



THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS®

Central Oklahoma Section Newsletter
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The Section is located at: Oklahoma Engineering Center, 201 Northeast 27th Street, Oklahoma City, OK 73105

The Central Oklahoma Section Newsletter is nominally published nine times per year to convey monthly meeting dates, meeting topics, section activities, and/or other ASME information to its membership.

******* Joint Meeting with the Oklahoma AIAA Section *******

Topic: Michelin Energy Saving Tires & Technology

Speaker: Mr. Tom Betzen, Sr. Engineer, Michelin NA

Date: Thursday, January 22, 2009

Location: Okla. Engineering Center, 201 NE 27th St., OKC



Michelin® has recently launched several innovative tire concepts and designs focused on energy savings. Included are Michelin’s *Energy Saver All-Season* passenger car tires and *X-One®* semi-truck tires. These energy efficient "green" tires, the result of over 16-years of research and development, can save up to 4% in gas mileage and reduce associated CO2 emissions. Michelin’s new *HydroEdge®* passenger tire line also utilizes this technology. These tires have a “Green X” symbol on their sidewall.

Tom Betzen’s presentation offers a look at Michelin’s history, an overview of Michelin’s rolling resistance research leading to these new energy efficient designs, and their impact on both passenger car and trucking industries. Michelin North America (www.michelin.com) employs more than 22,300 and operates 19 major manufacturing plants including the Ardmore, OK plant. **Make plans to join us on January 22 for this timely presentation!**

Time: 6:00 - 6:30 PM: Gather at the Okla. Engr. Center 6:30 – 7:15PM: Catered meal.
 7:15 – 7:30PM: Introductions & AIAA/ASME Business 7:30 – 8:30PM: Presentation by Tom Betzen

Cost: \$10 for Sr. Members, \$5 for Student Members. **PLEASE PLACE YOUR RESERVATION with Albert Janco** (Ph: 405-848-1991 (leave message) or e-mail jancoa@asme.org **by TUESDAY, January 20 at noon!**

<p>2008-2009 COS Executive Committee</p> <p>Officers</p> <p>Curtis Vickery, Ph.D., P.E. Chair Cameron Compression Systems Bus: 405-619-5013 ; Fax: 405-619-5081 e-mail: vickeryc1@asme.org</p> <p>OPEN Vice-Chair VOLUNTEER NEEDED!!!</p> <p>John McCachern, P.E. Treasurer Alcatel-Lucent Technologies Bus: 405-302-1651; jmccachern@alcatel-lucent.com</p> <p>Tom Betzen, P.E. Secretary Michelin North America Bus: 580-221-2280 ; Fax: 580-221-8586 e-mail: betzent2@asme.org</p> <p>Albert Janco, P.E. Program Chair Consulting Engineer Membership Chair Bus: 405-848-1991 ; Fax: 405-843-6244 e-mail: JANCOA@ASME.ORG</p> <p>Elizabeth Schwartz Webmaster Ford Audio-Visual Systems Bus: 405-945-2057 ; schwartz3@asme.org</p> <p>Ed Reynolds Honors & Awards Ph: 405-721-6753 ; edwin_c_reynolds@yahoo.com</p>	<p>Directors</p> <p>Mike Frey Professional Development Bus: 405-736-3368 ; freym1@asme.org</p> <p>Frank Parker, P.E. Scholarship Bus: 405-739-1813 ; frank.j.parker@gmail.com</p> <p>Doug Brown, P.E. ASME Vice-President Ph: 580-536-0363 ; brownd919@asme.org</p> <p>Vladimir Yun College/industry Relations Bus: 580-251-4014 ; vd_yun@yahoo.com</p> <p>Nathan Weber Past Chair Bus: 405-419-6305 ; webern2@asme.org</p> <p>Frank Chambers, Ph.D., P.E. Director Bus: 405-744-5901 ; chambersf@asme.org</p> <p>Wendell Cavin, P.E. Director Bus: 405-291-5586 ; wendell.cavin@att.com</p> <p>Jamal Siddiqui Director Bus: 405-739-5456 ; siddiquij2@asme.org</p> <p>Ed Root Director Phone: 405-946-3254 ; emroot@cox.net</p> <p>Tommy Lear, P.E. Director Bus: 405-739-1827 ; thomas.a.lear@boeing.com</p> <p>Bill Green, P.E. Director Phone: 405-728-5849 ; wgreen@cox.net</p>	<p>John Heaton Director Bus: 580-251-4166 ; heatonj2@asme.org</p> <p>Ex-Officio Directors</p> <p>Byron Newberry, Ph.D. OC Bus: 405-425-5428 ; byron.newberry@oc.edu</p> <p>Sub Gollahalli, Ph.D., P.E. OU Bus: 405-325-1728 ; gollahal@ou.edu</p> <p>Larry Hoberock, PhD, PE OSU-MAE Bus: 405-744-5900 ; lhobero@okstate.edu</p> <p>Jim Bose, PhD, PE OSU-MET Bus: 405-744-9458 ; jbose@okstate.edu</p> <p>Past Chair</p> <p>Stan Wells Consulting Engineer Ph: 405-330-4769 ; wellss2@asme.org</p> <p>Faculty Advisors</p> <p>Wayne Whaley, Ph.D., P.E. OC Bus: 405-425-5424 ; wayne.whaley@oc.edu</p> <p>Kuang-Hua Chang, Ph.D. OU Bus: 405-721-7149 ; khchang@ou.edu</p> <p>Hongbin Lu, Ph.D. OSU-MAE Bus: 405-744-5900 ; hongbin@okstate.edu</p> <p>Rick Beier, Ph.D. OSU-MET Bus: 405-744-9371 ; beier@okstate.edu</p>
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ADDITIONAL JANUARY MEETING INFORMATION

Mr. Tom Betzen, P.E. was born and reared on a small family farm near Colwich, Kansas. Tom holds a B.S. degree in Mechanical Engineering from Kansas State University and a Masters of Business degree from Oklahoma City University. He is a registered Professional Engineer in Oklahoma and has been an active member of the ASME Central Oklahoma Section, currently serving as Section Secretary.

