Continuing Education Night
Thursday, February 19, 2015 - 6:00 pm

Menu:
Penne with Peppers, Garlic & Onion, Flounder Florentine, Stuffed Breast of Chicken, Sliced Tomato & Red Onion, Potatoes au Gratin, Vegetable Medley, and Sherbet.

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

Prices:
Members & Guests: $35.00; Retirees: $24.00; Students: $15.00

Spouses and guests are invited and welcome.  Meetings held at Williamson Banquet, on the corner of Rt. 611 (Easton Road) and Blair Mill Rd., Willow Grove, PA 19044   For directions:  www.williamsonrestaurant.com.

Meeting Registration: PLEASE NOTE**:
Reservations must be made no later than 1:00pm on the Tuesday before the meeting to guarantee dinner availability. Register to attend our meeting on our website http://philadelphia.asminternational.org. If you have a large group attending or do not have access to the web site, please contact Trevor Jones at 215-721-1502 ext 1220 to register.

This Month’s E-Newsletter Sponsored by:

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.

Related links:

http://philadelphia.asminternational.org

SPEAKER:  T. SCOTT KREILICK
President & CEO

TOPIC: Conservation & Restoration of Historic Metal Sculpture, Architecture and Objects

This presentation will focus on the conservation and restoration of historic metals in the Mid-Atlantic region, with a particular emphasis on bronze and iron (both wrought and cast). The goals of conservation are to mitigate the natural deterioration of historic materials and to minimize the loss of historic fabric during cleaning and maintenance. The goal of restoration is to return an object to the appearance it had at some point in the past. Often, these goals come into conflict with each other. When one factors in exterior weathering or the utilitarian use of an object, the challenges become more complex.

T. Scott Kreilick is President, CEO, and Principal Conservator of Kreilick Conservation, LLC. Established in 1996, Kreilick Conservation provides condition assessments, laboratory and field analysis of materials, emergency response and stabilization, treatment, documentation, and maintenance of architecture, monuments, sculpture, industrial artifacts, and objects. Kreilick Conservation, LLC has performed conservation treatments, assessments, or material analysis at more than 200 sites in the U.S., including more than 30 National Landmarks. Philadelphia-area projects have included Independence Hall, Merchants’ Exchange Building, Philadelphia Museum of Art, Founder’s Hall at Girard College, Philadelphia City Hall, Laurel Hill Cemetery, Washington Monument, and the Wright Brothers Aeronautical Collection at the The Franklin Institute, among many others.

Mr. Kreilick earned his Master of Science in Historic Preservation with a specialization in Architectural Conservation at the University of Pennsylvania; and his BA in the History and Sociology of Science also at the University of Pennsylvania. He completed an internship at the Philadelphia Museum of Art. In addition, Kreilick has studied stone carving at the Pennsylvania Academy of Fine Arts, and oil gilding at the Smithsonian Institution.

This Month’s E-Newsletter Sponsored by:

Technical Chairperson:  Tim Steber, Solar Atmospheres, Inc.
Meeting Sponsors: Solar Manufacturing Inc. and Forensic Sciences Inc.

This Month’s E-Newsletter Sponsored by:

Advertise in the 2015-2016 ASM Yearbook!
The yearbook is seen by over 900 materials professionals and companies in the Delaware Valley & South Jersey area. To receive info about Yearbook rates, please contact Ed Mazeika at e.mazeika@asm-philadelphia.com
Chairperson’s Message
February 2015

I can’t believe it’s February already, and we’re halfway through the ASM season. Thank goodness our weather has not been as bad as our friends in New England. Even though the groundhog predicted six more weeks of winter, perhaps we can get by without a major snow event!

Last month’s speaker, Prof. Linda Schadler presented a fascinating talk about nanomaterials and their potential to solve some of the world’s global challenges, including more efficient use of energy. Afterward our members enjoyed a lively conversation with Prof. Schadler, and a special visit from former colleagues at the University of Pennsylvania. It was a fun evening! A special thanks goes to Ron Smith from S-Bond Technologies, and meeting sponsors, Laboratory Testing Inc., and Robert Wooler Inc.

