

November Meeting Topic -

Progress in Growth of Diamond Crystals

Diamond is a rare mineral best known for its brilliance and "fire" in jewelry applications. Diamond also has unique physical and chemical properties, which make it a material of choice for a variety of industrial applications from grinding to polishing, surgical blades to wire drawing dies, and electronic heat sinks to infrared windows. Alluvial or mined deposits were the only sources of diamonds until GE's discovery of manufacturing of diamonds under high-pressure, high-temperature conditions in 1954. Since then, major progress has been made in controlling the growth conditions such that the quality and size of laboratory created crystals rival those of natural diamonds. In this presentation, an overview of the application of crystal growth fundamentals in the high-pressure, high temperature production of diamonds will be made, with particular emphasis on the recent developments in the production of gem quality diamond crystals.

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Thursday, November 17, 2005

National Officers Night - Joint Meeting with Lehigh ASM Chapter

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



Speaker: Dr. Reza Abbaschian, FASM, ASM International President

Topic: Progress in Growth of Diamond Crystals

Dr. Reza Abbaschian is Vladimir A. Grodsky Professor of the Materials Science and Engineering Department at the University of Florida (UF). He received his Ph.D. in materials science and engineering from the University of California, Berkeley, in 1971, M.S. degree in metal-allurgical engineering from Michigan Technological University in 1968, and B.Sc. in mining and metallurgy from Tehran University in 1964.

Before joining UF in 1981, he was chairman and member of the faculty at Pahlavi University, Shiraz, Iran, Visiting Associate Professor at the University of Illinois, and Visiting Scientist at Massachusetts Institute of Technology. He has produced more than 200 scientific publications on subjects ranging from metal processing, crystal growth, solidification, and intermetallic matrix composites to phase diagrams. He also has four patents, three patent disclosures, and eight books, including the third edition of Physical Metallurgy Principles, which he co-authored.

Dr. Abbaschian has been active in several regional and national educational and professional organizations, including National Materials Advisory Board, NASA Space Station Users

Advisory Committee, TMS Board of Directors, Trustee of Federation of Materials Societies, NSF-Materials Research Advisory Committee, and chairman of the University Materials Council. He has served or chaired numerous panels and committees, such as the ASM Government and Public Affairs Committee, ASM/MSD Thermodynamics and Phase Equilibria Committee, the NSF panel for education in Materials Science and Engineering, TMS-Solidification Committee, the ASM-MSD Materials Processing Committee, and MRS External Academic Affairs Committees.

Awards and citations he has received include UF Top Researcher or Research Achievements Awards for eight consecutive years, the 1992 ASEE Southeastern Best Paper Award, the 1998 Educator Award of TMS for outstanding contributions in engineering education, TMS 1999 Leadership Award, and the Structural Material Division's 1999 Distinguished Scientist/Engineer Award. He was also elected an ASM Fellow in 1992 and a Fellow of TMS in 2000.

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Technical Chairperson

Travis Nelson
Materials Resources International

Meeting Sponsors:

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Dinner Menu

Fresh Garden Salad
Roasted Top Sirloin of Beef
Baked Stuffed Potatoe
String Beans Almondine
Chocolate Parfait

Social Hour

6:00 - 7:00 p.m.

Dinner

7:00 p.m.

Price: Members & Guests: \$24.00;

Retirees: \$15.00; Students: \$12.00

Reservations are necessary -

Please make your reservations online at www.asm-philadelphia.com

If you have a large group or do not have access to the website, you can make your reservation by contacting Rob DeKaib at 215-542-7600.

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Chapter Officers 86th Year

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

Contact Chapter Chairperson Travis Nelson at 215-631-7111 x103 or email him at nelson@materialsresources.com

Do you have news...

that should be shared with the other members of the "Liberty Bell" Chapter? If so, please send your info to Anna Whitehead at her email address:

aj.whitehead@att.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.

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.asmiinternational.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 the return address on this newsletter.

Upcoming Events...

11-8-05	Tuesday	MEI Course - Welding Inspection & Quality Control SPS Technologies	
11-17-05	Thursday	National Officers Night / Joint Mtg. with Lehigh ASM Chapter Topic: Progress in Growth of Diamond Crystals, Williamson Restaurant, Horsham, PA	6:00 pm
1-19-06	Thursday	Eisenman Award Night Topic: Powder Metallurgy - A Long Term Growth Technology, Williamson Restaurant, Horsham, PA	6:00 pm
2-16-06	Thursday	Continuing Education Night Topic: Managing Materials Degradation in the Nuclear Power Industry, Williamson Restaurant, Horsham, PA	6:00 pm



Chairperson's Message

November, 2005

Greetings Philadelphia ASM Family & Friends,

In light of our upcoming National Holiday, I thought I would approach my message to you in November a little differently. So...

