

## ASM International Philadelphia Liberty Bell Chapter Newsletter

### Thursday March 20, 2008 - Sauveur Award Night

Spouses and guests are invited and welcome. Williamson Restaurant, Easton Road, Horsham, PA

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*Best Wishes to the Philadelphia Chapter*

**Technical Chairperson:** Dr. Chad Graham – University of Pennsylvania (Ret.)

**Meeting Sponsors:** Donovan Heat Treating, B & G Manufacturing Co. Inc. and Hoeganaes Corp.

**Dinner Menu:** French Onion Soup, Roast Tom Turkey w/stuffing, Rice Primavera, Caesar Peas, Apple Pie

**Social Hour** - 6:00 - 7:00 p.m.      **Dinner** - 7:00 p.m.

Price: Members & Guests: \$26.00; Retirees: \$17.00; Students: \$14.00

#### Meeting Registration

Register to attend our meeting on our website [www.asm-philadelphia.com](http://www.asm-philadelphia.com). If you have a large group attending or do not have access to the website, please contact Rob DeKalb at 215-542-7600 to register.

#### Meeting Cancellation Notification

In the event of cancellation of a meeting due to inclement weather, we will broadcast the news as part of KYW News radio's (1060AM) Storm Center Service. ASM cancellations will be specifically announced when KYW airs community cancellations at :20 and :50 past each hour during the afternoon of the day of the meeting. ASM's name will be specifically mentioned, so listen for the name rather than an organization number as is used for schools.

## Thursday, March 20, 2008 - Sauveur Award Night

**Speaker:** Roger Dougherty, Ph.D. – A.W. Grosvenor Professor of Materials Engineering, Drexel University

**TOPIC :** *Structural Materials Fifty Years After the Subject Became a Science:*

*Some Unsolved Problems and Thoughts on the Future*

Metallurgy, the father of Materials, was a craft skill for as long as human history but became a science only very recently, in several different stages. However many of the most important changes appear to have taken place over a narrow period of time, between 1945-1955. Optical microscopy (1865) and X-ray diffraction (1912) had started the process, continued by steel and aluminum research, but after WWII, research in Chicago, GE Research Labs, the Department of Metallurgy at Birmingham University in the UK and elsewhere laid the foundation for our subject: Dislocation theory, diffusion via point defects, the physical chemistry of phase transformations capped by the development of transmission electron microscopy at a resolution of less than 1 nm transformed the study of metallurgy. Although the actual alloys in industrial use did not immediately change very much, many new developments did occur: Gas turbine superalloys, high strength low alloy steels, semiconductor crystals and the microchip, optical fibers, lasers being some of the most significant materials developments. During this last half-century university courses changed dramatically, metallurgy expanded to materials and "materials" research now dominates much of engineering research as well as that in solid-state physics and chemistry. It is widely felt that structural metallurgy is now a "mature" subject; one often neglected for studies of newer materials, nano-, bio- etc. This lecture given by someone who was an undergraduate from 1958-1961 and who has been practicing the black "art" of metallurgy from then on, will review the past changes, draw attention to some of the many scientific challenges that remain and speculate on what the future might yield.

#### Chairpersons Message – March 2008

Wow, it is March already, where does the time go? I hope this note finds all of us having an enjoyable winter albeit too warm for winter.

We have some really wonderful events being planned for the remainder of the year in the form of tours and contests along with the Materials Camp in the summer. So, if you know anyone with an interested student or someone who is unsure about Materials Engineering, feel free to inform them about the materials camp held at Drexel University this summer. The Materials Camp link can be found at <http://www.asm-philadelphia.com/asm.html?materialscamp.html> and will be held the week of June 23-27<sup>th</sup> 2008. As a member of the Liberty Bell Chapter of ASM, I would highly recommend anyone that would like to observe any of the student




activities during the camp to feel free to do so. If you have any comments, or questions about the camp or any of the other happenings of the chapter, please do not hesitate to contact us for answers to your questions. Tim and Tom are doing a wonderful job on the camp and are coordinating with the folks at Drexel to likely have the best camp ever for our chapter.

Our chapter is doing well on both the local and the national levels, but we would still love to see more people at the meetings. If you have any ideas or suggestions for meeting topics, sponsors please feel free to drop one of us a note to let us know what you think. We on the E & O are volunteers for your chapter and to benefit the chapter members.

I would also like to take this opportunity to ask everyone to bring a friend or call someone they have not seen in a while and bring them out to a meeting. Let's get our meeting attendance back to where it was a few years ago with standing room only for people who do not reserve ahead of time.

Thank you,  
David Von Rohr  
2007-2008 Chairman

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### ASM Sustaining Member News

The Sustaining Member Thank You Luncheon will be held on Friday, March 28, 2008. Invitations have been mailed to all Company Sustaining Member Representatives.