Coming up this month on February 19th, our Continuing Education Night will prove to be quite captivating. Mr. Scott Kreilick, President & CEO of Kreilick Conservation will present a talk about Conservation and Restoration of historic metal sculptures, architecture and other objects. Kreilick Conservation, LLC., has performed conservation treatments, assessments, or material analysis at more than 200 sites in the U.S., including more than 30 National Landmarks. Philadelphia-area projects have included Independence Hall, Merchants’ Exchange Building, Philadelphia Museum of Art, Founder’s Hall at Girard College, Philadelphia City Hall, Laurel Hill Cemetery, Washington Monument, and the Wright Brothers Aeronautical Collection at The Franklin Institute, among many others. What a treat to have Scott in our Liberty Bell Chapter!

With such an excellent topic this month, why not bring a colleague or friend along? Hope to see you on the 19th!

Respectfully,

Jerri Jefferies
2014-2015 Chapter Chairperson

SPEAKER: T. SCOTT KREILICK continued from page 1

Mr. Kreilick is a Professional Associate (since 2001) of the American Institute for Conservation of Historic and Artistic Works (AIC), having been an Associate since 1994. Kreilick is a member of AIC’s Collections Emergency Response Team (CERT). He served on the Board of Directors of the Delaware Valley Chapter of the Association for Preservation Technology International from 1998-2004. As a Member of the American Society of Metals, Kreilick served on the Historical Landmarks Award Selection Committee from 1995 until 2005, serving as Chair for 9 years. He was a member of Committee E-06 on Performance of Buildings of the American Society for Testing and Materials (ASTM) from 1995 until 2005; and Committee B-01 on Electrical Conductors from 1986-1997. Kreilick is President of the Springfield Township Historical Society, and President-Elect of the Rotary Club of Springfield Township.

Kreilick’s previous metallurgical experience (1979-1993) included the design, manufacture, and marketing of metallic superconducting wire products for use in particle accelerators, magnetic energy storage, medical imaging, and other applications. Kreilick established a focused business unit to manufacture superconducting wire for Phelps Dodge Corporation. He also designed a Class 1000 cleanroom, a closed-loop wastewater treatment facility, and a state-of-the-art composite wire fabrication facility. In addition, he published twenty-eight peer-reviewed papers and the chapter on Niobium-Titanium Superconductors in Volume 2 of the 10th Edition of ASM’s Metals Handbook.
2015 ASM Materials Camp

We are accepting applications for our 11th Annual Materials Camp at Drexel University on June 22-26. Each year there is a strong demand for the camp, with between 75 and 100 applicants over the last few years. With between 20 and 25 slots available, it is very competitive. The very best engineering-oriented students in our region are being served by our camp. As a result of their experiences at camp many are pursuing a Materials Engineering career.

The program is one of which our Chapter is extremely proud. It really makes a difference in the lives of the students. We depend on the generosity of local companies and individuals to continue providing this priceless learning experience. Please contact Brian Gorney at 586-354-5167 or gorneybj@gmail.com to become a sponsor and have your company linked to this wonderful program.

We would also like to announce a new Teacher's Camp that will be coordinated jointly between the ASM Liberty Bell Chapter and Temple University in the summer of 2016. This program will provide science and engineering-oriented teachers in the region an opportunity to be taught by certified master teachers from the ASM headquarters. The purpose of the week-long course is to assist teachers in finding ways to better interact with students and promote science and engineering in their school. More information will be posted in the newsletter as it becomes available.

Delaware Valley Science Fairs Judges Needed

Once again this year, ASM chapter members will be involved in judging the Delaware Valley Science Fairs. April 1, 2015 is the judging day for students in grades 8-12. The DVSF is an annual competition for middle and high school students from eastern Pennsylvania, Delaware, and southern New Jersey. In addition to selecting the recipients of ASM prizes for materials-related projects, some members have assisted in judging categories such as physics, chemistry, and engineering. Again this year, the award medals will be handed out at the awards ceremony on April 2.

