

Additional April Meeting Information

Inductee (2005), Sigma Xi Faculty Research Award (2001), Oklahoma City Journal Record's 50 Making a Difference (2004 & 2005), NSF Creativity Extension (1989). The *Journal of Organic Chemistry* (Feb. 4, 2005) cover featured her research. In the last 5 years, she has spoken at over 100 national meetings of professional societies and organizations, Capitol Hill briefings with the US Congress, teleconferences, universities, and radio and TV programs, such as the McNeil-Lehrer News Hour.

In physical organic chemistry, she developed a new synthetically useful technique for gathering mechanistic information on addition reactions of alkenes. The investigations often permit selection of one mechanism from several which are proposed. The technique has helped determine mechanisms of important addition reactions of alkenes, such as hydroboration, oxymercuration, bromination, Wacker reaction, and Wilkin-

son reaction. She has over 50 peer-reviewed publications. She now applies her earlier research to Single Walled Carbon Nanotube (SWNT) reactions.

She surveyed (FY2001 - FY2004) faculty race/ethnicity, gender, and rank of "top 50" departments in each of 14 science and engineering disciplines. Comparing her faculty data vs PhD and BS attainment revealed that generally, representation of females and underrepresented minorities on faculties is much less than in degree attainment. Her faculty data are complete populations, rather than samples, so they accurately reveal the small number or absence of underrepresented groups. They were obtained simultaneously and by a consistent protocol and are therefore comparable across a large number of disciplines. For chemistry and chemical engineering faculties, her additional national origin data revealed that recently, more immigrants have been hired as faculty than US females and US minorities combined. Her final report is available at

<http://cheminfo.chem.ou.edu/~djin/diversity/briefings/Diversity%20Report%20Final.pdf>
The GAO report using her data is available at <http://www.gao.gov/new.items/d04639.pdf>

Dr. Nelson utilized her teaching assignment of large sections of organic chemistry to develop and evaluate learning devices for her students. The devices use a visual, rather than oral or written, presentation; two were adopted by publishers to accompany their major organic chemistry textbooks. For information see http://cheminfo.chem.ou.edu/~djin/diversity/SACNAS_Keynote/SACNAS_Keynote.html. Her research results and materials from an education project, designed by Oklahoma high school students and involving precipitate-forming reactions conducted in microgravity on board the STS-40, are the subject of a permanent educational exhibit demonstrating the scientific method, at the Oklahoma Air and Space Museum.

1st Annual ASME COS Golf Tournament

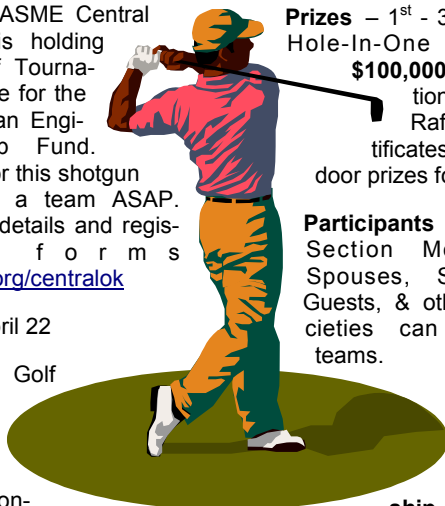
On April 22, the ASME Central Oklahoma Section is holding our 1st Annual Golf Tournament to raise revenue for the section and set up an Engineering Scholarship Fund. Recruit a team of 4 for this shotgun scramble. Register a team ASAP. Visit our website for details and registration forms <http://sections.asme.org/centralok>

When – Saturday, April 22

Where – Silverhorn Golf Club in OKC

Entry Fee – \$75 for individuals or \$280 per team of 4, at a non-sponsorship level

Included in Fee – Greens fee, cart fee, range balls & practice facilities, Hamburger & Hot Dog Buffet; 10% Pro Shop Discounts, Gratuity



Prizes – 1st - 3rd Place Winners, a Hole-In-One Shootout for a **\$100,000 cash prize**, Vacation Raffle, Secondary Raffle for iPod, Gift Certificates, and golf items, plus door prizes for all.

Participants – Central Oklahoma Section Members, Member Spouses, Student Members, Guests, & other Engineering Societies can challenge ASME teams.

Sponsorship Levels

Bronze Sponsorship – \$250 – Company Logo on a Tee Box;

Silver Sponsorship – \$500 – Team entry and a Company Logo on a Tee Box, plus advertising for 2 issues of The

Central Oklahoma Section Newsletter;

Gold Sponsorship – \$1000 – Team entry and Company Logo on 5 Tee Boxes, plus advertising for 5 issues of The Central Oklahoma Section Newsletter;

Platinum Sponsorship – \$1500 – Team entry and Company Logo on 9 Flags, plus advertising for all 8 issues of The Central Oklahoma Section Newsletter.

