

November Meeting

Topic: Tour of Eastman's Coal Handling Facilities

When: Tuesday the 28th starting at 9am

Where: Meet at B-521 (next to B-328 on the plant map)

Safety Equipment Req'd: Hard Hat, Safety Glasses, Safety Shoes, and Earplugs

RSVP: None required for Eastman employees. Non-Eastman employees should RSVP to Jason Goodman, 423-229-5617 or jasongoodman@eastman.com. Further instructions for meeting at Eastman will be provided to those that RSVP.

October Meeting Recap

The October meeting was presented by TVA engineer Ken Lewis and held at Giuseppe's on the 19th. Ken is a mechanical engineer (West Virginia Institute of Technology, 1977) and the engineering manager at John Sevier Fossil Plant in Rogersville, TN. He came to present the evolution of emission control at fossil power plants (a.k.a. coal fired plants).

Ken discussed how the strength and might of the industrial revolution was shown through the heavy black smoke being poured out of all manufacturing plants. This smoke was filled with ash and soot along with invisible hazards, which were not addressed until much later. To remove the ash, the first emission controls were done with tortuous path and electro-static precipitators. The large particles were captured just before going out the stack, but finding a place to put all the ash became another problem. Today that ash is put in settling ponds and even sold into the concrete block market.

It was later discovered that building taller smoke stacks would reduce local pollution, meaning the flue gas is released higher into the atmosphere. But also the smoke fines would have longer to precipitate out before making it to the outside.

The most recent changes in emission control have been the addition of low NOX burners, scrubbers, and selective catalytic reducers (SCR's). The scrubbers are used to remove sulfur oxides (SOX) and the low NOX burners and SCR's remove the nitrous oxides (NOX). These are currently being installed in many of the units at TVA's 11 fossil plants; however capital cost is so great that it is a slow process to equip every generating unit.

Looking towards the future, the next step in emission control is continuous emission monitoring systems (CEMS) and continuous opacity monitoring systems (COMS). This will allow for greater monitoring and control of the SOX, NOX, and other emissions coming from the stacks. Also, the utilities are soon to be required to monitor and control mercury emissions.

Overall, this was a very interesting discussion by Mr. Lewis. From the more experienced utility engineer to the most novice, this presentation was very entertaining and worthwhile.

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ASME-ITI AIDS IN FIGHT AGAINST TERRORISM



The ASME Innovative Technologies Institute, LLC (ASME-ITI), has announced the commencement of a \$5 million contract with the U.S. Department of Homeland Security (DHS) for continued work using its risk analysis methodology known as RAMCAP (Risk Analysis and Management for Critical Asset Protection).

Created and developed by ASME-ITI and adopted by DHS, RAMCAP is a framework for analyzing and managing the risks associated with terrorist attacks against critical infrastructures. The purpose of RAMCAP is to provide essential information to government decision makers about consequences and vulnerabilities in the private sector, which owns 85 percent of the nation's critical infrastructure. RAMCAP is unique in that it facilitates the comparison of risks within a sector and across multiple sectors by employing a common terminology and standardized measurement metrics. The process is then tailored to specific aspects of various sectors of the critical infrastructure in documents called Sector-Specific Guidance documents (SSGs) that enable companies to identify and report on the vulnerabilities and potential consequences of terrorism by providing guidance on how to complete both preliminary and in-depth assessments. For more information about the ASME-ITI visit <http://www.asme-iti.org/about/us.cfm>

Applicants Needed: ECLIPSE

Applications for the Early Career Leadership Internship Program Serving Engineering are due by Dec. 1 for internships beginning at the 2007 Summer Annual Meeting. Women, non-traditional engineers and engineers in the workforce between three and 10 years are encouraged to apply.

For additional information and an application, go to http://www.asme.org/Governance/Volunteer/Early_Career_Leadership.cfm. ASME staff contact: Mary James Legatski, legatskim@asme.org

2007 Johnson & Johnson Consumer Companies, Inc. Medal



The Johnson & Johnson Award, first presented in 2005, recognizes outstanding contribution to the promotion of diversity and inclusiveness within the engineering community. This award is open to ASME members and individuals who are members of a recognized/engineering or professional society.

The deadline for all nominations is Feb. 1, 2007. For additional information and forms, visit http://www.asme.org/Governance/Honors/SocietyAwards/Johnson_Johnson_Consumer.cfm, or contact ASME staff contact: Mary James Legatski, legatskim@asme.org

GMET - Meet the Challenges of Globalization

Globalization affects everyone, particularly engineers. In order to help companies cope with issues resulting from globalization, ASME has developed a global training program: Global Management for Engineering and Technology (GMET), consisting of four courses developed by well-known subject matter experts.

