



Connecting Rod

May 2009

Oregon SAE Newsletter

Volume 13 Issue 11



Governing Board Meeting

When: May 19th; 4:30pm

Where: Room 1J; Daimler Trucks Corporate Building, [4747 N Channel Ave, Portland OR](http://www.daimlertrucks.com)

Meeting minutes and agenda are located at <http://www.oregonsae.org/GovBoard.html>

Special Event

What: Baja SAE Oregon 2009 Design Competition and Endurance Event

When: May 8-10, 2009

Where: Expo Center (Portland) & Washougal MX Park (SW Washington)

Why: To support university engineering education

Contact: Ryan Dillon, Volunteer Coordinator, at Ryan.Dillon@ConMet.com if you can volunteer or see <http://bajasaeoregon.com> for more information.

Morning Webcast

What: Keys to the Electric Car Future: Batteries, Drivetrain & Infrastructure

When: Thursday May 7th from 8:30 am to 10:30 am

Where: Daimler Trucks North America (Freightliner) Corporate Conference Center
Willamette West Room
4555 N. Channel Ave, Portland OR. [map](#)

News/Announcements

The Baja SAE Collegiate Design Competition and Endurance Event is almost here! Come support the engineering students by volunteering for the event or just come to cheer them on! The event is May 8-10. See the next page for more information. If you can volunteer, especially for day 3, contact Ryan Dillon, Volunteer Coordinator at Ryan.Dillon@ConMet.com.

Oregon Trail Rally Needs Volunteers

The Oregon Trail Rally is May 15-17th, near Portland, Oregon.

Volunteers are needed to make the rally happen. We need people to road marshal, staff controls, operate HAM radios, and direct traffic. No special skills are needed and all volunteers receive a T-Shirt, goody bag, and entry to the awards banquet with dinner. In addition, we will be holding a raffle for some bigger, nicer items at the banquet. Volunteers can work the whole weekend, or just one day. It is fun and rewarding- Volunteers usually have the best viewing spot in the rally, or get to interact directly with the drivers and co-drivers, including Travis Pastrana, Ken Block, Dave Mirra, and Tanner Foust. The rally is based at Portland International Raceway on Friday night, May 15th, and then moves into the forest near Hood River, Oregon for Saturday and Sunday. For more information, please visit <http://www.oregontrailrally.com/volunteers.html> or email Rebecca Ruston at volunteers@oregonrally.com.

Want to see when local SAE Events are happening but don't have the Connecting Rod handy? You can now check them out on our on-line calendar events at: <http://www.oregonsae.org/calendar.html>

Section Officers, 2008-09

Chairman	Vijay Gopalswamy	(503) 745-8749	vijay.gopalswamy@daimler.com
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SAE Baja West

2009 Baja SAE Oregon Design Competition and Endurance Event

What: Baja SAE Oregon 2009 Design Competition and Endurance Event
When: May 8-10, 2009
Where: Expo Center (Portland) & Washougal MX Park (SW Washington)
Why: To support university engineering education
Contact: Ryan Dillon, Volunteer Coordinator, at Ryan.Dillon@ConMet.com if you can volunteer



The 2009 Baja West Competition is almost here! Come support engineering students as they put their designs to the ultimate test either by volunteering or just cheering them on! With 95 registered teams, competition should be intense.

See the official website at <http://bajasaeoregon.com> for more information.

Schedule of Events

Day 0: Thursday, May 7, 2009

- Event Registration at Holiday Inn Portland Airport Conference Rooms

Day 1: Friday, May 8, 2009

- Static Events Day: Portland EXPO Center

Day 2: Saturday, May 9, 2009

- Dynamics Events: Washougal MX Park
- Includes Hill Climb, Maneuverability, Acceleration, and Rock Crawl.

