



**Notre Dame
Chapter**

The Link Newsletter

Notre Dame Chapter

A 5-Star Chapter



Visit us at:
WWW.ASM-ND.ORG

Methods of Crosslinking Polyethylene for Total Joint Replacement!!!

WEDNESDAY Jan. 17, 2007

Plastics have revolutionized the Materials field. Many of us remember when Materials Engineering programs used to be Metallurgical Engineering programs at colleges (I unfortunately do not remember this). No-where has the plastic revolution been greater than in the medical field. From UHMWPE for orthopedic implants to bio-absorbable materials, medical plastics are redefining how implants are made. Hallie Brinkerhuff, PhD who works in the orthopedic industry will be presenting on this topic. This meeting will occur in the Orthopedic Capital of the World, which is located conveniently in Warsaw, Indiana. Warsaw, Indiana is home to not 1 but 3 of the major orthopedics companies in the World: Biomet, DePuy, and Zimmer. This presentation will be useful for anyone that knows anyone that has ever received a medical implant, is about to receive a medical implant, or wants to learn more about a medical polymers.

Next Board Meeting

Weds., Feb. 6, 6:00 P.M.
To Be Announced

To improve our delivery of the LINK to you, and reduce our postal costs, please provide a current e-mail address to the Chapter Secretary, Tim Conrad, at ticonrad@gmail.com

Medical Polymers Presentation

Date: **Wednesday Jan. 17, 2007**

Meeting Time: 5:30 PM

Meeting Location: The Boat House Restaurant, 700 Park Ave, Winona Lake, IN

Dinner Choices: Prime rib, roasted red bell pepper pasta with shrimp, or garlic and herb chicken.

Cost: \$20, students \$10

Agenda: first eating then meeting

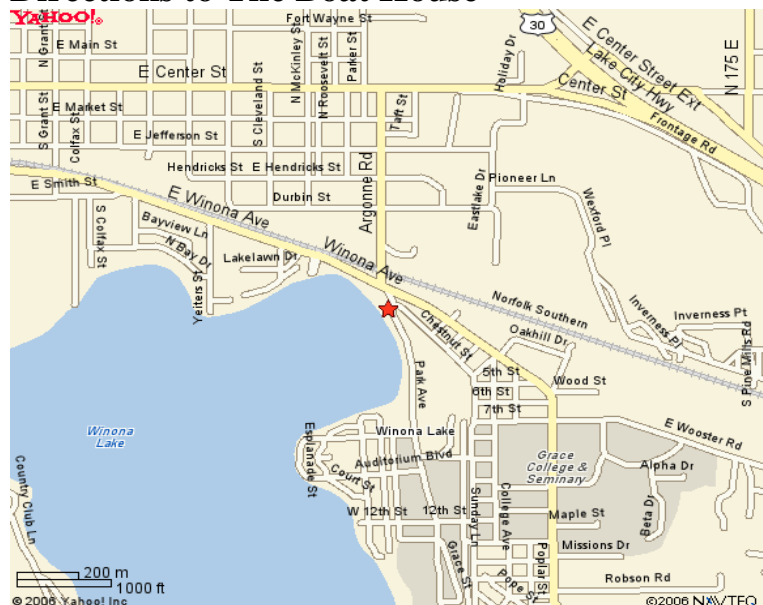
To Make Reservations: RSVP with dinner choice by Monday, Jan 15: Phone Randal Griffith at 574-231-2807 or email him at randal.griffith@honeywell.com

THE NOTRE DAME CHAPTER IS LOOKING FOR A FEW GOOD MEN AND WOMEN!

Keeping the chapter solvent and its programs both interesting and relevant requires the work of a Board and officers. Duties include one dinner meeting a month for our nine or ten month chapter year. The dinner is your compensation, and some committee work at other times is needed. We would love to see some new names placed in the ring. We will need at least two Board Members with terms running from 6/2007 to 5/2010, one Board member for a shorter term, and a Secretary and Vice Chairman. Some of the normal through-the-ranks progression has been attenuated by outside forces like graduate school. Please nominate yourself and suggest what position you believe you would enjoy most. I sure had a great time, but the by-laws have put me on the bench. Now it's your turn! E-mail Jon Oram jono@steelwarehouse.net or phone him at 574-236-5161. Thanks!

