

## APRIL DINNER MEETING

Thursday, April 23, 1998

**TOPIC:** Metal Injection Molding (MIM)

**SPEAKER:** Mark Rasmussen, President of  
Phillips Plastics – Powder Metal Molding Di-  
vision

- Overview of common metal forming methods
- Overview of the MIM process and technology
- Materials processed by MIM
- Markets served by MIM
- Design for MIM
- Future directions in MIM process technology

### MEETING AGENDA

**SOCIAL HOUR:**

5:00–6:00 pm Zorba's Restaurant  
20290 West Bluemound Road  
Brookfield Wi.  
414-782-8670

**DINNER:** 6:00 pm

**PRESENTATION:** 7:00 pm

**MENU:** Roast Loin of Pork with Mashed Potato  
or:  
Extra Large Jumbo Breaded Shrimp with  
Rice Pilaf

Both choices include soup, crisp garden salad, vegeta-  
bles, rolls, chocolate parfait and beverage.

**Dinner Costs:**

Members & Non-members	\$16.00
Students:	\$8.00

Advance reservations are required for dinner. Please  
make reservations no later than April 21, 1998, by calling  
Christine at 414-549-3325. Spouses and guests of mem-  
bers are welcome. **Please call to cancel at least 24 hours  
in advance if your plans change. "No-shows" with  
reservations will be billed.** Fifty year members are en-  
titled to one free meal per year.

Powder Metal Molding™



# **SPEAKER BIOGRAPHY**

## **MARK RASMUSSEN**

Mark Rasmussen is President of Phillips Origen™ Powder Metal Molding, a business unit of Phillips Plastics Corporation dedicated to advanced production metal injection molded components. He earned his degree in Mechanical Engineering from the University of Wisconsin in 1980 and has since held product development, marketing and business management positions with technology based companies.

## **GOVERNING BOARD ELECTIONS**

The Governing Board of the Milwaukee Section SAE consists of volunteer engineers from local industry who are willing to donate an hour or so per week to section activities. Eight of the Governing Board positions are 'elective', in that the names of the candidates are published in the April newsletter, and a vote taken at the May membership meeting to elect said candidates.

The nominations for the 1998-1999 Milwaukee Section SAE Governing Board are as follows:

Chairman: Bill Schultz, Harley Davidson, Inc.

Vice Chairman: Richard Sievert, Robert Bosch Fluid Power Corp.

Secretary: Alicia Muszynski, J.I. Case

Treasurer: Jon Jeffords, Waukesha Engine Division.

Vice Chair Membership: Rainer Schnabel, Brooks Stevens Design

Vice Chair Student Activities: OPEN

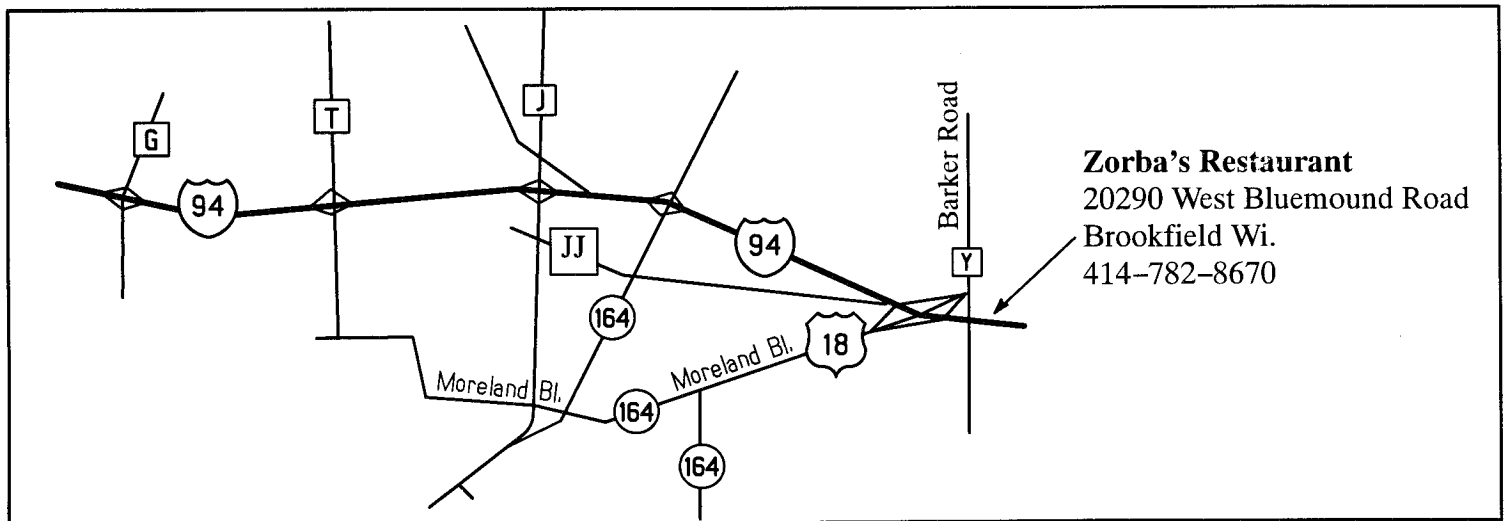
Vice Chair Math & Science, K-12: Kimberly Gleffe, Engineers & Scientists of Milwaukee, Inc

Delegate to SAE Annual Nominating Committee: Doug Bayerlein, Bay-San Co., Inc.

