



## APRIL MEETING

### Wednesday, 20-Apr-2005

#### PROGRAM:

*Thomas Magnete USA --plus--  
SAE 2005 Student Meeting*

- ◆ Visit the MSOE Vehicle Labs and hear from Milwaukee Section Students about their project activities
- ◆ See the SAE Aero, Formula, Mini-Baja, and Future Vehicles
- ◆ Talk with the students from other Student Sections, too. MSOE invited them to come down and bring their vehicles
- ◆ Join us for dinner at the 2005 Student Meeting in the Todd Wehr Conf. Center
- ◆ Technical presentation:
  - > Automotive Fluid Power Systems by Mark Jankowski (Thomas Magnete)
- ◆ Hear the results of a great 2005 CSC event

#### Tour & Dinner

**Location: MSOE**  
**Todd Wehr Conf. Center**  
 1047 N Broadway  
 Milwaukee, Wi 53202  
 Phone 414.272.7169

- - - EVENT AGENDA - - -

Registration & Tours:	5:15pm
Social (cash bar):	6:00pm
Dinner:	6:30pm
Presentation:	7:15pm

- - - DINNER - - -

#### **MENU:**

Select either *Chicken Chardonnay* or *Roasted Pork Tenderloin*, vegetables, potato, beverages & dessert.

#### **MEAL PRICE:**

SAE Members / spouses:	\$20.00
Retirees:	\$15.00
Guests / Non-members:	\$25.00
Students w/ID	\$5.00

#### **Registration:**

Dinner reservations must be received the week before the event. Only charge card pre-payments can be collected online, via <http://milwaukee.sae.org>. Register to **pay-at-the-door** via email at: [milw-sae@wi.rr.com](mailto:milw-sae@wi.rr.com), or call the SAE Phone Line at **(414) 687-3032**. "No-shows" with reservations will be billed. 50-Year members entitled to 1 free dinner annually.

Registration deadline: 2:00pm – Friday, Apr 15th

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**Topic: Fluid Power Systems in Modern Automotive Engineering**  
**Speaker: <> Mark Jankowski, Senior Product Engineer, Certified Fluid Power Specialist**

New EPA emissions guidelines have auto and truck manufacturers scrambling to find ways to improve vehicle efficiency and fuel economy, while also finding ways to make vehicles safer, more productive and easier to use. Surprisingly, auto and truck manufacturers are finding solutions through advanced and innovative electro hydraulics. Engineers are resorting to fluid power to control fuel-injection characteristics, engine timing, suspension/brake adjustments, etc.

This presentation will highlight the increased use of hydraulic valves, pumps and actuators in today's automobiles and trucks. These systems can be found in engines, suspensions, interiors, and other places on automobiles and trucks. Parallels will be drawn between conventional hydraulics, known in the fluid power industry, and automotive systems found in cars and trucks. Focus will be on current achievements, and will bring to light future advancements.

Mr. Jankowski received his Bachelor's Degree in Mechanical Engineering from Iowa State University and has since received certifications as a hydraulic and pneumatic specialist. With a focus on electro hydraulic controls of fluid power systems for both on and off-highway applications, Mark began his experience as a test engineer for heavy-duty, closed-loop propulsion systems at Sauer Sundstrand. This was followed by a position as a Principal Engineer for design and application of electro hydraulic control valves at Case Corporation, where Mr. Jankowski focused on developing CAN-based electro hydraulics for transmissions and implement controls. Currently, Mr. Jankowski is a Senior Product Engineer for electromagnetic and electro hydraulic actuators and systems at *Thomas Magnete USA*.

Mark's application experience at Thomas Magnete ranges from off-highway proportional hydraulic controls to heavy-duty engine management for on/off highway diesel engines. He has also been an active member with the SAE and the FPS since 2001.

A division of Thomas Magnete GmbH, in Herdorf, Germany, *Thomas Magnete USA* is a world-wide leader in the design and manufacture of solenoid valves, actuators, and metering pumps for a variety of markets, including the Automotive, Off-Highway, Marine and Construction industries.

