Washington DC Section



Newsletter March 2007



Editor: Geoffrey Smith

202-404-6324

geoffrey.smith@nrl.navy.mil

Executive Secretary: Andrea Gironda

703-489-9503

http://www.isr.umd.edu/~jwh2/asme/

agironda12@comcast.net

Chairman I. Eronini 443-885-3868

Vice-Chairman Rattan Tawney 301-228-8820 eronini@eng.morgan.edu rtawney@bechtel.com Treasurer Charles Akula 301-228-7278 cakula@bechtel.com Secretary Mohsen Mosleh 202-806-6622 mmosleh@howard.edu **Executive Advisor** Gurmukh D. Mehta 703-414-3882 gurmukh.d.mehta@saic.com

ASME DC Fellows Meeting - April 9, 2007

ASME Washington Fellows Dinner

Date: Monday, April 9, 2007 Time: 6:30 pm - Cash Bar 7:00 pm - Dinner

8:00 pm - Presentation

Location: Market Inn

200 E Street, SW Washington, D.C..

Cost: \$25 per person

RSVP: To make reservations, contact ASME Washington DC Section Executive Secretary Andrea Gironda by telephone (703-489-9503) or email agironda12@comcast.net by April 5.

Menu: Choice of Salmon or Cajun Chicken Breast.

Program:

- 1. Tim Athan (House Science and Technology Committee)
- 2. Eldon Boes (Senate Committee on Agriculture, Nutrition, and Forestry)
- 3. Dennis Michael Egan (Department of Homeland Security)
- 4. John Larson (Office of Congresswoman Heather Wilson)
- 5. Stephen Lehrman (Office of Senator Mark Pryor)

Each year we have a dinner meeting with our ASME Washington Fellows who are assisting the government in analyzing technical issues. They give us some insights into what really happens when they bring some engineering thinking into the process.

~ continued on page 3 ~

MESSAGE FROM THE CHAIR

Of our two programmed events for the month of February, the ASME display on Family Day (02/17/2007) at the Building Museum in Washington DC came off great while regrettably, our embassy dinner had to be cancelled at the last minute at the behest of our host who urgently had to travel to Venezuela. If you have not been to the Family Day at the Building Museum you are missing a treat. The mass of eager children with their parents and guardians, trying their hands and minds on all that technology, the excitement in the air all are better experienced than described. Our display of wave phenomena proved very popular and equally up to the task was our program lead, Thomas Beutner who has a remarkable ability to break down and explain the most complex of ideas to the very young minds. We commend Tom for a job very well done! A brief write up on the Family Day event appears elsewhere in this newsletter.

Upcoming Programs

As the end of this program year (June 30) approaches, we look forward both to warmer weather and the balance of our programs. In this issue is our April event: a dinner meeting on 04/09/07 featuring five ASME Washington Fellows. The ASME Federal Government Fellowships enables selected ASME members to devote a year working in government providing engineering and technical advice to policy makers in Congress, Federal agencies, and the White House. Our annual Washington Fellows dinner meeting is an exclusive opportunity for our membership to, so to speak, debrief some these fellowship recipients and learn what they have been up to during their term - and you don't want to pass such opportunity.

On May 2 (mark your calendars) we plan to hold an awards banquet during which we shall recognize first and second place Science and Engineering Fair winners in the engineering category, as judged by the Washington DC Section of ASME in five of the regional fairs held this year. Also to be recognized at the banquet are the recipients of five scholarships to be awarded by the section to undergraduate students from each of five area universities, as well as our 50 and 75 year members who were announced earlier by ASME. Some interesting data on the section demographics appears below.

Our next (April) newsletter would contain ballots for expiring positions on the executive board. Although the ballot always includes provision for write-in candidates, it is still feasible to be considered formally by the nominations committee - just get in touch with the Executive Advisor. We continue to explore ideas for a family event and a professional development program this year. As discussed below, our section demographics suggest areas to target our exploration with respect to the professional program. But we are still calling for your advice, suggestions, and active involvement.