Recruit a team of 4 and/or have your company sponsor a foursome, at one of the mentioned levels. Be sure to mention that sponsorships will contribute significantly towards an Engineering Scholarship Fund for engineering college students.

Contact Nathan Weber at <mailto:webern2@asme.org> or call at 405-225-4061 to reserve your spot.

26th Annual Oklahoma AIAA/ASME Symposium

The 26th Annual Oklahoma AIAA/ASME Symposium will be held at University of Oklahoma's Sarkeys Energy Center in Norman on Saturday, April 15, 2005. The purpose of the symposium is to encourage communication among the engineers of Oklahoma's

universities and industries. You are invited to participate by helping to organize a session, chair a session, and/or attend presentations to listen and discuss the papers with the authors. The symposium provides a great opportunity for students to attend and present papers. Students

receive a reduced registration fee. The Symposium will have parallel morning technical sessions and will end after a luncheon with an invited speaker.

<http://www.coe.ou.edu/ame/symposium/>

Chair's Corner

Dear ASME-Central Oklahoma Section Members:

It's hard for me to believe how quickly time has gone by this year. March madness is behind us and there's only two months left in our Section's program year. However short the time is, it's still chocked full of activity which I hope is of interest for many of you. Besides our Honors and Awards meeting this month, the University of Oklahoma will host the 26th Oklahoma AIAA/ASME Symposium on Saturday, April 15th. The 1st ASME Central Oklahoma Section Golf Tournament Fundraiser will follow the next Saturday, April 22nd.

Before continuing with upcoming events, I would first like to extend our thanks and appreciation to **Mr. Robert Zahl, P.E.** for his insightful presentation on Engineering Ethics. His briefing and

the subsequent discussion gave us a better appreciation of how the ASME Canons of Ethics and Oklahoma State Statutes to which our professional practice must abide are intertwined. Many practical issues related to ethical dilemmas brought up by the speaker and some in attendance were very informative and linked various aspects of the Oklahoma Statutes to real life situations.

As I noted in last month's newsletter, engineers are typically considered to be among the most trusted professionals in society. As such, their contributions toward our society tend to not only be numerous but also usually go unnoticed. Unfortunately, it's typically the disastrous results of poor engineering practice (usually from ethical lapses) that make the headlines. That is why it's imperative of our Society to honor those among us who have upheld the highest standards of conduct throughout their engineering career. It is the main rea-

son we have an Honors and Awards Program every April and I would like to encourage all of you to consider attending to give these individuals the acknowledgment they so richly deserve.

Besides honoring our 25 year, 50 year, and Life members, our program will feature **Dr. Donna J. Nelson** of the University of Oklahoma's Department of Chemistry & Biochemistry. She will make a presentation related to the prospects for a more diverse participation of our citizenry within science and engineering faculties at US Research Universities. It may particularly be beneficial for those of you with teenage or pre-teen sons & daughters who show an interest in science, math, or engineering to attend with your children. The event would be very informative and may inspire them to direct their goals toward those fields in college and subsequent careers.

Frank Parker – Chair

Central Oklahoma Section 2006-2007 Election Results

The ballots have been counted and we can announce that next year's officers will be:

Chair: Nathan Weber

1st Vice-Chair: Stan Wells

Treasurer: John McCachern, P.E.

Secretary: Tom Betzen, P.E.

Vice-Chair, Programs: Albert Janco, P.E.

Vice-Chair, Membership: Stan Wells

Vice-Chair, Professional Development: Mike Frey

Directors: Jon Akins; Andrew Brugger; Frank Chambers, Ph.D., P.E.; Wendell Cavin, P.E.; Bill Green, P.E.; John

Heaton, P.E.; Dan Metzger, P.E.; Frank Parker, P.E.; Ed Reynolds, P.E.; Ed Root; Elizabeth Schwartz; Jamal Siddiqui; Curtis Vickery, Ph.D., P.E.; Vladimir Yum.

This is a fine group of officers & we are very fortunate to have such willing volunteers. CONGRATULATIONS!

April Meeting Honors and Awards

Membership Recognition

The ASME Central Oklahoma Section is pleased to announce that seventeen of our members have reached significant milestones in their professional careers. These members have been presented with certificates and rockers for their ASME pins in recognition of their years of membership in ASME:

25 Years: **Gordon V. Beard**, Member; **Frank W. Hoke, P.E.**, Member; **Arnold M. Krush**, Member; **James R. Mueller**, Member; **Charles K. Reynolds**, Member; **Kartik C. Saha**, Member; **Wesley L. Taylor**, Member

Life Members: **William R. Green**, P.E., Life Member; **Lyle Harms**, Life Member; **Lawrence L. Hoberock**, Ph.D., P.E., Life Fellow; **Richard C.**

Jackson, P.E., Life Member; **Raymond F. Neathery**, Ph.D., P.E., Life Member; **Marvin L. Peterson**, Life Member; **Edmund C. Root**, Life Member; **Ronald G. Wynne**, P.E., Life Member.

50 Years: **Eldon D. Lyon**, P.E., Life Member; **Jerald D. Parker**, Ph.D., P.E., Life Fellow.

Our congratulations to these members for their continued membership, support, and many contributions to ASME!

Student Recognition

The ASME Central Oklahoma Section is also very pleased to recognize four ASME student members at our

April Section meeting. Student awards to be presented are: the **Jerald D. Parker Award** to honor the outstanding **Oklahoma Christian University ASME student member**, the **Tom J. Love Award** to honor the outstanding **University of Oklahoma ASME student member**, the **James H. Boggs Award** to honor the outstanding **Oklahoma State University-MAE ASME student member**, and an **Outstanding Student Award** to honor the

outstanding **Oklahoma State University-MET ASME student member**. Please attend our April Honors & Awards meeting and celebrate these students' fine accomplishments!



ASME & THE NATIONAL INSULATION ASSOCIATION FORM A STRATEGIC PARTNERSHIP

ASME and the National Insulation Association (NIA) in Sept. 2005 entered into a partnership to collaborate on educational programs and initiatives. NIA is a fifty-year-old trade organization representing the mechanical and specialty insulation industry.

NIA has worked with ASME's Continuing Educational Institute in developing a training course; PD568 – "Mechanical Insulation and Design Technology" and recently established a Communities of Practice for Mechanical Insulation. In addition, NIA has developed a series of presentations that are available to the Section network. The two most notable presentations are entitled: "The Power of Insulation" and "Insulation, The Lost or Forgotten Technology."

Mechanical Insulation is a time tested and proven technology for energy conservation, emission reduction, personnel safety, process and productivity improvements and host of cost reduction and work place improvements. Yet, given those benefits this technology, simply known as insulation is often overlooked, undervalued and not used to capacity.

The NIA presentations are eligible for Professional Development Hours (PDH) and are being provided to the ASME Section Network on a no charge basis. All attendees receive a software program that can be utilized to determine energy loss and with existing and new insulation systems and a variety of mechanical insulation resource information.

Take advantage of this offer from NIA to learn more about the value of this technology in new construction and maintenance applications in the industrial and commercial markets. Ron King, a past president of NIA and currently a consultant for NIA, is coordinating the ASME Section presentations. You can contact him at <mailto:RonKingRLK@aol.com>. To learn about NIA visit their website at <http://www.insulation.org>.

Call for Submissions: Mechanical Advantage

Do you have something to share with ASME's Student Members? Submit your article or ideas to *Mechanical Advantage*, ASME's online student newsletter. *Mechanical Advantage* offers engineering students useful articles, program information and upcoming events and deadlines. Please send all submissions to <mailto:mechadv@asme.org>.

Student submissions are highly encouraged!

ASME SPRING STUDENT CONFERENCES (formerly known as the RSC'S)

ASME Student Conferences will be held between March and April 2006 throughout the ASME districts. The student conferences attract over 2,500 participants annually and are hosted by ME/MET Departments at selected universities or by ASME Sections. They take place over 1 to 3 days at the host campus or a nearby location. In addition to professional development sessions or workshops, grad school seminars or career fairs, these conferences also include the following ASME competitions: The Student Design Competition, The Old Guard Prize - Oral Presentation Competition, The Old Guard Technical Poster Competition and The Old Guard Technical Webpage Competition. Visit the student conference website for dates and locations. http://www.asme.org/Communities/Students/2006_Spring_Student.cfm

Frontiers in Biomedical Devices 2006

The ASME Nanotechnology Institute presents Frontiers in Biomedical Devices 2006, to be held **June 8-9, 2006** at the McDonnell Douglas Engineering Auditorium at the University California at Irvine campus.

Leading authorities in the commercial and academic arenas will focus their expertise in 4 intense meeting tracks including: Physiological & pathological environment for medical devices, Monitoring & imaging techniques, Device development, Regulatory & clinical issues. The conference also includes an evening reception, exposition and poster session on June 8th at the University Club. General Audience and Student Registration fees include access to all sessions, one copy of the conference proceedings, daily coffee/tea breaks, lunches, and conference reception/poster session/exhibit. For more details visit <http://www.asmeconferences.org/NanoBio06/> or contact Brandy Smith at 917-596-0306 or email: <mailto:smithb@asme.org>

2006 FIRST Championship

The FIRST (For Inspiration and Recognition of Science and Technology) Robotics Competition is an exciting, multi-national competition that immerses middle and high school students in the world of engineering. Working with engineers who serve as mentors and advisors, students get a hands-on, inside look at the engineering profession.

