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IMPORTANT NOTICE:

To continue receiving your chapter's event notifications, please be sure your email and postal addresses are up to date on the ASM web site:

www.asminternational.org

We will continue to send the hard copy to members who do not have email or have requested email not be sent.

Be sure to visit the chapter websites at:
EasternVA.asminternational.org
asmeasternvirginia.tripod.com

Eastern VA Chapter ASM
C/O Steven J. Gentz
2252 Towne Park Drive SW
Huntsville, AL 35803

Eastern Virginia Chapter

A Joint Meeting with the ASME Senior and Student Sections

Technical Seminar

Plastics in Medicine

Dr. Thomas W. Haas

Thursday, March 27, 2014

Virginia Commonwealth University
Engineering West, Room 105
601 West Main Street
Richmond, Virginia 23284

6:15 – 7:00	Social Time and Dinner
7:00 – 8:00	Presentation

Dinner: Pizza and soft drinks will be provided at no charge courtesy of the ASM Chapter and the ASME Section.

Reservations: Please notify Jeff Wiese at 804-421-7897 or wiese@nleng.com by **Tuesday, March 25** on your planned attendance. Everyone is welcome.

Chairman's Message:

This month's presentation is the second of three technical talks jointly sponsored by our chapter and the Central Virginia Section of ASME, the last one being "Ceramic Materials" to be held in the Williamsburg or Newport News area in April. All three of these technical presentations are educational in nature and will be worth one (1) Professional Development Hour (PDH) each toward a Virginia Professional Engineer license. 16 PDHs are required during each two year license renewal period in Virginia.

The chapter held its first CO_2 Dragster Contest at the Science Museum of Virginia in Richmond on Sunday, February 23 during the Celebrating Engineering Ingenuity Day (Career Day). This was a competition for students of all ages to test their skill at building and racing small, CO_2 jet powered model dragsters, with special attention paid to materials selection and utilization. There were around 20 vehicles competing, and despite some difficulties with the track, it was very successful. We hope that this will become an annual event.

Finally, we are raising funds for the summer ASM Materials Camps for teachers. A letter containing more information is attached. Please consider supporting the effort with a contribution and/or passing the letter along to the appropriate contact at your company.

Jeff Wiese

About the Presentation:

Plastic products are universally acceptable because these materials offer excellent physical properties (e.g., high toughness and low weight). Furthermore, plastics are both thermal and electrical insulators. However, the primary advantage of plastics is their ease of fabrication as compared to metals and ceramics. Most plastics can be recycled provided that they are sorted according to standards set by the plastics industry.

The use of plastics as implants in medicine may seem to be of low risk because at first glance, the human body may seem to be a very benign environment. However, plastics in the body may experience hydrolysis, oxidation, be attacked by various elements of body fluids, or simply fail mechanically, as in fatigue. Also debris generated by plastics during wear in orthopedic applications may cause serious problems by activating the human immune system.

This presentation will review some of the applications, including both failures and successes, of plastics in implants, and some of their uses external to the body in the hospital environment.

About the Speaker:

Dr. Thomas W. Haas received a B.S. degree in mechanical engineering from SUNY Buffalo, a M.S. degree in engineering mechanics from the Pennsylvania State University, and M.A. and Ph.D. degrees in Aerospace and Mechanical Science from Princeton University in the Polymer Materials Program.

Dr. Haas joined VCU in 1983 as Professor and Director of the Commonwealth Graduate Engineering Program, a consortium of Virginia engineering schools offering graduate programs leading to a master's degree in engineering delivered by interactive television. He also served as Associate Dean for Academic and Faculty Affairs of the VCU School of Engineering from 1995 to 1999.

Dr. Haas is a past President of the Society of Plastic Engineers (SPE), an international society currently of about 20,000 members. In addition to being a Distinguished Member of SPE, he is a Fellow of the Plastics and Rubber Institute (now the Institute of Materials, Minerals & Mining) in the United Kingdom and a Fellow of the Virginia Academy of Science. He is a member of the American Chemical Society (ACS), the Society of Rheology (SOR), and the American Society of Mechanical Engineers (ASME), having served as the 2000-2001 Chair of the Central Virginia ASME Section. Dr. Haas is currently a past Chair and Executive Director of the Richmond Joint Engineers' Council (RJEC).

Parking:

Street parking is limited. The nearest public parking is in the West Street Parking Deck at 801 West Main Street with the entrance off of N. Laurel St.

Upcoming Events:

Apr.:	Technical Talk – Ceramic Materials (Jim Hurst)
May:	Spring Social – Colonial Shooting Academy
July:	ASM Camp for teachers – Princess Ann High School in Virginia Beach
August:	ASM Camp for teachers – Highland Springs High School in Richmond

Chapter Officers:

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