2007 Leadership Training Conference Highlights

The section was represented at this year's Leadership Training Conference (LTC) held in Houston, March 2-4, 2007, by Scott Walthour, our program committee lead, and myself. A report by Scott on the LTC, giving perspectives of an early career engineer and a first-time attendee is featured in this newsletter. The LTC is a well of great ideas, best practices, and information on useful resources. It is also a reminder of our continuing need for greater participation by our membership - for great ideas require people to plan and execute them. A few of the action items taken away from this LTC are (1) develop a business plan for the section (it is hoped that some form of a draft plan would be available by the end of this program year for member review and comments, (2) initiate company and government unit focal points (the section would like to identify at least one member in each organization that employs a significant number of our members to serve as our focal point at the place; if you would like to volunteer to be the focal point in your organization, identified below as employing up to 10 or more of our members,

LEARN MORE, EARN MORE IT'S THAT SIMPLE!

- Is your job market becoming saturated?
- Do you need a promotion or raise?
- Do you see career growth in what you are doing now?
- Are you the only engineer in your company without an advanced degree?
- Would you be marketable in a job search?

Program Options

Aerospace Enginearing
Chemical Enginearing
Civil & Environmental Enginearing
Electrical & Computer Enginearing
Energetic Concepts
Environmental Enginearing
Fire Protection Enginearing
Materials Science & Enginearing
Mechanical Enginearing
Nuclear Enginearing
Nuclear Enginearing
Reliability Enginearing
Software Enginearing

The A. James Clark School of Engineering is the highest-ranked engineering graduate school in the region and ranked No. 16 in the nation by U.S. News & World Report. With those credentials, it's the perfect choice for advancing your career and keeping you current with the latest technological developments in your field or in transferring to a new area of expertise.

Master of Engineering (30-credits)
Graduate Certificate in Engineering (12-credits)
Custom Short Courses, Workshops, License Reviews

Apply Today: No GRE EXAMS
NO THESIS TO COMPLETE DEGREE
NO QUALIFYING EXAMS
CLASSES OFFERED TO ACCOMMODATE

Contact Us: 301-405-0362, ENPM-C@UMD.EDU

Class Locations:

College Park campus, remote sites in Maryland, On-Line, or ask us about classes at your workplace













Office of Advanced Engineering Education

please contact me), and (3) continue to explore, in a more targeted fashion, ideas for a professional course or workshop (Management and Aerospace represent the largest technical divisions of interest to our membership; what professional development course/workshop could be most desirable and useful to one or the other of the two groups? - we like to know).

Washington DC Section to become Part of District A

I would like to use this opportunity to report that effective July 01, 2007, the Washington DC section which presently is part of District F, would officially become a member of District A. The section executive board opted for transfer to District A, which is being expanded to contain all the sections of former Region 3 (XR3) except those affected sections that elect not to transfer. The XR3 sections now reside in three districts, A, B and F. Notwithstanding, the section's experience under District F has been great and without complaints, and I would like to again thank Richard H. Bunce, ASME Southeast District F leader for his direction, favorable disposition to, and support of our section.

Some Interesting Section Demographics

A lot of interesting and useful information can be gleamed from the section membership roster. The following is based on the roster effective February 2007. The section has a total of 2,022 members of which 84 are of Fellows grade, and 180 are student members (40 of them graduate students). The distribution of our membership by

~ continued on page 5 ~

- 1. **Tim Athan, P.E.** is assigned to the Space and Aeronautics Subcommittee of the House Science and Technology Committee. He is analyzing the next generation of air transportation, especially air traffic control. He has two decades of experience in automotive and aerospace engineering. This includes dynamic system simulation, control systems, knowledge engineering, and optimization. He also did forensic engineering which included international rule harmonization. He spent five years on the Ann Arbor Energy Commission, which advises city government on energy issues. He holds a Ph.D. in Mechanical Engineering from the University of Michigan.
- 2. **Dr. Eldon Boes** is a technical advisor to the Senate Committee on Agriculture, Nutrition, and Forestry, chaired by Senator Tom Harkin. He is analyzing energy and environmental issues including the global oil market, farming and forestry. Before his

Fellow assignment, he was director of the Energy Analysis Office of the National Renewable Energy Laboratory (NREL). He ran the NREL Washington Office, analyzing security, economic, and environmental issues in energy. From 1974 to 1990 he had worked in solar energy programs at Sandia National Laboratories. He holds a Ph.D. in Mathematics from Purdue and he taught mathematics for eight years before joining Sandia.

