: \$3,500 (USD)

Friend of the Industry: \$1,000 (USD)

Other opportunities available or customize your sponsorship!

Event Guide Advertising

- 2nd Cover [inside front] - \$1035 gross
- 3rd Cover [inside back] - \$970 gross
- 4th Cover [back] - \$1100 gross
- Inside pages (B/W)
 - Full page - \$880 gross
 - Half horizontal page - \$500 gross

Contact Arlene DiSilvio to learn more about promoting your company to top industry professionals!
 Phone: 1-724-772-4060 or email, adisilvio@sae.org.

Premier Partner:



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