Chapter Officers: Jim Hendricks – Chairman (574) 532-9237; Randy Griffith – Vice Chairman (574) 231-2807; Tim Conrad – Secretary (574) 315-5260, Rick Gordon – Treasurer (574) 272-9209; Jon Oram – Past Chairman (574) 236-5161, Al Miller – Student Advisor; **Board Members:** Walt Hornberger, Jim Chan, Bob Merryfield, Larry Lapp, Rick Rateick, Dave Coulston

Directions to The Boat House



Directions: *From the North* –Take US 31 south until you reach the US 30 East exit and take US 30 East towards Warsaw. After 26.5 miles on US 30E turn right onto East Center Street and go 0.4 miles. Turn left onto Argonne Rd and go 0.4 miles. Turn left onto Kings Hwy and go <0.1 miles. Bear right onto Park Ave and go <0.1 miles to arrive at the Boat House.

From the South: Take US 31 North until you reach the US 30 East exit and take US 30 East towards Warsaw. After 26.5 miles on US 30E turn right onto East Center Street and go 0.4 miles. Turn left onto Argonne Rd and go 0.4 miles. Turn left onto Kings Hwy and go <0.1 miles. Bear right onto Park Ave and go <0.1 miles to arrive at the Boat House.

From the East: US 30 west towards Warsaw. Turn right onto East Center Street in Warsaw and go 0.4 miles. Turn left onto Argonne Rd and go 0.4 miles. Turn left onto Kings Hwy and go <0.1 miles. Bear right onto Park Ave and go <0.1 miles to arrive at the Boat House.

From the West: take US 30 East towards Warsaw. Turn right onto East Center Street in Warsaw and go 0.4 miles. Turn left onto Argonne Rd and go 0.4 miles. Turn left onto Kings Hwy and go <0.1 miles. Bear right onto Park Ave and go <0.1 miles to arrive at the Boat House.

ASM Notre Chapter Scholarship

The ASM Notre Dame Chapter offers annual undergraduate scholarships for children of chapter members, for study in materials or material- related fields. The scholarship is for one year and is renewable. The minimum scholarship is \$500. We encourage all qualified children of chapter member to apply. The application is at <http://www.asm-nd.org>

Future Meetings for the Year:

January 17, 2007: Medical Polymers, Speaker: Hallie Brinkerhuff, PhD (The Boathouse, Warsaw)

March 3, 2007: Engineers Week “Nanotechnology”, Speaker: George Adams III (Century Center, South Bend)

March 20, 2007: “Combinatorial Metallurgy”, Speaker Dr. Paul McGinn

April 17, 2007: National Officers Night with Dr. Fred Schmidt, FASM, presenting “Anatomy of a Landing Gear Failure Analysis”

Summary of the Nov. Studebaker Meeting

The tour of the Studebaker museum was a trip to the past. The tour covered the early days of Studebakers and their trip to Indiana in a covered wagon. We learned about the vehicles and cars and that made Studebaker one of the most famous car companies ever to exist. We gazed in awe at the cars that our fathers and grandfather may have driven. After the tour we enjoyed dinner inside of the Studebaker Mansion.

Invitation: ASM Materials Camp

Do you know any bright high school student who will be entering the Junior (Grade 11) or Senior (Grade 12) grade next fall? Are they inquisitive learners with strong math and science aptitude?

What about a teacher of high school math, science, or technology who is eager to teach and motivate young people in exciting new ways?

If so, you know a perfect candidate for the **ASM Materials CampSM**, a program utilizing hands-on learning principles of applied math, chemistry, and physics led by a distinguished world-class faculty.