- 3. **Dennis Michael Egan, P.E.** is providing risk assessment and management consulting for various offices and agencies within the Department of Homeland Security. He also teaches at The George Washington University. He had 30 years in the Coast Guard, which included planning for emergencies and military exercises. In the Coast Guard, he served as Chief of the National Response Center, providing disaster alert to federal agencies during the terrorist events of 9-11. He served as Chief Scientist at System Planning Corporation from 2002 to 2004. He started his own consulting firm, Egan Engineering Support Services, LLC in 2005. He holds the Professional Degree of Ocean Engineer from MIT. He also holds a master's degree from MIT's Sloan School of Management.
- 4. **John Larson** is the Military Legislative Assistant to Congresswoman Heather Wilson of New Mexico. He analyzes issues involving foreign policy and Department of Defense appropriations. Before his Congressional assignment, he was a Senior Manager at Sandia National Laboratories, in charge of cyber infrastructure studies. He managed 200 people responsible for providing telecommunication services. He also served part time on the faculties of the University of New Mexico and Las Positas College. He attended the University of New Mexico, earning a master's degree in Management Information systems.
- 5. **Stephen Lehrman, P.E.** is advising Senator Mark Pryor of Arkansas on technical issues. He is President of LabraTek Consulting, an engineering and intellectual property consulting firm. He has analyzed nanotechnology, microelectromechanical systems, photonic devices, advanced material processing, and electronic materials. Before LabraTek, he was with Research Triangle Institute, North Carolina State University, Corporate Consulting and Development Company, and Stone and Webster. He holds a B.S. from Brown University and an M.S. from Northeastern University.

Directions:

The restaurant is located near NASA, two blocks from the Federal Center Southwest Metro stop. There is ample free parking either on the street (after 6:30 p.m.) or in the Market Inn's valet parking lot.

You can advertise in this newsletter! one time/alternate months/every issue*

Full page - \$400/\$1500/\$2700 Half page - \$250/\$1000/\$1800 Quarter page - \$150/\$500/\$900

Business-Card size - \$85/\$275/\$500

*50% discount on 'New Position Open' ads

Discover Engineering Family Day

Washington, D.C. February 17, 2007

The ASME Washington D.C. Section supported Engineers Week "Discover Engineering Family Day" in Washington, D.C. 17 February, 2007, at the National Building Museum. ASME provided an exhibit with volunteer members to facilitate hands on activities promoting engineering to students, focusing on sixth through eighth grade students. The ASME exhibit demonstrated wave phenomena, including sound waves, wave interference, water waves, polarization, a Faraday cage, dispersion, and parabolic reflectors, to several thousand students, parents, and teachers. The ASME Washington D.C. Section wishes to thank all the volunteers that made the exhibit such a success.

"Discover Engineering Family Day" has been held in Washington, D.C. since 1993. It has become one of the premier Engineers Week events introducing elementary and middle school students to the fun in engineering. Over 6,000 excited and very vocal students and parents attended this year's event held at the National Building Museum, 401 F St., NW, Washington, D.C., between 10 AM and 4:30 PM, on Saturday, 17 February, 2007. The free one day festival gave young people the opportunity to enjoy a day of fun and participate in a variety of hands on activities that explore the field of engineering.

This year's event was bigger and better than ever, with a record number of 29 exhibitors. The list of exhibitors can be found on the "Discover Engineering Family Day" web site http://www.eweekdcfamilyday.org.

The purpose of the Family Day event is twofold. First, the excitement of hands on activities involves young children with the concept of engineering and engineers. Children and even adults often do not understand the role of the engineer in our society or more simply what an engineer does. Not typically part of a school's curriculum, teaching children about engineering generally falls to enrichment programs. But waiting for college or even high school to introduce the possibility of an engineering career is often too late. Capturing a 6 to 13 year old child's natural curiosity about the way things work the realm of engineering is crucial preparation for reaching middle school, and opens children to the possibility of engineering as a career option. Second, showing "real life" applications of engineering solving real life problems fosters recognition among parents, teachers and students of the importance and relevance of a high level of math, science and technology literacy, and ultimately, the importance of engineering in today's world.

