



# Connecting Rod

April 2010



Oregon SAE Newsletter

Volume 14 Issue 11

## Governing Board Meeting

**When:** Tuesday, April, 20<sup>th</sup>; 4:30pm

**Where:** Room 1J, Daimler Trucks Corporate Building, [4747 N Channel Ave, Portland OR](#)

All members and Non-members who are interested in SAE are welcome.

Non-DTNA employees please check in at the rear entrance security desk.

Meeting minutes and agenda are located at

<http://www.oregonsae.org/GovBoard.html>

## Lunch Meeting

**What:** Learn what it means to drive your vehicle safely and efficiently.

**When:** Friday, April 16<sup>th</sup>, 11:45am – 1:00pm

**Where:** Old Spaghetti Factory 715 SW Bancroft St. Portland OR 97239 ([map](#))

**Cost:** \$9 for members, \$11 for non members. Choose items from a customized menu.

**RSVP:** Andre Susanto, [andreosae@gmail.com](mailto:andreosae@gmail.com) / 503-406-8581

## Tech Meeting

**What:** Programming for Automotive Safety – Using C Language in Vehicle Based Software

**When:** Wednesday, April 21, 2010: Refreshments at 6pm, Presentation at 6:30pm

**Where:** Daimler Trucks Corporate Conference Center – Channel Room ([map](#))

4435 N Channel Ave, Portland, OR

**Cost:** \$5 members, \$4 students, \$7 non-members. Light meal included.

**RSVP:** [Rebecca.Bauman@Daimler.com](mailto:Rebecca.Bauman@Daimler.com)

## SAE Industrial Lectureship Meeting hosted by Viking Motorsports

**What:** Tire Testing and Modeling for Vehicle Dynamics by Dr. Edward Kasprzak

**Where:** Portland State University; Engineering Building, Room 102 ([map](#))

1930 SW 4th Ave, Portland, OR 97201

**When:** Friday, April 16<sup>th</sup>, 2010 3:00PM

**Cost:** Donations gladly accepted for Viking Motorsports Formula SAE project

**RSVP:** [brenaman@pdx.edu](mailto:brenaman@pdx.edu)

## News/Announcements

The Mighty Yet Tiny (MYT) engine meeting has been cancelled due to the speaker being unable to make it.

## Section Officers, 2009-2010

Chair	Katie Knudson	(503) 745-2004	<a href="mailto:Katie-jo.Knudson@daimler.com">Katie-jo.Knudson@daimler.com</a>
Vice Chair	Blake Kashiwagi	(503) 745-8986	<a href="mailto:Blake.Kashiwagi@daimler.com">Blake.Kashiwagi@daimler.com</a>
Treasurer	Blake Kashiwagi	(503) 745-8986	<a href="mailto:Blake.Kashiwagi@daimler.com">Blake.Kashiwagi@daimler.com</a>
Secretary	Srija Pidaparthi	(503) 745-8299	<a href="mailto:Srija.Pidaparthi@daimler.com">Srija.Pidaparthi@daimler.com</a>
Tech Meeting Coordinator	Rebecca Bauman	(503) 745-2876	<a href="mailto:Rebecca.Bauman@daimler.com">Rebecca.Bauman@daimler.com</a>
Lunch Meeting Coordinator	Mike Dragulin	(503) 307-7920	<a href="mailto:mihaildragulin@hotmail.com">mihaildragulin@hotmail.com</a>
VC Student Activities / Scholarship	Suman Narayanan	(503) 745-2375	<a href="mailto:Sumanoharan.Narayanan@daimler.com">Sumanoharan.Narayanan@daimler.com</a>
VC Motorsports	Willie Rossi	(503) 888-9243	<a href="mailto:Motorsports@oregonsae.org">Motorsports@oregonsae.org</a>
VC Membership / Company Rep	George Gvakharia	(503) 745-5975	<a href="mailto:George.Gvakharia@daimler.com">George.Gvakharia@daimler.com</a>
VC Investment Committee	Jason Wilkening	(503) 745-9328	<a href="mailto:Jason.Wilkening@daimler.com">Jason.Wilkening@daimler.com</a>
VC AWIM Activities	Andre Susanto	(503) 745-2185	<a href="mailto:andreosae@gmail.com">andreosae@gmail.com</a>
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## Driving For Efficiency

