

Department of Electrical and Computer Engineering

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Apr. 15: ECpE Centennial Celebration Seminar - "Myths and Misunderstandings About Drivetrain Electrification Solving All Our Energy Problems"

April 15, 2009 01:00 PM
Category: ECpE Events

Faculty, students, and staff are invited to attend the following ECpE Centennial Celebration Seminar:

Topic: Myths and Misunderstanding About Drivetrain Electrification Solving All Our Energy Problems"

Speaker: Theodore Bohn, Senior Power Electronics Engineer, Argonne National Laboratory

Date: Wednesday, April 15

Time: 1 p.m.

Location: 3041/3043 ECpE Building Addition

Abstract: This talk will present a historical perspective on the evolution of the state of the art in automotive drivetrain electrification from the turn of the previous century to today, with a look at possibilities in this area in the near future. From a university research point of view, electrically driven vehicles although not new, hold a lot of possibilities to improve upon current technology from both a cost and performance standpoint. One of the key misunderstandings is that electrically driven vehicles will "solve all our problems." Although some believe that all electric vehicles are cleaner than any conventional internal combustion vehicle, the answer is somewhere in between, highly dependent on the comparison framework. Succinctly stated, it all depends on where you plug it in, and how clean your "conventional vehicle" is. This presentation also will have electric drivetrain and energy storage hardware from current and future hybrid vehicles on display. (Insight Hybrid vehicle on display outside as well.)

Biography: Theodore Bohn works at the Center for Transportation Research at Argonne National Laboratory. He is the principle investigator on Plug-in Hybrid Electric Vehicle (PHEV) prototype vehicle development in the Vehicle Systems Group. The main concerns of this effort include in-vehicle traction battery subsystem benchmarking and validation, as well as power electronics and embedded systems control optimization of the electric powertrain in PHEVs.

Bohn has worked for each of the U.S.-based automobile manufacturers, as well as various Tier I automotive suppliers. He has been working on advanced technology and alternative energy fueled vehicle research for more than 20 years. He is the current Advanced Battery Technology Chair for SAE Congress. He actively serves on battery- and PHEV-related SAE technical standards committees. He is the chair of the SAE Electric Machine Rating Standards taskforce.

Bohn received his bachelor's and master's degrees in electrical engineering at the University of Wisconsin-Madison. His area of specialization is design of electric machines, power electronics, and dynamic control systems.

Additional details: Seminar will begin at 1:10 p.m. Reception to follow seminar; refreshments provided.



Theodore Bohn, Senior Power Electronics Engineer, Argonne National Laboratory