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 powers as the elected nominating committee. If a special nominating committee is to be formed, it should present its list of consenting candidates to Chairman Jim Wilkinson on or before May 1, 1998.

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.

## **Meeting Location Map**



## **MEMBERSHIP**

If you have questions about change of address, or other membership issues, call 1-800 TEAM SAE (1-800-832-6723)

## Milwaukee Section 1996-1997 Governing Board

**CHAIRMAN:** Jim Wilkinson  
Pierce Manufacturing Inc.  
2600 American Dr.  
P.O. Box 2017 Appleton, WI 54913-2017  
E-Mail: wilkinson@piercemfg.com  
Work: (920)832-3163  
Fax: (920)832-3092

**VICE – CHAIRMAN:** Bill Schultz  
Harley-Davidson Motor Co. Inc.  
11800 W. Capital Dr.  
P.O. Box 25527 Wauwatosa, WI 53225-5527  
E-Mail: dunkleed@aol.com  
Work: (414)616-1286  
Fax: (414)616-1338

**SECRETARY:** Richard Sievert  
Robert Bosch Fluid Power Corp.  
7505 Durand Ave. Racine, WI 53406  
E-Mail: Baja1998@aol.com  
Work: (414)554-7100  
Fax: (414)544-7217

**TREASURER:** Jon Jeffords  
Waukesha Engine Division  
1000 W. St. Paul Ave. Waukesha, WI 53188  
E-Mail: Jon\_Jeffords@wed.dresser.com  
Work: (414)549-2718  
Fax: (414)549-2690

### VICE CHAIR – MEMBERSHIP:

Rainer Schnabel  
Brooks Stevens Design  
1415 Donges Bay Rd. Mequon, WI 53092  
E-Mail: rainer@brkstevens.com  
Work: (414)241-3800  
Fax: (414)241-3812

### VICE CHAIR – MATH & SCIENCE AWIM

Kim Gleffe  
Engineers & Scientists of Milw., Inc.  
c/o Marquette College of Engineering  
1515 W. Wisconsin Ave. Milwaukee, WI 53233  
E-Mail: esm@www.eng.mu.edu  
Work: (414)288-3483  
Fax: (414)288-7082

### VICE CHAIR – STUDENT ACTIVITIES

Alicia Muszynski  
Case Corporation  
24th & Mead Streets Racine, WI 53403  
E-Mail: amuszynski@casecorp.com  
Work: (414)636-0422  
Fax: (414)636-5720

### VICE CHAIR – GOLF OUTING

Bill Burke  
Young Radiator Co.  
2825 Four Mile Rd. Racine, WI 53404  
E-Mail: none  
Work: (414)639-1010  
Fax: (414)639-1013

### HISTORIAN: Norm Mollinger

7707 W. Cedar Ridge Ct.  
Franklin, WI 53132  
E-Mail: npmoll@execpc.com  
Home: (414)425-1244

### VICE CHAIR-PLANT REP.

John Brackin  
Simplicity Manufacturing, Inc.  
500 N. Spring St.  
P.O. Box 997 Port Washington, WI 53074-0997  
E-Mail: jbpkin@execpc.com  
Work: (414)284-8761  
Fax: (414)284-8657

## From Your Chairman:

Our thanks to Mr. Jim Gralton and Hovercraft America for an excellent March dinner meeting presentation. The hovercraft is a truly a unique land, sea and air "mobility" vehicle.

Our April meeting focuses again on the technology sector. Metal and ceramic injection molding offers a low cost way to produce complex and precision-shaped parts from a variety of materials. Plan now to attend our April dinner meeting and get a quick lesson on how plastics and powder metals work together to make complex metal parts.

While a leader in providing a mobility industry standards, SAE is in search of programs, activities and services with value and relevant benefits to your professional interests. How do SAE and the Milwaukee Section fit in the era of downsized companies, multi-functional teams and increasing demands on the engineer as a manager? A recent SAE survey identified and ranked several key issues facing the mobility industry today. The issues (in ranked order) are as follows:

- Integrated Product Development
- Regulations / Standards
- Workforce
- Customer Expectations
- Electronics
- Global
- Reuse / Recycling
- Human Factors

If you have any comments regarding how SAE or the Milwaukee Section of SAE can help address these issues please contact any of the Governing Board members listed in this newsletter.

Jim Wilkinson  
1997 / 1998 Chairman  
Milwaukee Section SAE

## FREE MEAL DEAL From the Milwaukee Section

When a guest attends a dinner meeting bearing a completed membership application and dues payment, both the guest and his/her sponsor will receive a certificate good for a free dinner that evening or any other meeting of their choice during the Section year. *NOTE – This offer is not effective for application for student membership.*



# April Dinner Meeting

**Metal Injection Molding  
Phillips Powder Metal Molding**

# Milwaukee Section **SAE** Meeting Sponsorship

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

**Waukesha Engine Division of Dresser Industries, Inc.**

For more information on becoming a sponsor, please contact: Jim Wilkinson (920)832-3163