April 17<sup>th</sup>, 2008, will be the Sustaining Members Expo! The Expo starts at 5:30 pm. Come and see what your fellow ASM Member Companies have to offer. If your company has a Sustaining Membership with the ASM Liberty Bell Chapter, don't forget to sign up to participate in the Expo.

-If you are not a current ASM Sustaining Member, and want more information on how to become a Sustaining Member with The Liberty Bell Chapter:

- If you are a current Sustaining Member and have questions about upcoming Sustaining Member events:

- Contact Sarah Mansuetti: Email: [sarah.mansuetti@rexht.com](mailto:sarah.mansuetti@rexht.com) Phone: 215.855.1131 x221

### Welcome New Members

Dawn Bonnell	NBIC	Jim Given	NWL, Inc.
Donald Bowe	Air Products & Chemicals Inc.	Kristy McMullen	Heraeus Electro-Nite Co.
Don Brown	Hamamatsu Photonic Systems	Kalathur S. Narasimhan	Hoeganaes Corp.
Nicholas P. D'Aniello	US Patent & Trademark Office	Ryan VanderMeulen	ArcelorMittal -Coatesville
John Dwyer	Air Products & Chemicals. Inc.		

### Upcoming Events

3-20-08	Thursday	<b>Albert Sauveur Award Night</b> Topic: Structural Materials Fifty Years After the Subject Became A Science Williamson Restaurant, Horsham, PA 6:00 pm
4-17-08	Thursday	<b>Sustaining Members Night/Poster Contest</b> Topic: A Partial Solution to the Mystery of the Great Pyramids of Egypt Williamson Restaurant, Horsham, PA 6:00 pm
5-15-08	Thursday	<b>Honors &amp; Past Chairmen Night</b> Topic: Dedicated to All Past Chairpersons- Awards & Honors Williamson Restaurant, Horsham, PA 6:00 pm
6-2-08	Monday	<b>Golf Outing</b> Limekiln Golf Club 8:00 am
6-23thru 27		<b>2008 Materials Camp</b> Drexel University

### CF. Burns Memorial Poster Contest

The Liberty Bell Chapter will be holding its 7th annual poster contest for graduate students during our Sustaining Members Night on April 17, 2008. This will be the fourth year the contest is sponsored by Solar Atmospheres, Inc. Prize money will be \$500 for 1st Place, \$300 for 2nd Place and \$200 for 3rd Place. Due to limited space, we are asking students to pre-register. Space will be awarded on a first come, first serve basis. Please register your name and poster title with Don Jordan at [dj@solaratm.com](mailto:dj@solaratm.com). Good luck to everyone!

### Three Scholarships in 2008

In the academic year of 2007-2008, the Philadelphia Liberty Bell Chapter will provide three scholarships (\$1500.00 each) to college engineering students who intend to pursue a career in Materials Science. All eligible students are encouraged to apply. One full-page essay (single spaced, Arial font, with font size between 10 to 12), stating his/her commitment to the Materials Science profession, will be required. An application form is available from our website – [www.asm-philadelphia.com](http://www.asm-philadelphia.com) Or for more details, email Ken Moyer at [moyer@snip.net](mailto:moyer@snip.net). The deadline for application is March 1, 2008.

### Materials Camp 2008

The fourth annual Materials Camp will be held June 23-27 at Drexel University. This stimulating camp is open to high school students. Applications will be accepted now through April. This highly successful program is only possible through the generous donations from our local individuals, and businesses. There are several levels of support. As little as \$250 will get your name or your company name displayed on the Materials Camp banner, and in our Yearbook. For more information contact Tim Steber at [tms@solaratm.com](mailto:tms@solaratm.com), or Tom Reid at [ReiTmRd@aol.com](mailto:ReiTmRd@aol.com).

### Delaware Valley Science Fairs

Delaware Valley Science Fairs, Inc. (DVSF) was founded in 1949 and incorporated in 1993, making it one of the oldest Fairs in the country. It is now also one of the largest. The Fairs were designed as a vehicle for stimulating interest in science and technology among students in middle and high schools in the tri-state area. The philosophy behind the Fairs is that students learn science by doing science.

The Delaware Valley Science Fairs are seeking research-experienced scientists, engineers or technologists willing to volunteer one day of their expertise to help one of the most important science education programs in the Delaware Valley.

The ASM International Foundation has traditionally supported Science Fairs throughout the country and offers awards to projects focused on Materials Science and Engineering. For the past several years, the ASM Philadelphia chapter has provided judges for the ASM International-sponsored awards. We and the Science fair are always looking for additional volunteers to Judge these special awards, or any other category. Our local Fair will be held in Fort Washington in April 2-4, with the judging occurring on April 2.

For more information visit their website <http://www.drexel.edu/dvsf/> or contact John Janiszewski at [jjaniszewski@ltk.com](mailto:jjaniszewski@ltk.com).