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## **Milwaukee 2005 STUDENT SECTION Meeting hosted at MSOE**

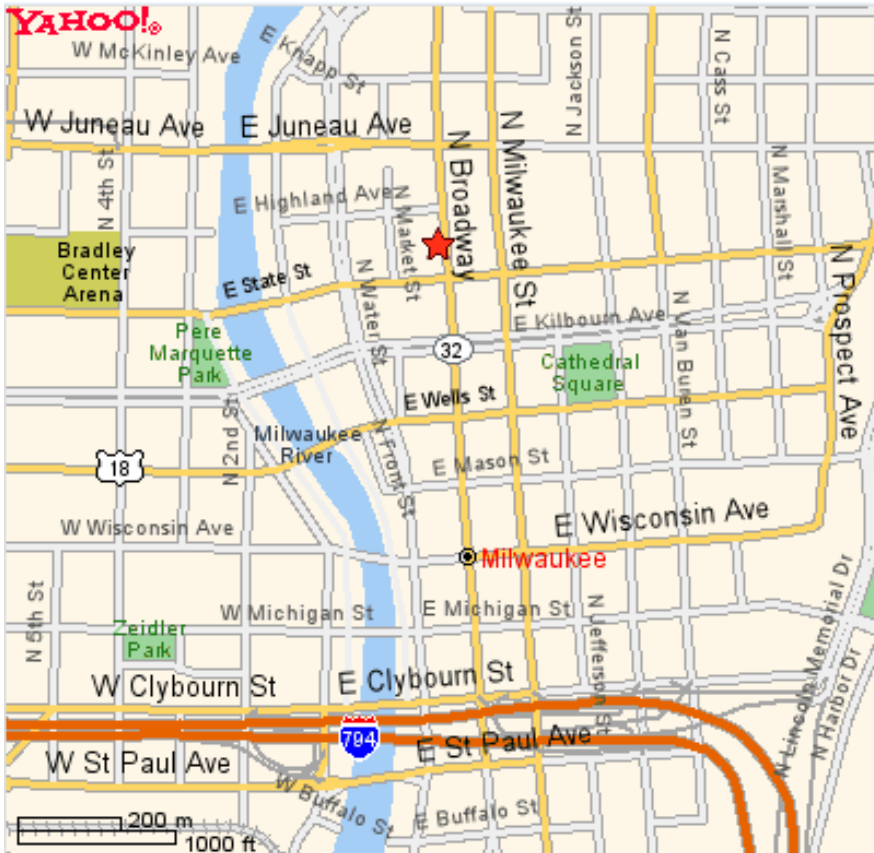
You can support our Student Chapters! The Milwaukee Board would like to invite you to join us for the 2005 Student Meeting. During April's meeting, we encourage you to honor our student members by visiting the school's labs ... and engaging the students while you are there. We will be providing some presentation time for highlights of the ongoing projects and activities within the Milwaukee Section's Student SAE Chapters. The chapters are excited about bringing their vehicles, and having an opportunity to present to the Milwaukee SAE Professional Section. This year, a Board committee created an application for the student chapters to complete, which may be submitted as a grant request. Schools in our Section can qualify for up to \$1500. You can learn a lot more about what's new during the April event at MSOE.

**UW-Madison      UW-Milwaukee      Marquette      MSOE      Michigan Tech Univ.      Northern MI Univ.**

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May 19 Meeting tour: Hub Chrysler-Jeep Dealership / the Hot New 2005 Vehicles – West Allis

# Upcoming Events



### Tour location [MAP](#) :

MSOE, Todd Wehr Auditorium  
1025 N Broadway  
Milwaukee, WI 53202

**PARKING:** Plans are to make the lot across from Todd Wehr **on the east side of Broadway**, available for meeting attendees. Street parking is also close by.

#### Driving directions from the WEST

- Take I-94 east to downtown Milwaukee.
- then take I-794 (exit to left from I-43).
- exit at Jackson/Van Buren (exit #1-E).
- north on Van Buren Street 7 blocks to State Street; turn left.
- turn right on Broadway, and proceed to parking (Todd Wehr Conference Center will be on your left).

#### Driving directions from the NORTH

- Take I-43 south to downtown Milwaukee.
- then take I-794 (exit to left from I-43).
- [Same as above]

#### Driving directions from the SOUTH

- Take I-94 east to downtown Milwaukee.
- then take I-794 (exit to left from I-43).
- [Same as above]

# Milwaukee Section 2004-2005 Governing Board

## CHAIRMAN:

Dale Wiza  
Professional Engineering Placements, Inc.  
email: dale@engineeringplacements.com  
Work: (414) 427-8080

## VICE CHAIR:

Joe Sagat  
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## SECRETARY:

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## TREASURER:

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## VICE CHAIR MEMBERSHIP:

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Work: (800) 860-2692 x354

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## VICE CHAIR STUDENT ACTIVITIES:

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## VICE CHAIR PROGRAMS:

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## COMPANY REPRESENTATIVE:

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## HISTORIAN:

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## Alt SECTION DELEGATE:

Glenn Bower  
UW-Madison  
Work: (608) 263-7252

# - Chairman's Note -

Much good news to share within our Section!