GMET has received a positive global response since its launch in April this year. In China, ASME has signed up three top universities and one national training company to offer GMET training. ASME also signed two more agreements on GMET with Malaysia and Kuwait. GMET has also met with enthusiasm from universities and professional institutions in Hong Kong, Singapore, South Korea, India, and some parts of Europe. China Petrochemical Corporation (SINOPEC) has decided to provide GMET program to its engineers. Boeing and other American companies are also considering its adoption. To view GMET demo courses, visit:

<http://gmetdelivery.asme.org/demo/>. For more about GMET, visit: http://www.asme.org/Education/Courses/GMET/Global_Management_Technology.cfm

NEW FACES OF ENGINEERING: Celebrate the Future of Mechanical Engineering

Call for Nominations: New Faces of Engineering 2007

Deadline: Nov. 17, 2006

The **New Faces of Engineering** strives to promote the accomplishments of young engineers by highlighting their engineering contributions and the resulting impact on society. The campaign is designed to enhance and improve the image of engineering by:

- Putting faces to what has often been referred to as the stealth profession;
- Displaying a group of young, diverse and talented engineers, thereby portraying engineering as an exciting profession open to everyone;
- Providing both stimulation and incentive for college engineering students to explore the variety of career options available to them with their engineering degrees as well as encouraging high school students to study engineering in college.
- Help engineering students understand they are part of a global profession.

Submit your nomination today by visiting: <http://files.asme.org/asmeorg/Events/10380.doc> or contact Marina Stenos, stenosm@asme.org.

ASME E-Library Expands to 75 Titles – Free to members!

In early Sept. 2006, ASME members gained access to 75 interactive, user-friendly references available on the newly expanded ASME e-Library powered by Knovel. To take advantage, members simply access ASME.org and log onto the members-only page. Members pay no charges for access.

Selecting from a large, diverse collection that includes *Mark's Standard Handbook for Mechanical Engineers*, *Handbook of Materials Selection*, *Mechanical Engineer's Reference Book*, *Structural and Stress Analysis*, *Pipeline Rules of Thumb*, *Mechanics of Materials*, and the *Manufacturing Engineer's Reference Book*, members enjoy additional benefits unavailable from printed references. Using embedded analysis software, they quickly locate data, analyze it, and export the results. For a complete listing of available titles, visit the e-library pages in Members only.

For the initial session on the expanded ASME e-Library, each individual can log onto the member-only page and register. For future sessions, the individual can simply log onto the members-only page and click on an icon, which opens the collection for use.

Programs for Early Career Engineers

Visit www.asme.org/communities/earlycareer, the online destination for Early Career Engineers (ECEs) with fewer than 10 years of professional practice. The Early Career Center provides information about events, career development opportunities and products specific to their need, as well as to a number of online career and job search resources.

Call for Nominations: 2007 Old Guard Early Career Engineer Award

Recognize outstanding early career engineers who are actively involved in their profession, their communities, and the work of the Society.

Submit nominations today! Visit:

<http://files.asme.org/asmeorg/Communities/EarlyCareer/8026.pdf>

ME Today

If you are interested in contributing to the professional and career development of early career engineers, we invite you to submit articles for publication in ME Today.

<http://files.asme.org/asmeorg/NewsPublicPolicy/Newsletters/METoday/7563.pdf>

Local Section News Continued...

Short Course Ideas??

Holston Section will again be sponsoring a short course available for training in the early part of 2007. A list of suggestions will be sent out to supervisors asking for their input on the course to be offered. All input is encouraged, so if you would like to receive this list and provide feedback; please contact Brian Eiselstein at <mailto:briane@eastman.com>. Any suggestions not on the initial list (either specific courses or general topics) will be considered as well.

Win Lunch on ASME

Sorry, no lunch to be given away this month since we are doing a tour. Look for the trivia question to return next month, which if correctly answered you'll be entered to win a free lunch at the next meeting.

Congratulations to Matthew Dickerson, who was last month's winner.

DB Students Participate in Engineer's Day at UT-K

22 students from Dobyngs-Bennett High School attended UT-Knoxville's Engineers Day (12 from an all female pre-engineering class), which was held on October 24. They competed in an egg drop competition, bridge building contest, and a Math and Science quiz bowl. One of the science bowl teams came in first place in the written part and second place in the verbal part. Other teams finished 2nd place in quiz bowl, 4th place in egg drop contest and 9th place in Bridge Design contest. Congratulations to these future engineers! Much more information and a photo gallery can be found at the following: <http://www.engr.utk.edu/ed/index.htm>

December Meeting Update

Topic: History of BAE Systems

Who: Jason Spears, BAE engineer

When: Thursday the 14th, 11:30-12:30

Where: Giuseppe's

Attend Holston Section Meetings and You Could Win!

A reminder that if you attend 75% or more of the Holston Section ASME monthly meetings between October and May you will be automatically entered for a chance to win. A drawing for a gift certificate will be held next May for all qualifying members. Watch the newsletter and your e-mail for the time and location of the monthly section meetings. Then just attend, sign-in, and enjoy the meeting. See you there!

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