ASM Materials Camp – Teachers demonstrates how to use low/no cost, simple labs and experiments using everyday materials that can be integrated into existing science/math lessons plans. These simple activities and experiments are proven to actively engage students in learning more about applied science.

Contact any Board Member for additional information.

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Engineers Week 2007 Celebration
The Emerging Field of Nanotechnology

Speaker – George B. Adams III, Ph.D.

*Research and Outreach Coordinator
Birck Nanotechnology Center
Purdue University*

At Purdue University, researchers are investigating some of the most intriguing and significant problems: those in the emerging, highly interdisciplinary field of nanotechnology. For more than 15 years, Purdue has been active in defining the field and developing its key components. Encompassing research and technology development primarily in the length scale of about 1 to 100 nanometers (a nanometer is one billionth of a meter), nanotechnology is a field exploding with possibilities, and it's a key signature area at Purdue. Here, research is under way within and across a host of disciplines – agriculture, biology, chemistry, computer science, engineering, pharmacy, and physics – with projects ranging from nanoelectronics and nanomanufacturing to public health.

**Saturday, March 3, 2007 Century Center Grand Hall in South Bend,
Indiana**

Event Price - \$37.50 per person

**Dinner - Bruschetta Chicken, Potato, Vegetable, Salad and Dessert
Vegetarian dinner selection is available by direct request to Jim Koontz
jhk@csinet.net or (219) 326-8978**

Social Hour: 6:00 PM

Dinner: 7:00 PM

Presentation: 8:00 PM

Presented by the following Societies

ACS	<i>American Chemical Society</i>	ASABE	<i>Am. Society of Agricultural & Biological Engineers</i>
AFE	<i>Association for Facilities Engineers</i>	ASM	<i>International (The Materials Information Society)</i>
ASCE	<i>American Society of Civil Engineers</i>	ASQ	<i>American Society for Quality</i>
ASME	<i>American Society of Mechanical Engineers</i>	IEEE	<i>Institute of Electrical and Electronic Engineers</i>
ISPE	<i>Indiana Society of Professional Engineers</i>	SAE	<i>Society of Automotive Engineers</i>
SME	<i>Society of Manufacturing Engineers</i>		

**The public is invited, RESERVATIONS NECESSARY, Corporate tables are available
Feel free to invite your spouse, a friend or a guest**

Registration Closes Monday, February 26, 2007 at 10 AM EST

How to register:

Registration is required over the internet by credit card to attend our Engineers Week 2007 Celebration. The registration has been contracted to Acteva, a reputable "on-line event registration" company. You will be taken to their website by clicking the link at the bottom of this page when you are ready.

Information Required for Reservation System:

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1st page - You will enter how many reservations you are making at a price of \$37.50 each and select the group you are associated with. Click "Continue".

2nd page – Enter your personal information. Click "Continue".

3rd page – Review your order. Click "Continue".

4th page – Enter first name and last name for each reservation. Click "Save Attendees".

5th page – Enter your credit card information. Click "Approve Order".

6th page – This is your order. Print it for your file.

If you are making a reservation a complete table of Eight, is similar to the above information with additions noted below:

1st page – Also enter a name for your table.

4th page – For any names not known, enter your "Full Name" as "first name" and "Guest" as "last" name so that all eight lines are complete.

Preparation for On-Line Registration

Make sure you have the above information available and your credit card handy. Upon completion you will receive a confirming email.

Register at: <http://www.acteva.com/go/asmesjvs>

If you do not have internet access please contact Jim Koontz [jkh@csinet.net](mailto:jhk@csinet.net) or (219) 326-8978

Fun Materials Fact for the Month:

Vito Volterra (1860 – 1940) was the Italian scientist that developed the theory of dislocations in crystals that was later important in the understanding of ductile materials. He was a professor of rational mechanics at the University of Pisa, a professor of mechanics at the University of Turin, and a professor of mathematical physics at the University of Rome. He was also a senator of the Kingdom of Italy and in WWI he worked on the design of airships. He is also known for his work on mathematical models for the interactions of biological species.