We were a part of extremes within aeronautic engineering recently, with the Packer Engineering's Wright Flyer presentation at MATC's Airframe & Powerplant Facility. Packer took us through many of the challenges of the Wright project, including the flights and crashes. An added bonus was having our SAE President Dr. Duane Teide in attendance, making another visit to Milwaukee. Then early in March, SAE was invited to join ASME's presentation by a former pilot of the SR-71, (Ret.) Col. Richard Graham, who shared some of his exciting first-hand experiences on a Mach3 aircraft. Thanks ASME! We look forward to returning the favor!

We had a fantastic time up at the Clean Snowmobile Challenge in Houghton, MI! Students were motivated to share and learn from one another, and the weather and trail conditions were great. Congratulations to SUNY-Buffalo for First Place Overall, and to Milwaukee Section's team from UW-Madison, who took Third Place Overall, winning in Endurance and Emissions again! Congratulations and thanks to Glenn Bower (UW Advisor) whose commitment really shows and is appreciated. MTU just missed 6<sup>th</sup> place, was very competitive, and had by far the best looking hood design. Come and see the sled at the meeting this month. They have an excellent program under Bernard Bettig (Advisor), and are the second largest SAE Student Chapter in the nation! More **CSC** results & information is available at: <http://www.admin.mtu.edu/urel/snowmobile/>.

The Awards Banquet offered a nice opportunity to inform the "Yoopers" about Milwaukee Section event and student activities. Thank you MTU, and Dr. Bill Predebon who hosted our Milwaukee Section meeting, provided a talk about MTU and arranged tours of the labs. Also thanks to the sponsoring companies in Michigan who offered great enthusiasm to foster future growth with this now-popular clean technology. Sincere thanks goes to Jay Meldrum who successfully directs this awesome event. To Evert's Motorsports, thanks for serving us with discounted snowmobile rentals, and especially to Pat Schoepel who did a fine job planning for us. We're already looking forward to next year, and will be promoting the event to get a whole bus-full of attendees from Milwaukee.

Over the next two months Mike Freisleben will be encouraging us to help support the Midwest Mini Baja, at Dayton, OH. The Milwaukee and Dayton Sections alternate as host cities for Mini-Baja. Already 151 teams have registered! Mike will be starting to arrange the volunteers for our 2006 Mini-Baja. Please help in 2006 as we plan for another successful Baja.

\* Congratulations to Mike and his wife, who just had a baby boy, named Mark. We will slot Mark to Chair the Mini-Baja of 2030!

\* Please help to show good support at SAE Congress. With SAE 100, this promises to be quite an event. I'll be there to serve SAE as a Resume Consultant. Stop in the Career Center to say Hi.

We hope you like what's happening within our Section. Please remember to help sustain it, by taking a turn to serve somewhere as well.

Thank you for your continued support,  
Dale Wiza  
SAE Milw. Section Chair

## S.A.E. ELECTIONS will be held at the MAY 19<sup>th</sup> meeting.

The SAE Milwaukee Section Governing Board consists of volunteer members who are willing to spend a few hours per month on section activities. The following is a slate of nominees for the 2005-2006 Milwaukee Section Governing Board's elected positions:

Chairman:	Joe Sagat
Vice-Chair:	Bernard Krauska
Secretary:	Louise Goto
Treasurer:	Wayne Richter
Vice-Chair Membership:	Tim Fauser
Vice-Chair Student Activities:	Chris Damm
Vice-Chair Math & Science:	Liz Sutton
Delegate:	Glenn Bower
Alt. Delegate:	Dale Wiza

Five or more members in good standing of the Section who are entitled to vote may constitute themselves as a special nominating committee with the same power as the elected nominating committee. If a special nominating committee is formed, it should present its list of consenting candidates to Chairman Dale Wiza on or before April 30<sup>th</sup>, 2005. All section members, except student members, are eligible to vote on section matters, to hold section office, and serve on section committees. To be eligible to vote and/or hold a section office, a member's dues must be paid in full.

To assist in our new initiatives, our Board will also be forming sub-committees. We welcome your desire to help us serve. Please inform any Board member of your interest

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Views from the  
recent SAE  
2005 CSC  
event in  
Michigan...

See how many  
times you can  
find Dale!



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## Meeting Sponsorship

We wish to thank the following organizations for their continued support of the Milwaukee Section:

**THOMAS**  
*Dynamik aus Herdorf*  
**MAGNETE**

**Thomas Magnete USA**



**Harley-Davidson Motor Company**



**Briggs & Stratton Corporation**

For more information on becoming a sponsor, please contact any Section Board member.

Keep current with us on these SAE web sites:

<http://milwaukee.sae.org> for the Milwaukee Section or

the national site at <http://www.sae.org>

For more information on **A World In Motion** call: 724-772-8514, and ask for Darlene Geweth

email: [awim@sae.org](mailto:awim@sae.org) internet: [www.sae.org/foundation/awim](http://www.sae.org/foundation/awim)

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