**What:** Learn what it means to drive your vehicle safely and efficiently.

**When:** Friday, April 16<sup>th</sup>, 11:45am – 1:00pm

**Where:** Old Spaghetti Factory 715 SW Bancroft St. Portland OR 97239 ([map](#))

**Cost:** \$9 for members, \$11 for non members. Choose items from a customized menu.

**RSVP:** Andre Susanto, [andreosae@gmail.com](mailto:andreosae@gmail.com) / 503-406-8581

### Meeting details:

Learn how the EPA ratings are achieved and how it relates to our every day driving. In this presentation, different powertrain choices will be discussed and how they perform differently under different driving conditions. Test results from real life conditions of several hypermiling techniques will show which will save you fuel.

This information was gathered as part of a data set for a future SAE paper about fuel efficiency and utilizing existing as well as new sensors in a new way to increase it. While only a small part of the paper, the information is the most relevant to most people.

While there is no shortage of hypermiling techniques, only a few make a large difference in fuel efficiency. Some are even downright dangerous to practice without a high degree of concentration and situational awareness of the surrounding environment. While all of them work to a degree, learn about the most beneficial techniques and its risks.



## MISRA C – Programming for Automotive Safety

**What:** Guidelines for the Use of the C Language in Vehicle Based Software

**When:** Wednesday, April 21, 2010: Refreshments at 6pm, Presentation at 6:30pm

**Where:** Daimler Trucks Corporate Conference Center – Channel Room ([map](#))  
4435 N Channel Ave, Portland, OR

**Cost:** \$5 members, \$4 students, \$7 non-members. Light meal included.

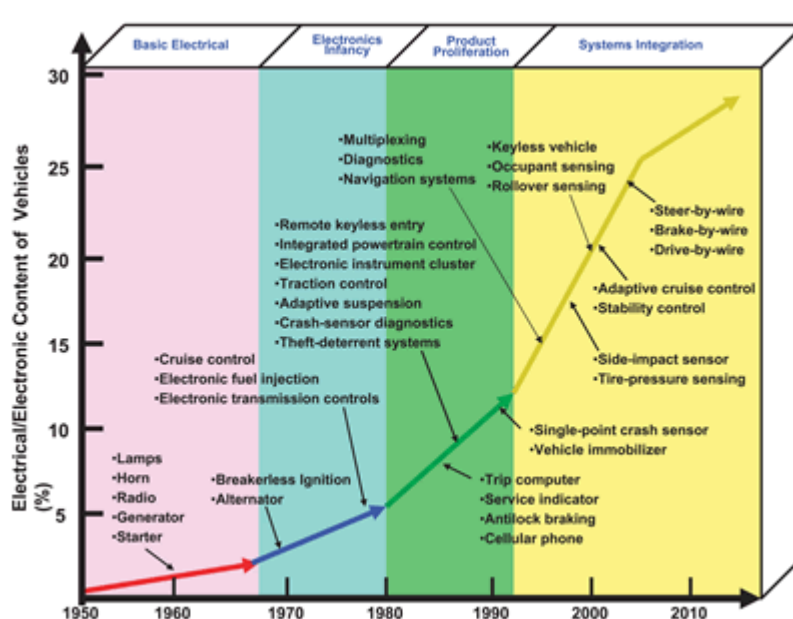
**RSVP:** [Rebecca.Bauman@Daimler.com](mailto:Rebecca.Bauman@Daimler.com)

### Meeting Agenda:

- Why MISRA ? (Current Toyota Recall/Software Dilemma as Example)
- Overview of MISRA
- Highlights of "The Rules" (no we won't cover all 188 of them here...)
- C Software examples
- Automatic Checking Tools
- Commercial Solutions Overview

### Speaker Bio:

Tom Moxon is the Director of Engineering for Westmark Electronics. He has designed integrated circuits for a number of client companies, including Cray Research, Adobe Systems, Hewlett Packard, Silicon Graphics, Rohm, and Hyundai Electronics. Tom is currently working on software motor control systems for Light Electric Vehicles using Misra C. When he's not "slinging gates" for a living, Tom is often called upon to torture test new CAD and EDA tools before they are inflicted on the remainder of the engineering community.



