



The Volunteer

AACE International East Tennessee Section Newsletter



Volume 20, Number 7
Editor: Suzanne Patton

Happy Holidays

December 2009
pattonse@y12.doe.gov

Upcoming Events

Thursday, December 17, 2009 Holiday Dinner

Carrabas Restaurant on North Peters Road in Knoxville at
6:30 pm

Monday, January 25, 2010 Section Meeting

Location: TBD

Time: 6:00pm social/dinner
6:30pm business meeting
6:45 – 7:30pm Speaker

Speaker: Mike Lassiter, UPF Project Lead Estimator
Topic: B&W Y-12 Uranium Processing Facility

Save the date for future section meetings:

February 22, 2010
March 22, 2010
April 26, 2010
May 24, 2010
June 28, 2010

Message from the “Prez”

From Joy Grubb, ETS President

During this busy time of year it is nice to take a break and catch up with friends and colleagues you don't get to see very often. As we do most years, instead of a section meeting we will be having a Holiday Dinner during December. Bring your significant other and so stop by for dinner and to socialize with other members.

Please plan on joining us for the AACE East Tennessee Section Holiday Dinner at Carraba's on North Peters Road in Knoxville, on Thursday @ 6:30 pm, December 17. Please RSVP to either Joy Grubb (241-4366; grubbjm@y12.doe.gov) or Tammi Hodges (574-5484, hodgestr1@y12.doe.gov) by December 16.

Hope to see you there!

November Section Meeting – November 16th

Larry Sheron, ETS Vice-President

The East Tennessee Section's November meeting was a rare lunch time meeting providing a nice break from the office. The meeting was at the Gondolier Restaurant in Oak Ridge, TN. The guest speaker was Ms. Laura Edwards of the Center for Nanophase Materials Sciences (CNMS) at the Oak Ridge National Laboratory. The topic presented was Nanoscience.



Nanotechnology is not usually on the national news, but from what Ms. Edwards shared with us it probably should be featured every night. The potential to be gained from nanoscience is just in the beginning stages.

Nanotechnology is the future and could revolutionize the world (enthusiast's side), providing fantastically light and strong materials, as well as amazing progress in science, technology, medicines, and space exploration. Some of the current research is on very small particles and structures with huge potential, as well as the mundane such as use in sunscreens, stain resistance, and anti-microbial. The fantastic side that really made me listen

even closer was when Ms. Edwards described nanobots. These nanobots are super small robots that carry a toxin through our blood seeking out virus's, or they would be attracted to cancer cells where they would then release their toxin to kill the cancer cells. This does sound like science fiction, but it really is being researched. There are numerous different nano forms that have numerous applications, from bucky balls, nanotubes, nanoparticles, and self assembled nanostructures. Some applications besides those already mentioned include electrical devices, biosensors, crystal growth, filters, and fibers.

Ms. Edward's shared a slide show with us to help us understand how very small nanotubes and other nano structures are. I confess I didn't grasp this very well, (pay attention here) but by comparing large sizes to small sizes, such as meters to the power of 23 away from the earth where you can see the milky way and other galaxies, and at the minus power of 16 where you reach the limits of matter at the atomic level, one can get the idea of size through comparisons. One nanometer is one meter to the minus power of 9, or another way to say it is there are one billion nanometers in a meter. A nanotube is about 2 nanometers wide, DNA is about the same size in width, and a cold virus is 25 nanometers.



Again if I understood right, nano forms are grown or fabricated in clean laboratories. The Center for Nanophase Materials Sciences (CNMS) at the Oak Ridge National Laboratory is one of six laboratories at various national labs around the country all researching nanoscience and producing nano forms in their laboratories. The CNMS is a user center, where it's open for use by anyone that submits a proposal that is successfully reviewed. The only requirement is that the user agrees to publish their results in open literature. This was a very interesting topic, and keep up the great work Ms. Edwards. It also sounded like funding is not a problem.

Membership News

Robyn Rose, ETS Membership Director

During the hustle and bustle of the holiday season don't forget to renew your AACE membership for 2010. Not a member of AACE? For only \$130/year membership in AACE entitles you to:

- The monthly Cost Engineering journal to keep you updated on new ideas and techniques
- Discounts on various AACE merchandise, meeting registrations and certification fees
- Annual Meeting is a three-day technical program to maximize your learning experience
- Website for technical papers and publications and access to other resources
- Virtual Library which contains over 40 years of technical reference information
- Networking with peers and pick up fresh ideas for implementation in the work place

AACE offers opportunities to both expand your professional network and to attend special development programs which can enhance your career. Check us out and see all the benefits AACE provides. For more information on AACE membership contact me at roserj@ornl.gov or 574-8593.

Join the Board

Joy Grubb, ETS President

Elections for the 2010-2011 AACE ETS Board members will take place April 2010.

The Board consists of the following officers: President, Vice-President, Secretary, Treasurer, Past President, and five directors (Regional Representative, Directors of Activities, Education, Communications, and Membership). The President's main responsibility is overseeing the operation of the Section and carrying out its goals and objectives. In this role, the President presides at the Section and Board meetings. The Vice-President serves as the Chair of the Program Committee establishing the technical and social content of the monthly Section meetings and selecting the meeting locations. The Treasurer is responsible for administering the financial affairs of the Section. This includes maintaining records, financial accounts, and preparing budgets.

It always helps to have new faces with new ideas on the board. The board meets once a month for about an hour in the Oak Ridge or West Knoxville area. It is a great

networking opportunity and you receive recertification points for serving.

Please consider helping out the section by serving on the Board.

AACE Certification News

From www.aacei.org

Save the date.

The next time all certification exams will be hosted by the local sections is on March 6, 2010. EARLY deadline for this exam is December 21, 2009 and final deadline is January 5, 2010.

After the March exams the next time all certification exams will be hosted by the local sections is on July 10, 2010. EARLY deadline for this exam is April 27, 2010 and final deadline is May 11, 2010.

If you miss both the March and July exams, the next opportunity would be November 6, 2010. EARLY deadline for this exam is August 23, 2010 and the final deadline is September 6, 2010.

In order to prepare for the EVP exam, AACE has released the EVP Study Guide, 2nd Ed. It is available through the AACEI website bookstore.

Plan ahead and be ready to take your exam in 2010.

International News

From www.aacei.org

AACE's website is being redesigned to make it easier for you to locate the things you need!

If you have not stopped by the International website lately you should. They have changed things around and added a lot of content.

Keep Us Informed!!

Suzanne Patton, Newsletter Committee Chair

As we are ever striving to keep our members informed about what is happening in the organization, we hope this newsletter will help us do that. If you have any announcements regarding seminars, members receiving a special recognition or award, members moving or changing jobs, job opportunities or anything else deemed

appropriate to share with the East Tennessee AACE members, provide this information no later than the 3rd Monday of each month to Suzanne Patton. Suzanne can be emailed using the ETS Board link on the ETS website. Just click on contact under the phone number.

Contact Information

Board of Directors:		
President:	Joy Grubb, EVP	241-4366
Vice-President:	Larry Sheron, EVP	632-6241
Secretary:	David Benton, EVP	241-5264
Treasurer:	Audrey Clark, CCC	986-6806
Past-President:	Tammi Hodges, CCE	574-5484
Regional Rep:	Open	
Directors:		
Membership:	Robyn Rose	574-8593
Education:	Melissa Buckner	574-8300
Communication:	Mark Plemmons CCE	241-9432
Activities:	Bob McCoy, CCC	574-9715