



Thursday, October 15, 2009

Eisenman Award Night

Spouses and guests are invited and welcome.

Williamson Restaurant, Easton Road, Horsham, PA

Speaker: MARK ROBINSON, MTL Technologies, LLC



Mark Robinson's Bio:

BS, MS, Ph.D in Materials Engineering from Drexel University, Philadelphia, PA
Registered PE in the Commonwealth of PA - Metallurgy Discipline
Elected Fellow of ASM International in 1995
30+ year industrial

career in technical or R&D positions with:
Westinghouse R&D - Pittsburgh, PA
INCO Sterling Forest Labs - Suffern, NY
Carpenter Technology Corporation R&D - Reading, PA
SPS Technologies Corp. R&D - Jenkintown, PA
Hamilton Precision Metals - Lancaster, PA
Currently, working for MTL Technologies, LLC, a technology consulting company.
Acknowledged leading expert in precision resistor and strain gage alloy technology.

Topic: Strain Gage Materials:

Processing - Metallurgy - Manufacturing

Strain gages may seem obscure, but they are used in many applications that the average person comes in contact with every day. Hamilton Precision Metals in Lancaster, PA is the world's leading supplier of strain gage alloy foil. The alloys used, their unique physical properties and the manufacturing processes employed to convert massive ingots to 2.5 micron foil will be discussed.

(Please note; by convention, the "u" is left out of the word "gage" when referring to strain gages)

****Please Note ****

The November ASM meeting will be held at Drexel University.
See details on page 2.

Technical Chairperson

Robert Hill, Jr.
Solar Atmospheres, Inc.

Meeting Sponsors

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Dinner Menu

Buffet Style -
Spinach Salad
Stuffed Whole Breast of Chicken
Miniature Crab Cutlets
Stuffed Shells
Baked Sweet Potato Wedges
String Beans Almondine
Carrot Cake

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

Dinner - 7:00 p.m.

Prices: Members & Guests: \$30.00;
Retirees: \$20.00; Students: \$16.00

Meeting Registration:

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

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Chairperson's Message

October, 2009

The Phillies are in the playoffs. The Eagles are looking good. The Flyers and Sixers are starting up, and the ASMI Liberty Bell Chapter is going full speed ahead as well. I want to thank the ASNT Greater Philadelphia Section for joining with us again for the September meeting. I also want to thank Dr. Leroy Alaways for his interesting explanation of baseball pitching and what goes into it.

Our October meeting features Dr. Mark Robinson, the Eisenman Award winner. You can read about his many accomplishments in the newsletter or yearbook. I hope that many will come to congratulate and welcome him to the class of Eisenman Award winners, a very distinguished list of Engineers and Scientists.

I am really looking forward to the November meeting at Drexel University. Sarah Mansuetti, Brian Gorney, Rick Knight, and the Drexel students and faculty are planning a great event. I hope that all of you are making plans to be there on November 19th to see and hear what is happening at Drexel and also hear a presentation from Mr. Paul Whitcraft.

Please make sure to check out the new yearbook. Read about what is happening in your chapter. Consider joining a committee. Attend more activities. Support the advertisers and sustaining members. Volunteer to teach or take the next MEI class. "The Metallurgy of Welding and Joining" will be starting in November. The chapter only exists via its supporting members.

Sincerely,
Bob Rich
2009-2010 Chairperson

Young Members Night has Changed Venue

Young Members Night for the Philadelphia Liberty Bell Chapter has changed! A joint meeting between the Liberty Bell Chapter and Drexel University's Department of Materials Engineering (MSE)/Graduate Student Organization (MAGNET)/Material Advantage Student Chapter will be held on **Thursday, November 19, 2009, at Drexel University** starting at 6:00 pm. Please come out and join us at The Bossone Research Building's 3rd Floor Atrium at Drexel University. We will have a tour of their MSE Department and Central Research Facilities, as well as hear from a few students on their areas of research. Paul Whitcraft from Rolled Alloys will be our speaker for the evening. There is parking available near the Bossone Building. The Bossone Building is also approximately one block from 30th Street Station. If you are interested in driving for or riding in a carpool - please email sarah.mansuetti@rexht.com. Any questions on Young Members Night please see or email: Sarah Mansuetti (sarah.mansuetti@rexht.com), Brian Gorney (bgorney@labtesting.com) or Dr. Richard Knight (knightr@coe.drexel.edu).