But, more judges are always welcome. The judges are all volunteers and come from a variety of technical areas, including industry, education, and research. Although there is not a specific materials category, your materials background qualifies you for a variety of areas.

So, in addition to helping the DVSF, you could help the chapter further its educational goals by being a judge. This year’s fair will be held at the Greater Philadelphia Expo Center in Oaks, PA. If you are interested in being a judge, you can sign up at http://www.drexel.edu/dvsf. If you need more information about judging, or some encouragement, talk to John Janiszewski (jjaniszewski@ltk.com or 215.641.8849).

To ensure you receive your E-newsletter and yearbook:

Please update your membership listing or your company affiliation listing. You can do this by calling Membership Service, ASM International at 1-800-336-5152 or using the ASMI website at www.asminternational.org. This will permanently update your information. We depend on ASM International to receive our updated Chapter roster.

2014-2015 Sustaining Members

A.L. SINGMASTER PERSONNEL SVC.
APOLLO DESIGNS
B & G MANUFACTURING COMPANY, INC.
CONSULTING ENGINEERS & SCIENTISTS, INC.
CRAIG CLAUSER ENGINEERING CONSULTING, INC.
DELWARE VALLEY UTILITY ADVISORS
DONOVAN HEAT TREATING COMPANY, INC.
ECRI-MSLB
EDWARD A. BOLL CO., INC.
EXCEL TECHNOLOGIES, INC.
EXELON POWER LABS
FORENSIC SCIENCES, INC.
FREDERICKS COMPANY/TELEVAC DIVISION
HOEGANAES CORPORATION
IPSEN INC.
LABORATORY TESTING INC.
LECO CORP.
LTK ENGINEERING SERVICES
MAGNA-TECH P/M LABORATORIES
METLAB CORP.
PENN STAINLESS PRODUCTS
PRESSURE TECHNOLOGY, INC.
RAMBALL TESTLAB, INC.
REX HEAT TREAT
SOLAR ATMOSPHERES INC.
SOLAR MANUFACTURING INC.
STRUERS INC.
SUPERIOR TUBE COMPANY
TINUUS OLSEN TESTING MACHINE CO., INC.
ROBERT WOOLER COMPANY
DREXEL UNIVERSITY
TEMPLE UNIVERSITY
UNIVERSITY OF PENNSYLVANIA
VILLANOVA UNIVERSITY
WILLIAMSON TRADE SCHOOL

President’s Club 2016

Cell: 440-570-4581

Jeri Jefferies
Account Representative
Philadelphia, PA

800-317-3236
www.solerultm.com

SOLAR ATMOSPHERES
Supporting the work of ASM Philadelphia “Liberty Bell” Chapter

Vacuum Heat Treating | Brazing | Carburizing | Nitriding

Sneak Preview
ASM Liberty Bell Chapter Scholarships

In the academic year of 2015-2016, 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 11 and 12), stating his/her commitment to the Materials Science profession, will be required. Please contact Mr. Kenneth Moyer at Magna-Tech P/M Labs for the application form and details (e-mail: moyer@snip.net). The deadline for application is March 1, 2015.

Eligibility of Applicants:

a) All students pursuing a diploma program, an Associates Degree or Baccalaureate Degree at a Philadelphia area educational institution in Metallurgy and/or Materials Science are eligible for scholarship consideration. Philadelphia area educational institutions are defined as those physically located in Philadelphia, Montgomery, Bucks, Delaware, and Chester Counties in Pennsylvania; and Burlington, Camden, and Gloucester Counties in New Jersey.

b) The children of Philadelphia Chapter ASM Members who are pursuing a diploma program, an Associates Degree, or a Baccalaureate Degree in Metallurgy and/or Materials Science at any accredited institution, including those outside of the defined geographical area, also are eligible for consideration.

c) Students whose residence is established in the counties noted in Section 3(a), who are pursuing a diploma program, an Associates Degree, or a Baccalaureate Degree in Metallurgy and/or Materials Science at any accredited institution, including those outside of the defined geographical area, also are eligible for consideration.