Next year Discover Engineering Family Day will be February 16, 2008, at the National Building Museum. Please consider joining this outreach event next year.

A Note from Scott Walthour, PE, on the Leadership Training Conference:

In Early March I attended the Leadership Training Conference (LTC) as an early career delegate. I found the experience both eye opening and rewarding.

"The theme of the 2007 LTC was Connecting Communities and its purpose is to provide unit leaders and key committee personal with an opportunity to develop their leadership knowledge and skills, share best practices, form partnerships with other units (networking), and focus on critical issues important to the society"

Key discussions included:

- How do we make the section more welcoming to new members, especially young engineers? How do we make ASME and our section relevant to members?
- Best practices from other sections/units. What has worked well/what doesn't? What exciting programming have they done and how can we implement it in our section?
- How do we better deploy and utilize ASME's resources: Courses, Speakers, Websites, Communities of Practice (https://cop.asme.org/COP), Codes and Standards, Publications, etc

A summary of the conference and all of the presentations can be found online at: http://www.asmeconferences.org/ltc07/

Scott Walthour, PE Arium AE scottw@ariumae.com

~ Message from the Chair continued from page 2 ~

age (figure 1) is most interesting (the zero-age data point represents members for which no age information is available). For the available age data, the median age of members is 58.5 (average is 50.6). Our section has one member aged 100, another aged 99, and two aged 98. About 25 members are 90 or more years old!

The distribution by years of ASME membership (figure 2) is equally fascinating. About 18.35% of us have been ASME members for four years of less. A little more than half (about 1,014) of our membership has been ASME members for 19 or fewer years. Alternatively more than 70.57% (1427) of our members have 10 or more years of ASME membership. Further, our section includes about 50 members with 60 or more years of ASME membership (see above discussion for Awards Banquet on May 2)!

About 39 technical divisions are represented in the Technical Division Interest reported by our members. The technical divisions with the largest number of our members are Management (247), Aerospace (234), Design Engineering (175), Power (112), Nuclear Engineering (82), Fluids Engineering (73), and Heat Transfer (68). The following are some of the organizations that employ at least 10 or more of our members (the total numbers are somewhat approximate due to the different ways in which the same organization could be reported in the records):

University of Maryland	107	Naval Research Laboratory	15
Nuclear Regulatory Commission	52	John Hopkins University	14
George Washington University	44	US Army	14
NSWC	41	Howard University	13
Department of Energy	28	US Navy	13
NAVSEA	28	Mirant MidAtlantic	12
Exxon Mobil	26	Northrup Grumman	11
NASA (HQ, GSFC, etc.)	26	Catholic University of America	11
Bechtel Corporation	23	Lockheed Martin Corporation	10
SAIC	18	BAE Systems	10
NAVAIR	18	MPR Associates Inc.	10
NIST	16		

(Note that all the figures follow on page 6)

We welcome your observations, comments, and other feedback.

Cheers,

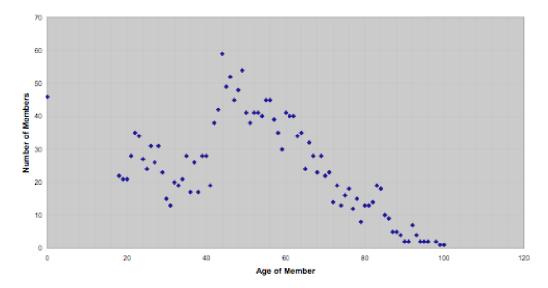
Iheanyi Eronini

Poster Series Now Available!

ASME's poster series highlighting the achievements of African American engineers and inventors is now available for purchase through ASME. The poster series contains ten posters, measuring 14-by-18 inches, each displaying a picture of an African American engineer or inventor and information about their work. Poster sets can currently be purchased for \$20 a set for members and \$24 for non-members.

Contact the ASME Information Central at 1-800-THE-ASME (843-2763) and request product #AAI497. Product Catalog Item: 1997 African American Engineers and Inventors Posters

http://www.asme.org/Communities/Diversity/African American Engineers.cfm



ASME Washington DC Section Demographics (02/2007) Fig. 2 Member Distribution by Years of Membership