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MEI COURSE: Metallurgy of Welding and Joining

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 are presenting the MEI course: **Metallurgy of Welding and Joining**.

When: Tuesday evenings 17 November 2009 through 23 February 2010 -- 6:30 to 9:00 PM

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

Cost: \$450.00 includes the 13 written lessons. The course carrying 3.0 CEU's and instruction by qualified personnel. Each student, after the first one from the same company will cost \$425.00.

Welding metallurgy is a complex subject because it requires knowledge of materials, welding processes, design, and inspection. This course provides an excellent review of welding processes, welding of materials ranging from carbon steel to specialized alloys, guidelines for designing weldments to facilitate welding, and testing and inspecting welds to meet performance requirements.

Target Audience:

The knowledge gained from this course will benefit anyone working in a welding environment, including welders, technicians, supervisors, managers of welders or welding inspectors.

Course Outline:

- | | |
|--|---|
| 1. An overview of Joining Processes | 8. Welding of Carbon Steels and Low and Medium Alloy Steels |
| 2. Overview of Welding Processes | 9. High Alloy Steels - Fundamentals |
| 3. Metals as a Material | 10. High Alloy Steels - Techniques |
| 4. Alloying and Phase Diagrams | 11. Arc Welding Aluminum, Magnesium, Titanium and Nickel |
| 5. Solidification of Metals and Alloys | 12. Weld Metal Soundness |
| 6. Solidification of Welds | 13. Inspection of Weldments |
| 7. Metallurgy of Steels | |

For more information contact Bob Rich 215-572-3485, Mark Heuberger at 610-489-5248 or Jim Korchowsky at 215-339-7034

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 09 November 2009**.

Name: _____

Work phone: _____ E-mail address _____

Company Address _____

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

Home phone and address: _____

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Best Wishes to the Philadelphia Chapter

Limerick Tour



In May 2009, the Professional Development Committee of the ASM Philadelphia, Liberty Bell Chapter arranged a tour of the Exelon Nuclear Power Plant located on 600 acres in Limerick, PA. The plant's two 1200 megawatt, boiling water reactor units designed by General Electric draw the plant's cooling water from the nearby Schuylkill River, generating enough electricity for over two million homes. As emergency backup, the facility has a piping and pumping system to draw water from the huge Delaware River, 30 miles away!

The highlight of the full three hour tour was standing directly on top of a 1200 Mega-watt operating nuclear reactor! Nearby, employees dressed in special suits were observed monitoring a huge spent fuel rod storage and cooling pool. They were using special cameras and temperature probes on long poles to gage the integrity of the rods, and how they should best be rearranged (a continual process) to keep the pool

at the requisite temperature while maintaining adequate shielding from radiation still being emitted from the fuel rods. Following the reactors, the group toured the huge main control room where everyone was mesmerized for a good 20 minutes by the vast amount of instrumentation and systems involved in running the facility.

The ASM membership left the Exelon Nuclear Power Plant with a great sense of having experienced a unique educational event, and great comfort knowing the emphasis placed on safety with all of the equipment and personnel, including the significant amount of redundant systems. Exelon was a fantastic host, and they openly said that their goal with these tours is to educate the public of the benefits, safety, and pure economics of nuclear power, which we all know is the most powerful, most efficient, cleanest, safest, and least visually intrusive energy source available today - Nuclear!

Upcoming Events...

- 10-15-09 Thursday **Eisenman Award Night**
Topic: Strain Gage Materials: Processing- Metallurgy - Manufacturing
- 11-19-09 Thursday **Young Members Night at Drexel University**
Topic: Influence and use of Standards in the Specialty Metals Industry
- 1-21-10 Thursday **National Officers Night**
Topic: Materials for Flight Control of Next Generation Aircraft

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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. This will permanently update your information. We depend on ASM International to receive our updated e-mail list for this e-newsletter and company membership listing for the upcoming 2009-2010 yearbook.

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 his email address:

dvua@verizon.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 Bob Rich at 215-572-3485 or email him at r-rich@spstech.com.

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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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