Day 3: Sunday, May 10, 2009

- Endurance Event Day: Washougal MX Park
- Includes Endurance Event 10 am - 2 pm
- Awards Banquet: Holiday Inn Portland Airport Ballroom
- All volunteers are invited as guests.
- 6pm Start Time

Place	Address	Phone #	Web Address
Washougal Motocross Park	40205 NE Borin Rd. Washougal, WA 98671	(360) 837-3975	www.washougalmxpk.com
Holiday Inn Portland Airport	8439 NE Columbia Blvd. Portland OR 97220	(888) 400-9714	www.hiportlandairport.com
Portland Expo Center	260 N. Marine Dr. Portland, OR 97217	(503) 736-5200	www.expcenter.org

Online at: www.oregonsae.org



The 2009 SAE Baja West is brought to you by the following sponsors:

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Keys to the Electric Car Future: Batteries, Drivetrain & Infrastructure

What: Keys to the Electric Car Future: Batteries, Drivetrain & Infrastructure
When: Thursday May 7th from 8:30 am to 10:30 am
Where: Daimler Trucks North America (Freightliner) Corporate Conference Center
Willamette West Room
4555 N. Channel Ave, Portland OR. [map](#)
Cost: Free
RSVP: No RSVP Needed

Overview

Until recently, plug-in vehicles were dismissed by carmakers as impractical, too costly, and impossible to sell. In a dramatic turnaround, mostly inspired by fluctuating gas prices and the need for reducing oil dependence and carbon emissions, nearly every major global auto manufacturer has announced plans to produce a plug-in hybrid or pure battery-electric vehicle. Yet, major technical obstacles must be overcome to turn big plans for plug-in cars into a reality and to reach beyond a small niche market of consumers. (Conventional gas-electric hybrids faced far fewer technical challenges but remain less than 3% of the new car market, nine years after being introduced in the U.S.).

The three keys to the electric car future are batteries, drivetrains, and infrastructure. In this webinar, we will bring together leading engineers for each of the three points. A discussion of batteries will focus on the emergence of lithium-ion batteries. What are the challenges to mass manufacturing lithium-ion cells and battery packs for cutting-edge automotive applications? The drivetrain presentation will use specific vehicles to examine the current state of electric drive technology. And finally, we will hear from a leading firm working to build a network of smart electric recharging stations. Then, we will connect the three dots. Fulfilling the dream of an electric car future will only be possible when battery systems, recharging networks, and vehicle platforms are communicating with one another. Our four panelists, leading architects of battery-powered vehicles, will do just that: communicate with each other in a lively discussion about key points of integration.

This 120-minute telephone/webcast titled, Keys to the Electric Car Future: Batteries, Drivetrain & Infrastructure, is organized and will be moderated by Bradley Berman, Editor of HybridCars.com.

Benefits of Attending

The Keys to the Electric Car Future: Batteries, Drivetrain & Infrastructure Telephone/Webcast will discuss:

- Current and emerging electric vehicle technologies
- Possible solutions to the obstacles facing plug-in hybrid and battery-electric vehicle manufacture
- The latest developments in battery technologies including the emergence of lithium-ion batteries and the challenges of mass manufacturing lithium-ion cells and battery packs
- The economic and legislative landscape for battery production in the U.S., Asia, and other locations
- Drivetrains including a vehicle case study and its electric drive technology
- Work being done on networks of smart electric recharging stations
- The critical integration of battery systems, recharging networks, and vehicle platforms

You should join the broadcast if you are a(n):

- Any engineer involved in the design, development, or manufacture of plug-in hybrid or pure battery-electric vehicles
- Automotive hybrid powertrain engineer or manager
- Product developers at battery or capacitor manufacturer
- Engineers or managers at Tier 1 or Tier 2 supplier of steering, brake, and HVAC systems, and components
- Electrical engineers and business planners actively involved in hybrid or electric drive
- Test engineer working on hybrid programs
- Hybrid vehicle product planner or program manager
- Engineers and others working to build networks of smart electric recharging stations

Featured Speakers

Bradley Berman, *(Telephone/Webcast Organizer and Moderator), Editor, HybridCars.com*

Bradley Berman is the editor of HybridCars.com. Mr. Berman writes about hybrid cars for BusinessWeek, New York Times, Washington Post, and other publications. He is frequently quoted in national media outlets, such as CBS News, ABC News, CNBC, CBC, National Public Radio, and Automotive News. Mr. Berman is a tireless researcher of the hybrid car market. He speaks directly to industry insiders and participates as a panelist and moderator at professional conferences, and is the Founder and Program Director of AutoFutureTech, an industry conference about advanced automotive technology, energy, and the environment. Mr. Berman's career includes experience as a journalist, entrepreneur, and web producer.