10 Things for Which the ASM "Liberty Bell" Chapter Can be Thankful

10. A recent, successful tour of Handy & Harman Specialty Tube Company. Many thanks to Don Jordan for organizing it, to H&H for hosting it, and to everyone who attended for, well, attending it! (These things don't work without people, you know.)
9. Partnerships with other Philadelphia area professional and engineering societies. ASNT, AWWI, AWS, ASME and other groups help us reach more people and meet more needs than we could on our own.
8. The Internet. (No, this is not an Al Gore joke.) The Internet and e-mail have enabled the Chapter to begin advertising with our monthly Newsletter, which helps to offset some of the costs of being a non-profit organization. Let's hear it for Technology!
7. Speaking of offsetting costs, Meeting Sponsors. Do you like beer? And food? Me, too. Companies who agree to sponsor technical meetings enable us to keep your dinner costs lower and to keep beer and wine available during the social hour.
6. The presence of seven new people on our Executive & Operating Committee. New people bring new energy and new ideas to the Chapter, which help us serve you better. Which brings me to...
5. Volunteers. Dozens of these are energetically and enthusiastically giving of their time, perpetually working behind the scenes, spanning the globe to bring you a constant variety of...technical programs. And plant tours. And scholarships, poster and essay contests, newsletters, meeting sponsors and a wonderful yearbook that serves as the trademark of this great ASM chapter, just to name a few.
4. The 2005-06 Technical Program. Have you looked at the last page in your Yearbook? We've got distinguished university professors and ambitious grad students, entrepreneurs, accomplished engineers with both business and non-profit organizations, a variety of materials and processes, analysis and discussion to interest almost anybody.
3. Dr. Reza Abbaschian, FASM, who is the 2005-06 President of ASM International and will make Philadelphia one of the first chapters to be graced with his presence in that role.
2. Safety. These are truly sobering times, with unprecedented natural disasters both at home and abroad. The Philadelphia area has been blessed to be spared such a fate. May we also be blessed in helping those who were not.
1. Turkey! OK, so it's not exactly an engineering material, but there sure will be a lot of it available this month. Enjoy it, and your holidays, and we'll see you in January!

Happy Thanksgiving,
Travis M. Nelson
2005-06 Chapter Chair



Need a caption written for here.

MEI course - "Welding Inspection & Quality Control"

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 Welding Inspection & Quality Control.

When: Tuesday evenings 8 November 2005 through 28 March 2006
6:30 to 9:00 PM

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

Cost: \$300.00 includes the 14 written and 19 video lesson courses carrying 2.8 CEUs and instructed by qualified personnel. Each student after the first one from the same company will cost \$250.00.

Who should attend:

Although this course was originally designed as an educational assist for personnel desiring to become Certified Welding Inspectors, it can also be very useful for others in the welding field. This includes design engineers, welders, metallurgists, quality control technicians, sales personnel and purchasing agents who deal with welds and welding.

Course overview:

This course addresses all the aspects that are critical to understanding this demanding area; it contains the technical information that the personnel in this area must know to perform their jobs properly. It is designed to be of tremendous benefit for personnel working to become Certified Welding Inspectors. It is also of practical use as a fundamental course for new personnel and for use as a refresher for more experienced personnel, and it is a valuable tool that helps management understand about the responsibilities of the people they supervise. This course was developed in cooperation with the American Welding Society.

For more information call Fred Klock 215 659 8424, Jim Korchowsky 215 339 7034 or Bob Rich 215 572 3485. E-mail afklock@comcast.net.

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 29 October 2005.

Name: _____

Work phone: _____ E-mail: _____

Company Address _____

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

Home phone and address: _____

Welcome New Members

Jeff Anderson	Consarc Corp.
Sharon Bergman	Saint Rose HS
Sheryl Bergman	Pemberton Twp HS
Leo J. Brancato	Northeast HS
Elender R. Bryant	Montgomery HS
Craig J. Buszka	Our Lady Of Mercy Acad.
Kaitlin Casper	Franklin HS
Michael Ehrlich	Middlesexboro HS
Peter Gange	Haddonfield Mem. HS
John Gardner	Voorhees HS
Marcy Gever	Winslow HS
Teresa C. Haney	Consarc Corp.
Graham Keough	Paul VI HS
Ryan J. Kirby	VSR Technology Group
Bruce Klauba	Drexel University
Pamela Knight	Rumson Fair Haven HS
Cheryl Laviola	Metlab Potero
Michael Lister	Gloucester Catholic HS
Laura Jean Lucca	Gloucester Catholic HS
James McGinley	Karosserie Ltd.
Richard Mullin	St. Joseph's Prep School
Brian Phillips	Merion Mercy Academy
Gina Piccioni	Cherokee HS
Ryan Powell	Trenton HS
Thomas Pullizzi	Eastern HS
Harry Rheam	Merion Mercy Academy
Jessica Rossello	Merion Mercy Academy
Meagan Sloan	Kingsbury Inc.
John Spain	Mast Charter School
Blair Thomas	Pennsville Memorial HS
Curtis Todd	Fels HS
Dieu Troung	Hatboro Horsham HS
Shawn Varvghese	Sayreville War Mem. HS
Roger Weiss	Hamilton HS West
Erin Welsh	DHS Burlington Proj.
Cynthia Whitley-Jones	Saint Basil Academy
Stephanie Yost	Hatboro Horsham HS
Shaw Yu	

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.