



October 2009 OUR 90th YEAR As A CHAPTER!

The Link Newsletter

www.nd-asm.org

Happy 90th Year!

Greetings ASM-Notre Dame chapter members! The September meeting at General Sheet Metal was a great success. We would like to thank General Sheet Metal for giving such a great tour and to all the members for coming. We learned much about how sheet metal is made into complex forms and how General Sheet Metal is using the latest technology in their work. This month, October, we will be having a talk on "High Strength Ceramics for Engine Applications" by Stephen P. Gonczy, PhD.

The members of the Executive Board want to hear from you! What meeting topics would interest you? Is there a plant tour you or someone else would like to give? Is there a topic you are an expert on and would like to share your knowledge with the other chapter members? Let us know! We are always open to ideas from our members.

Also, remember to that we give out a scholarship to students that are studying materials related fields in college. Read the LINK (our see our website) for more information.

Material Highlights

Aluminum is the most abundant metal in the Earth's crust and the third most abundant element after oxygen and silicon.

High Strength Ceramics for Engine Applications:

6:00pm Tuesday, Oct. 20, 2009

Ceramics were the first "engineered" materials and they continue to be an integral part of our industrial society with broad applications in construction, electronics, and industrial processing. But there is growing interest in using ceramics in structural roles in hot sections of engines, as new ceramics offer higher temperature capabilities than current metals. The turbine engine community has a particularly strong effort in developing these ceramics, because of the promise of higher fuel efficiency, as well as significant weight savings for aircraft turbines. Steve Gonczy will discuss the specific applications of ceramics in turbine and internal combustion engines, the fundamentals of ceramic mechanical properties, the different types of monolithic and composite ceramics, and the benefits and challenges of inserting these new ceramics into engines.

Time/Date: 6:00 pm Oct. 20, 2009.

Location: Tippecanoe Place
620 Washington Avenue
South Bend, IN

6:00 pm Social

6:30 pm Dinner

7:15 pm Seminar

Dinner Choices: Grilled Chicken Pasta or Classic Cut Prime Rib. Coffee and Ice Cream included.

Cost: \$20

Please RSVP via the Google Calendar invitation, on the website, or email Tim Conrad at tlconrad@gmail.com or Bob Merryfield at klmerryfield@aol.com by Sunday Oct 17.

Biography of Stephen Gonczy, PhD :

President, Gateway Materials Technology Inc.
Mt. Prospect, IL

Steve Gonczy is a PhD scientist with over 30 years of experience in materials research and development. For the last 12 years he has been an independent consultant in high temperature materials, working with private industry and government agencies on evaluating and developing ceramics and metals for a broad range of applications. Prior to his consulting career, he was a research scientist and group leader at Allied Signal Research in Des Plaines. He is the current chair for the ASTM C28 Advanced Ceramics committee and the chair for the government-industry Ceramic Composites Handbook task group. His engineering degrees are from Marquette University and Northwestern University. He has over 50 U.S. patents and technical publications.

Future Meetings

20 October	High Strength Ceramics for Engine Applications , Stephen T. Gonczy, PhD
November	TBD
December	TBD
January	TBD
February	TBD
March	TBD
April	TBD
May	TBD

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Notre Dame ASM Chapter Scholarship

About the Scholarship

The Notre Dame Chapter of ASM International established a scholarship in 1981 to encourage the study of Materials Science. This scholarship opportunity is offered to students having an interest in pursuing a college degree in the Materials Sciences (i.e. those involving metals, ceramics, polymers, semiconductors, composites, etc.). Those students with a parent or guardian who is a member of the Notre Dame Chapter of ASM receive preferential consideration. If there are no applicants that meet this criteria, applications from individuals not affiliated with the chapter will be considered. The scholarship is offered, in the spring, to those students enrolled in college in the upcoming school year.

Eligibility and Rules

The following rules govern the granting of scholarships:

- The chosen field of study should lead to a technical degree in a materials related field; for example a B.S. in Metallurgical Engineering.
- The Scholarship Committee will evaluate the applicant based on numerous factors, including but not limited to:
 - Scholastic Achievement
 - Extracurricular Activities
 - Interest in the Field
 - Recommendations
- The scholarship is awarded based on the recommendation of the Scholarship Committee and approval of the Chapter Executive Committee.
- The scholarship is awarded for one year only. Renewal is by reapplication, Scholarship Committee recommendation and Executive Committee approval only.
- The amount of the award is determined by the Scholarship Committee with the approval of the Executive Committee. The recommended minimum is \$500.00.
- Payment is made to the student's college or university in the student's name. It is to be distributed equally in each semester (e.g. fall and spring).
- Applicants must identify the school in which they are enrolled for the upcoming fall term.
- Application must be made by the student using the form provided at this web site. The form may be either submitted electronically or mailed directly to the Scholarship Representative at the address provided below:

Dave Coulston
LECO Corporation
3000 Lakeview Avenue
St. Joseph, MI 49095
Dave.Coulston@LECO.com

- In order to be considered for this scholarship, the following items must also be submitted:
 - Two letters of recommendation. Neither can be from an immediate family member.
 - Copy of an acceptance letter or proof of enrollment in a college or university.
 - Copy of college transcript (if now enrolled in college)
 - Copy of high school transcript (if now in high school)
 - Proof of ACT/SAT scores (if now in high school)
- All applications must be received by April 23, 2010. Any applications received after this date will be returned. A final decision on the scholarship recipient will be made no later than August 2, 2010.