Prabhakar Patil, *Chief Executive Officer, Compact Power, Inc.*

Prabhakar Patil is Chief Executive Officer of Compact Power, Inc. (CPI), the North American subsidiary of lithium-ion battery-maker, LG Chem (LGC), Korea. In this position, he has overall responsibility for strategic direction, engineering, and business development activities. Prior to joining CPI in 2005, Dr. Patil spent his entire professional career of 27 years at Ford Motor Company in various engineering and management positions. He served as Chief Engineer for Ford's Hybrid Technologies during 2003 and the Ford Escape Hybrid from 1998 to 2003. Dr. Patil received his undergraduate degree from IIT, Bombay, and his Ph.D. in Aerospace Engineering from the University of Michigan, Ann Arbor. He has 12 patents, published 22 articles, and received the Henry Ford Technology Award in 1991 for his work in Electric Vehicle Powertrain Development.



J.E. "Ted" Robertson, *Chief Technology Officer & EVP of New Product Creation, Magna International Inc.*

James Edward "Ted" Robertson joined Magna International Inc. in May 2006 as the Executive Vice President, New Product Creation. In addition, in 2008 he was named Chief Technology Officer, the Americas. Prior to joining Magna, Mr. Robertson spent 35 years at General Motors, beginning in 1968 as an Experimental Engineer for GM of Canada. Throughout his GM career, he held various positions including Staff Engineer for Buick Experimental Manufacturing and Buick Styling & Body Design, Director of Engineering and Forward Planning, Chief Engineer for the Camaro and Firebird, and Chief Engineer for Mid-Size Trucks. In 2002, Mr. Robertson retired from GM and was conferred the title Chief Engineer, Emeritus, for General Motors by Jack Smith, Chairman of GM. He then joined ASC as Vice Chairman for Product Development and in 2005 was elected President of SAE International. Mr. Robertson is an active alumnus of the University of Toronto, where he earned BS and MS degrees in Mechanical Engineering. He has published papers with the ASME and SAE and holds six patents.



Nancy L. Gioia, Director, Sustainable Mobility Technologies and Hybrid Vehicle Programs, Ford Motor Company

Nancy Lee Gioia is Ford Motor Company's director of Sustainable Mobility Technologies and Hybrid Vehicle Programs. Appointed to this position Nov. 1, 2005, she is leading efforts to develop and implement Ford's current and next generation of sustainable products. In addition, Ms. Gioia oversees Ford's electrification strategy to bring to market the next generation of hybrids, battery electric vehicles, and plug-in hybrid vehicles. Prior to her current assignment, Ms. Gioia was Director of Current Model Vehicle Quality for North America and was responsible for overall current model quality performance. She has held several key management and executive positions within Ford Product Development in electronics architecture design and integration in vehicles. She joined Ford Motor Company in 1982 as a graduate trainee in the Electronics Division. Ms. Gioia received a BS in Electrical Engineering from the University of Michigan and an MS in Manufacturing Systems Engineering from Stanford University. In 2005, she was named as one of the Automotive News "100 Leading Women in the Auto Industry." She is a recipient of the Rare Foundation's "Ordinary Hero" Award for leadership and mentoring and Crain's Detroit Business Award as one of Metro Detroit's Most Influential Women.



Richard Lowenthal, Chief Executive Officer, Coulomb Technologies, Inc.

Richard Lowenthal is Chief Executive Officer of Coulomb Technologies Inc., a leader in electric vehicle infrastructure. From 1998 to 2006, Mr. Lowenthal provided business formation consulting services for high-tech startup firms as sole proprietor of Berteleda Consulting. Through his consulting firm, he has been involved in starting several companies, including Lightera, Pipal Systems and Procket Networks. From 1996 to 1997, Mr. Lowenthal was Vice President and General Manager of Cisco's WAN Access Products Division. From 1990 through 1995, Mr. Lowenthal was Vice President of Research and Development for StrataCom. Prior to StrataCom, he was Co-founder and Vice President of Engineering for Stardent Computers in Sunnyvale, California. Mr. Lowenthal was also Vice President of Engineering for Convergent Technologies in San Jose. In addition, he is a former Mayor of Cupertino, California. Mr. Lowenthal has a BS degree in Electrical Engineering from UC Berkeley.