ASM INTERNATIONAL PHILADELPHIA CHAPTER UNDERGRADUATE SCHOLARSHIP APPLICATION (Academic Year of 2014-2015)

Type or print neatly in black or blue ink -

1. (circle one) Miss Mrs. Ms. Mr. Name: ________________________________________________________________

   Home Address: ________________________________________________________________________________________

   City/State/Zip Code: ____________________________ Home Phone Number: ( _______ )________________________

   Parent an ASM - Philadelphia Chapter - Member? Yes____ No_____ If “Yes”, Name: _________________________________

2. College or University: _____________________________________________________________

   Campus Address: ______________________________________________________________________________________

   City/State/Zip Code: ____________________________Campus Phone Number: ( _______ )________________________

   Expected Graduation Date and Degree: ___________________________ Major (including option if applicable): __________

3. Cumulative grade point average and basis (e.g. 3.5/4.0): ________________________________

4. Employment experience (attach resume if applicable): __________________________________________________________________________________

5. **NOTE - A personal essay (on separate sheet) describing special achievements, honors, and recognitions, background of interest in metallurgy/materials, interdisciplinary skills/interest and financial need. Essay should be no longer than two typewritten pages. A copy of resume should be included in the application.

   Name: ___________________________________ ________ Date: _____________________

6. DEADLINE: Applications must be received by March 1, 2015. Send application and attachments as a Word or Pdf file to:

   Mr. Kenneth Moyer, ASM Scholarship Chairman, Magna-Tech P/M Labs, 4 Greenbriar Lane, Cinnaminson, NJ 08077, Phone: 856-786-9061

   Email: moyer@snip.net
Solar Atmospheres Vacuum Heat Treats Ti Manifold for Orion Spacecraft

In today's modern production environment requirements seldom stay the same. In 2015, a prime example is a new third-party accreditation program called MedAccred in the medical industry. This program is going to be the equivalent of the Nadcap program in the aerospace arena. In addition to MedAccred, medical prime contractors are demanding that environmental conditions are controlled, processes validated, and the risk of exposure to foreign object debris (FOD) reduced. Solar Atmospheres has taken preemptive action to develop and build a new area to meet these upcoming requirements.

In mid-2014, Solar Atmospheres installed a new area within the existing shop at our 1983 Clearview Road address. The area is approximately 1500 square feet and incorporates temperature and humidity controls, as well as a slight positive pressure environment. These features will minimize water vapor and dust/debris in the heat treating area. One unique feature of the space is the addition of a brand new, state-of-the-art, all-metal hot-zone vacuum furnace with an oversized pumping system, ability to isolate the quench system during the heat cycle, and all stainless steel chamber. The furnace is capable of maintaining a vacuum level of 5x10⁻⁶ torr or lower and has successfully processed the most sensitive materials unshielded without any surface contamination. The furnace is positioned outside of the room, and only the door protrudes through the wall into the climate controlled room. This is a very unusual arrangement in the commercial heat treating industry. Early in 2015, an existing furnace will be modified and updated with state-of-the-art controls and added to this new area as well. Currently two laboratory furnaces also reside within the room bringing the total number of furnaces in the area to four.

This new climate controlled room will add significant value to our customers’ operations, a core component of Solar's mission statement, by lowering the risk of discoloration and FOD, and by the time-saving elimination of the need to shield parts during heat treating.

- Contributed by Lori Atkinson, Solar Atmospheres, Inc.

Upcoming Events...

2-19-15 Thursday Continuing Education Night- Topic: Conservation & Restoration of Historic Metal Sculptures, Williamson Banquet, Willow Grove, PA


4-16-15 Thursday Sustaining Members Night - Sustaining Members Mini Expo/Annual Charles F. Burns Poster Contest, Williamson Banquet, Willow Grove, PA

5-21-15 Thursday Honors & Past Chairmen Night - Awards & Honors

This Month's E-Newsletter Sponsored by: