

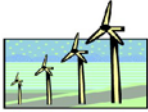

ASM International Philadelphia "Liberty Bell" Chapter Newsletter

(For optimum viewing and printing, this E-newsletter should be opened in Word and the margins In Page Setup changed to .25" for top, bottom and sides.)

Thursday, October 16, 2008 -- Young Members Night

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

This month's e-newsletter sponsored by:

<p>Energy Cost Problems? Maybe We Can Help</p> <ul style="list-style-type: none">➤ Energy Prices Are Up.➤ Full Electric Dereg is Coming➤ Call us. We can analyze your usage for a low fixed fee, or we can structure it so that you only pay us if you save money.  <p>DVUA DELAWARE VALLEY UTILITY ADVISORS 1939 Armstrong Drive • Lansdale • 215-699-0690 dvua@comcast.net www.utilitycostconsultants.com</p>	<p>Supporting the work of ASM Philadelphia "Liberty Bell" Chapter</p>  <p>SOLAR ATMOSPHERES</p> <p><i>The Metal Processing Advantage</i></p> <p>800.347.3236 www.solaratm.com</p>
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Technical Chairperson

Travis Nelson, LTK Engineering Services Inc.

Meeting Sponsors:

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Dinner Menu- Hot Sliced Roast top Sirloin of Beef, Sliced Ham, Sliced Turkey, Sliced Tomatoes, Sliced Cheese, Potato Salad, Pasta Salad, Egg Salad, Chicken Salad, Tuna Salad, Cole Slaw, Brownie Delight

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

Price: Members & Guests: \$28.00; Retirees: \$19.00; Students: \$16.00

Meeting Registration Register to attend our meeting on our website www.asm-philadelphia.com. If you have a large group attending or do not have access to the website, please contact Don Jordan 215-721-1502 ext 206 to register.

Speaker: PETER DENT - Electron Energy Corp.

Peter Dent is Vice President of Business Development for the Electron Energy Corporation (www.electronenergy.com) of Landisville, PA, a rare earth specialty magnet manufacturer serving the aerospace, military, medical devices, and energy technology markets. Peter is former President/CEO and Trustee of Leonardo da Vinci's Horse, Inc (www.leonardoshorse.org) which merged with the Discovery Center of Science and Technology and is now called the Da Vinci Science Center. He is Chairman of the Board of Trustees of the Da Vinci Science Center which opened its new 30,000 square foot, \$11 million facility in October 2005 on the campus of Cedar Crest College in Allentown (www.davinci-center.org). Peter has a Bachelor's of Science in Chemical Engineering from Lehigh University and is author of several technical papers and training courses in magnetics, cryogenics and high vacuum technologies. He has been a featured speaker in Milan and Vinci, Italy sculpture dedications, History Channel features and numerous media publications world wide related to Leonardo da Vinci's Horse.

TOPIC: The Technology, Casting Methods and Sculpture of Leonardo da Vinci

In the late 15th century Leonardo da Vinci labored for 17 years to create his ultimate triumph of art and technology: a colossal 24 foot tall, 80 ton bronze Horse in tribute to the father of Duke Ludvico Sforza of Milan. Unfortunately, war intervened and bronze for the Horse was diverted to form cannon to fight the French who eventually seized the city on 10 September 1499. Gaston bowmen used Leonardo's full size clay model as their target for archery practice which, along with the weather, destroyed what Leonardo had hoped would be his greatest legacy to art. Five hundred years later a group of Americans completed the dream of the late Charles C. Dent to build a modern tribute to Leonardo which is located in Milan, Italy. Through the donation to the Italian people of a Horse based on Leonardo's drawings, widespread international acclaim was received. This presentation will provide a context of times of the Italian renaissance and Leonardo's universal genius, 15th century casting technology, and contrast this with the methods used to build Leonardo da Vinci's Horse® which, even in modern times, posed numerous unique challenges.

About Da Vinci Science Center

The Da Vinci Science Center is an independent non-profit organization that promotes hands-on science learning through inquiry, highlights vibrant and important career opportunities in science available to every young person, and encourages all people to be curious and creative in the spirit of Leonardo da Vinci. The Da Vinci Science Center stresses the inquiry method. Utilized by scientists and recognized as the most effective way to learn, the inquiry method encourages questioning, experimenting actively, observing, communicating results, and connecting all knowledge.

Chairperson's Message – October, 2008

Fall is here, as nature bestows upon us the flaming foliage we all enjoy. A conglomeration of sporting events finds us embroiled in post season playoffs with Major League Baseball and the NFL in full swing.

Our opening meeting last month hosted Dr. William Frazier, Navy Senior Scientist for Materials Engineering who spoke on the topic of "Naval Aviation Materials Technologies." The Navy and Marines operate aircraft in very harsh environments of both sand and sea. Material selection is critical to minimize the impact of corrosion and erosion.

For October's "Young Members Night" we will host Peter Dent, VP of Business Development for Electron Energy Corp, speaking on "The Technology, Casting Methods and Sculpture of Leonardo Da Vinci." The correlation of art with industry will be quite interesting.

Thanks to every member of our five-star chapter for your continued support month after month. Please consider attending a meeting for good fellowship and compelling topics presented by our esteemed speakers.

Tim Steber
2008-2009 Chairperson

Aker Shipyard Tour



ASM Philadelphia Liberty Bell Chapter was privileged to be taken on a tour of the Aker Shipyard at the former Philadelphia Naval Base in May of this year. The photo shows the 17 men and women from the chapter who attended, along with the two guides who showed us around the facility (in the white hats). The tour started with a power point presentation followed by a question and answer session. We then went out and spent an hour and a half walking around the facility. The photo was taken in front of some of the smaller sub-assembly buildings.

Aker is currently in the middle of construction of a series of 12 tankers it is building for American Shipping Company. These tankers are double hulled and have a number of separate containment areas inside the ship that allow them to transport a number of different products at one time. The tankers are 600 feet long, they can haul 14 million gallons of liquid products, and they cost \$83 million each (from the Philadelphia Inquirer). At any one time the yard has three tankers in various stages of construction. One of the tankers we saw was in a dry dock. It appeared to be about 75% completed, and it was completely open on the front end. Aker is based in Norway.

Welcome New Members

Heather Chiarello Student
Divisha Dixit Student
Vincent T. Gatto Engrd. Precision Casting Co.

Christopher Pittler Student
Hongsheng Xiao Penn Engineering

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MEI Course - Principles of Metallography

The Greater Philadelphia Section of The American Society for Nondestructive Testing, The Philadelphia "Liberty Bell" Chapter of ASM International and the Philadelphia Chapter of the American Welding Society is presenting the MEI course - **Principles of Metallography.**

When: Tuesday evenings 18 November 2008 through 10 February 2009 -- 6:30 to 9:00 PM

Where: SPS Technologies -- Highland Ave. Jenkintown, PA

Cost: \$425.00 includes the 10 written lesson, a lab tour, the course carrying 3.0 CEU's and instructed by qualified personnel. Each student, after the first one from the same company will cost \$400.00.

Metallography is the study of the interrelationship between the structural characteristics and the physical and mechanical properties of metals, alloys and nonmetallic materials such as ceramics, polymers or composites. Structural interpretation of these materials is made possible by sectioning, mounting, grinding, polishing and etching a specimen which can then be viewed microscopically. This interpretation is invaluable in today's industrial workplace to maintain close control over production processes, in basic materials research, in development of new materials and in failure analysis. This course is intended to provide instruction in proper metallographic preparation techniques and the principles on which they are based. It describes methods of viewing structures and analyzing the constituents which are present.

Target Audience

The knowledge gained from this course will benefit anyone working in a metallographic facility, including technicians, supervisors, managers of Metallographers.

Course Outline:

1. Metallography: Its History and Aims
2. The States of Matter
3. Introduction to Phase Diagrams
4. Microstructure and Classifications of Steels
5. Metallographic Specimen Preparation
6. Fundamentals of Metallographs and Photomicrography
7. Quantitative Metallography
8. Auxiliary and Special Metallographic Techniques
9. Plastic Deformation and Annealing of Metals
10. Specific Metal Groups: Preparation and Interpretation

For more information contact Bob Rich 215 572 3485, Fred Klock 215 659 8424 or Ken Moyer 856 786 9061.

Return the lower portion of this form, with a check payable to "Philadelphia ASMI" to Fred Klock at 2305 Pershing Ave. Roslyn, PA 19001-2410 before 10 November 2008.

Name: _____

Work phone: _____ E-mail address _____

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Your Position: _____ ASM Member # (If Ap.) _____

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Best Wishes to the Philadelphia Chapter

Employment Opportunity - Metallurgical Engineer

FT position with a leader in the materials testing industry located in the Montgomery County area of suburban Philadelphia, PA. Primary responsibilities include conducting metallographic analyses in accordance with ASTM, ASME, and/or customer supplied specifications and test procedures, and performing sample preparation (drilling, cutting, grinding, mounting, polishing) on materials provided by customers. Position also requires mixing etchants and maintaining records.

This position requires mechanical aptitude, excellent attention to detail, excellent mathematical abilities, the ability to work with minimal supervision, and a willingness to work hands on.

Must have a B.S. in Material Science and Engineering or Metallurgy. A minimum of 1-2 years experience in a laboratory associated with metals testing and familiarity with the operation of digital imaging systems is desirable.

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. For additional information, please visit our website at www.labtesting.com.

Upcoming Events

10-16-08 Thursday

Young Members Night

Topic: The Technology, Casting Methods and Sculpture of Leonardo da Vinci

Williamson Restaurant, Horsham, PA 6:00 pm

11-18-08 Tuesday

MEI Course – Principles of Metallography

Classes held at SPS Technologies, Jenkintown, PA 6:30 – 9:00 pm

11-19-08 Wednesday

Eisenman Award Night

Topic: Creating A Unique and Profitable Heat Treating Facility within Seven Years

1-15-09` Thursday

National Officers Night

Topic: Managing Multi-Plant Metal Processing Operations Worldwide, A Corporate Prospective

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Mission Statement

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.

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. This will permanently update your information. We depend on ASM International to receive our updated e-mail list for this newsletter.

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. 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 Tim Steber at 215-721-1502 x 216 or email him at tms@solaratm.com.