The fun and excitement of FIRST Championship competition will be held **April 26-29** at the Atlanta Georgia Dome and is free and open to the public. To foster the technological literacy of society, ASME and FIRST (For Inspiration and Recognition of Science and Technology) are working together to achieve this goal. For more information visit <http://www.asme.org/Events/Contests/Partnership.cfm>

Student Activity Calendar

April

April 27 2006 FIRST Championship

<http://calendar.asme.org/EventDetail.cfm?EventID=1398>

May

May 8 Turbo Expo 2006

<http://iqti.asme.org/events/te2006/>

June

June 17-22 ASME Summer Annual Meeting

<http://calendar.asme.org/EventDetail.cfm?EventID=1316>

Katrina Loans Available for Eligible Students

ASME has established a fast track student loan for mechanical engineering students who have been adversely affected by Hurricanes Katrina & Rita. Applications will be accepted on a continuous basis thru June 30, 2006.

For more information contact Maisha Phillips at (212) 591-7371 or <mailto:PhillipsM@asme.org>. Additional information can also be obtained by visiting the Web site at <http://www.asme.org/education/enged/aid/loan.htm>

ASME Deploys Vivísimo Velocity Search Engine

ASME has launched a new search engine on ASME.org with Vivísimo Velocity as its enterprise search platform. With Velocity, ASME is leveraging existing assets to search and combine the company's internal content management system, products catalog, and other Web content while presenting all results organized into easy-to-navigate folders. Now, thousands of ASME.org users will have access to multiple content sources searchable from a single, user-friendly interface.

To try out ASME's new search engine, visit <http://www.asme.org>

ASME CONGRESS '06 SET FOR CHICAGO



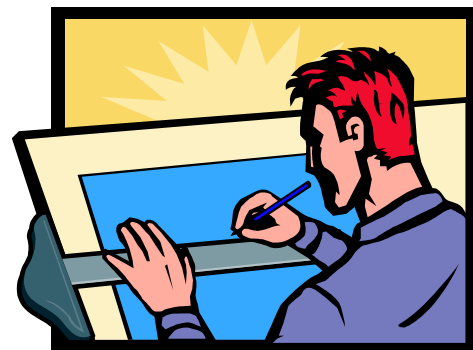
Mark your calendar to attend the 2006 ASME International Congress and Exposition to be held Nov. 5-10 at the Hilton Chicago.

The Congress will bring together engineers, scientists and technical professionals from around the world to discuss and demonstrate innovation

in advanced technologies. The program will feature special tracks organized around leading industries and technical disciplines, including energy, biomedical systems, transportation, and homeland security. Other highlights at the Congress include the Young Engineers Forum, Student Design Contest finals, and the Honors Assembly ceremony recognizing service and achievement in mechanical engineering.

Hundreds of sessions, forums, exhibits, tours and social events will keep you current on the latest trends in technology and industry, and provide the opportunity to network with engineers in different industries and companies.

For more information about this year's Congress, visit the Web site at <http://www.asmeconferences.org/congress06/>



Energy Nanotechnology International Conference Set for June

Featuring presentations on the role of nanotechnology in energy conversion, storage and utilization, the Energy Nanotechnology Int'l Conference will be held **June 26-28, 2006**, at the Massachusetts Institute of Technology in Cambridge.

Engineers and scientists on the leading edge of research in nanotechnology will interface with professionals engaged in the national debate over alternative energy technologies to reduce America's dependence on oil and natural gas. The ASME Nanotechnology Institute is a sponsor of this event. For more information visit <http://www.asmeconferences.org/energynano06/>

Future ASME-Central Oklahoma Section and Other Events

DATE	LOCATION	PROGRAM TOPIC AND SPEAKER
April 15	Starkeys Energy Center University of Oklahoma Norman, OK	The 26 th Annual Oklahoma AIAA/ASME Symposium
April 22	Silverhorn Golf Club 11411 N Kelley Ave Oklahoma City, OK	1st Annual ASME COS Golf Tournament
April 27	Oklahoma Engineering Center	"Diversity in Science and Engineering Faculty at US Research Universities" by Donna J. Nelson, PhD, Associate Professor of Chemistry, University of Oklahoma
May 25	Bergey Windpower Norman, OK	Plant Tour and Presentation by Mike Bergey, President

FOR UPDATES ON THESE AND OTHER EVENTS, VISIT OUR SECTION WEB SITE AT

<http://sections.asme.org/CentralOK>