### Nominating Committee Report

The nominating committee met on March 5, 2008. The following are nominated as officers and directors for 2008-2009:

Chairperson-- Tim Steber

Vice-Chair-- Mark Heuberger

Secretary-- Mike Moyer

Treasurer-- Sarah Mansuetti

Executive Treasurer-- Fred Klock

Executive Secretary-- Don Jordan

Director for one year term 08-09-- Dave Von Rohr

Director for two year term 08-10-- John Janiszewski, Tom Reid, Ron Smith

Travis Nelson, Bill Clark, and Jim Conybear will be serving the second year of a two year term as Director

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## **EMPLOYMENT OPPORTUNITY**

### **Quality Assurance Engineer**

Pennsylvania Machine Works, Inc., a manufacturer of piping components in accordance with ASTM, ASME and Mil specifications has a full-time Quality Assurance Engineer position available. Must have excellent computer skills including word processing, data base management and knowledge of Excel. Must also be comfortable in working on a high volume industrial manufacturing shop floor. Metal industry experience and/or certification or membership in organizations such as ASQ, NACE, ASME, SME or ASTM is also a plus. Penn Machine has been in business since 1931 and we take great pride in our work, our customer service and our employees. Come join a winning team. Feel free to visit our website: PENNUSA.COM Great Benefits, Great Company. See for yourself! Call 610-497-3300 or email [sue@pennusa.com](mailto:sue@pennusa.com).

### **Chemistry Technician**

FT second shift. Primary responsibilities include sample preparation, chemical testing and analysis of test results, and other laboratory tasks. The position requires strong mathematical ability, mechanical aptitude, and the ability to work with minimal supervision. Lab experience, especially in ICP and LECO combustion/fusion methods, desirable. Degree in chemistry or related science preferred. Excellent benefits and competitive wages. Please send your resume, including salary requirements, to Tim Snyder, Laboratory Testing Inc., 2331 Topaz Drive, Hatfield, PA 19440 or e-mail to [tsnyder@labtesting.com](mailto:tsnyder@labtesting.com).

### **Senior Technician**



Carpenter Technology Corporation has an immediate need for an experienced Materials Engineering Technician/Specialist to join our current Research & Development Laboratory Team. The Materials Engineering Technician / Specialist provides metallurgical evaluations for customer-related issues, for the resolution of short-term Mill production problems and for ongoing process improvement efforts. Your strong background in metallurgical characterization methods, special alloy systems and an in-depth understanding of common metal processing operations will be utilized as you assist with new product or special alloy development. A two-year technical degree or equivalent engineering laboratory experience is desired. Detail and team-oriented individuals with strong analytical skills will thrive in this fast-paced assignment. This position requires basic computer software skills, a positive, flexible work attitude, and the ability to pursue multiple tasks simultaneously. Candidates for this position must also possess excellent written and verbal communication skills. Carpenter, a world leader in the manufacture and distribution of specialty alloys, provides employees with competitive salaries, and a benefits package which includes a company-funded retirement and 401K Plans. Forward your resume and salary requirements via email to [employment@cartech.com](mailto:employment@cartech.com); Fax to 610-736-7355, or mail to the Employment Department's attention at CARPENTER TECHNOLOGY CORPORATION, P. O. Box 14662, Reading, Pa. 19612-4662. An Equal Opportunity Employer M/F/D/V

### **Mission Statement - ASM International, Philadelphia Liberty Bell Chapter**

The Philadelphia Liberty Bell Chapter of ASM International supports the development and continuance of the materials industry in the Philadelphia area. Chapter activities strive to inform the local technical community of new developments in materials, raise the visibility of the materials industry, provide educational opportunities in materials technology, recruit new people and organizations into materials-related activities, and provide networking opportunities for members of the materials community.

The Chapter works with ASM International to use our joint resources to accomplish this mission.

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**Changes To Your Membership Information** - Any Chapter Member who needs to make a change to their membership listing or to their company affiliation listing must call Membership Service, ASM International at 1-800-336-5152 or use the ASMI website at [www.asminternational.org](http://www.asminternational.org). This will permanently update your information. We depend on ASM International to receive our updated mailing list for this newsletter. So please do not send information to this email address.

**Do you have news...** that should be shared with the other members of the Liberty Bell Chapter? If so, please send your info to Jim Watters at [dvua@comcast.net](mailto:dvua@comcast.net). Be sure to add the phrase "Item to add to the ASM Chapter newsletter" in the subject line. We'll be sure to include it in the next monthly Chapter newsletter.

### **For more info about the ASM Liberty Bell Chapter. . .**

Contact Chapter Chairperson David Von Rohr at 215-579-7500 or email him at [David.vonRohr@stork.com](mailto:David.vonRohr@stork.com)