Source: chipdesignmag



# Industrial Lectureship Meeting



## Viking Motorsports to Host Dr. Edward Kasprzak from SAE Industrial Lectureship Series

**What:** Tire Testing and Modeling for Vehicle Dynamics

**Where:** Portland State University; Engineering Building, Room 102 ([map](#))  
1930 SW 4th Ave, Portland, OR 97201

**When:** Friday, April 16<sup>th</sup>, 2010 3:00PM, arrive early, parking can be difficult to find, as the location is in downtown Portland. There is a parking lot across the street from the Engineering building, behind the food carts and an additional parking lot below the Engineering building. There is an entrance on the south side of the building on 4<sup>th</sup> Av.

**Cost:** Donations gladly accepted for Viking Motorsports Formula SAE project

**RSVP:** Space is limited, please RSVP to Portland State Formula SAE Technical Director, Scott Brenaman at [brenaman@pdx.edu](mailto:brenaman@pdx.edu) or (754)273-6262



**SPEAKER BIOGRAPHY:** Dr. Kasprzak is an Associate at Milliken Research Associates, Inc. where he has worked since 1996. Responsibilities include developing dynamic, quasi-static and race circuit simulations, as well as performing tire modeling and testing for passenger car manufacturers, their suppliers and professional racing teams. He is the co-founder and co-director of the Formula SAE Tire Test Consortium, and in late 2006 he completed his Ph.D. with a dissertation on the Non-dimensional Tire Theory. Dr. Kasprzak teaches two courses on Vehicle Dynamics at the University at Buffalo and is the advisor to their Formula SAE team. He is the author of several technical papers, co-author of "Race Car Vehicle Dynamics: Problems, Answers and Experiments" with the Milliken's, and a significant contributor to their "Chassis Design, Principles and Analysis." He is also an occasional writer for Racecar Engineering magazine.

**ABSTRACT:** This lecture will focus on tire performance as it relates to vehicle dynamics. It will include: a brief overview of tire construction, a discussion of laboratory tire testing, a discussion of tire model development from measured data, and the application of tire models to vehicle analysis, design and simulation.



# Volunteer Opportunities

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## **Oregon SAE is in need of Volunteers to help run our section!**

- Fill a governing board officer position from June 2010-May 2011, click the link to learn about officer duties/responsibilities: [OSAE Board Member Handbook](#)  
If interested, please contact [chair@oregonsae.org](mailto:chair@oregonsae.org)

- We need members to help us with Technical meeting and Friday lunch meeting topics. Call a board member with your ideas. What do you want to learn about this year?

- Help re-establish the local AWIM committee for K – 12 student curriculum. Contact a board member for more information.

- Provide comments/feedback to the governing board on how to better serve your needs via email to [chair@oregonsae.org](mailto:chair@oregonsae.org) or come see us at a board meeting.

We always encourage your participation in Oregon SAE. Participation in Oregon SAE does not need to take a lot of time, and it is a great way to socialize on a professional level. We encourage you to become involved!

## **2010 SAE Baja – Western Washington University**

Western Washington also needs volunteers for the SAE Baja event they are hosting this year on May 19th - 22nd.

Event website: <http://www.wvu.edu/bajasae/>

Volunteer page: <http://www.wvu.edu/bajasae/?page=volunteer.html>

Ryan Jefferis has a Sprinter Van reserved from Daimler to allow a carpool from Portland. For more information contact [Ryan.Jefferis@Daimler.com](mailto:Ryan.Jefferis@Daimler.com).