Mr. Betzen has been employed at the Ardmore, Oklahoma Michelin tire plant, 16-1/2 years as a Senior Staff Engineer in charge of process design improvements of tire assembly areas, and 2 years as a Quality Obtention Engineer responsible for a plant-wide process waste reduction initiative.



<http://www.michelin-green-meter.com>

NOMINATIONS NEEDED -- Central Oklahoma Section Awards 2009

The Executive Committee has established seven (7) awards to recognize the section and student members who are making outstanding contributions to their section or the profession of mechanical engineering. Award recipients will be recognized at our April 23rd Central Oklahoma Section Meeting.

Outstanding Engineer Award – To be presented for outstanding professional and technical organization activities and achievements. Also considered will be community and civic activities along with awards received. The nominee must be a member of ASME.

Minority and Women Engineer-of-the-Year Award – To be presented for outstanding professional and technical activities by a minority or woman engineer. In addition, community and civic activities will be considered as well as awards received. The nominee must be a member of ASME.

Outstanding Engineer-in-Management Award – To be presented to the engineering manager deemed by the nominator to have done an outstanding job in furthering the goals of ASME and the engineering profession. The ability to select and develop engineers as well as to communicate with and motivate engineers will enter into the selection of awardee. The nominee must be a member of ASME.

Outstanding ASME Student Member Awards – Four awards will be made in recognition of academic achievement and outstanding service to an ASME student section. The **Jerald D. Parker Award** will be awarded at Oklahoma Christian University; the **James H. Boggs Award** will be awarded at Oklahoma State University-MAE; the **Tom J. Love Award** will be awarded at the University of Oklahoma & an **Outstanding Student Award** will be awarded at Oklahoma State University-MET.

For application and/or additional information contact: Ed Reynolds, 6507 N.W. 96th Street, Oklahoma City, Ok. 73162, Phone: (405) 721-6753, E-mail: edwin_c_reynolds@yahoo.com (Nomination deadline is March 26, 2009)

Call for Nominations: Old Guard Early Career Engineer Award

Recognize an outstanding early career engineer who is actively involved in their profession, their communities, and the work of ASME. **Nomination deadline is February 1, 2009.**

The Old Guard Committee honors ASME members that have made great strides in the engineering profession, community and the work of the Society by sponsoring this Award, established in 1994. Eligible applicants must be a current ASME Member who has received a Baccalaureate degree in Mechanical Engineering between February 1, 2003 and February 1, 2005. A Grand Prize of \$5,000 cash plus an ASME prepaid life membership will be awarded to the successful candidate at the ASME International Mechanical Engineering Congress and Expositions. All contestants will be notified by July 1st. Two Runner-Up Prizes of Prepaid life membership may also be awarded. All three prize winners would receive a plaque as a commemorative gift.

All nominations must be received by February 1, 2009 to be considered for the award. All applications should be accompanied by supporting documentation and a copy of the nomination form, and then emailed to Cheryl Hasan at hasanc@asme.org with keywords 'Old Guard Early Career Award'.

For the nomination application and more information visit <http://files.asme.org/asmeorg/Communities/EarlyCareer/8026.pdf>.

For more information contact Cheryl Hasan, Manager, Early Career Development, ASME Center for Professional Development, Practice and Ethics, E-mail hasanc@asme.org.

Financial Meltdown Slowing Wind-power Boom

Courtesy NSPE's *U.S. Engineering Press Review*, Dec. 29, 2008

Associated Press (12/22/08); Mercer, David; The wind-power industry has enjoyed an unprecedented build-out over the past few years. The American Wind Industry Association reports the nation's wind-power capacity has increased by 500 percent in the past decade, to about 21,000 megawatts. Federal tax credits and state mandates requiring that some power be generated by sources such as wind or the sun exist in 28 states and are responsible for about two-thirds of the market for wind energy, according to Hans Detweiler, director of state policy for the American Wind Energy Association. There are 86 wind-farm projects under construction around the country, with 57 taking place in the windy states in the country's midsection from Texas to the Dakotas, Minnesota, and Illinois. However, that expansion is now drastically slowing as financing dries up for many projects because of the global economic crisis. "There's definitely a lot of, obviously, upheaval," says Ric O'Connell, a renewable energy consultant with Black & Veatch Corp. "I would definitely think in 2009 there are going to be projects that are going to be delayed." Florida Power and Light, a major developer of wind power, has said it will slow down in 2009. Oil tycoon T. Boone Pickens has also delayed his massive Texas wind-farm plans, blaming both a lack of financing and declining petroleum prices. Firms like American International Group Inc., Lehman Brothers, and Wachovia helped finance many projects by taking short-term ownership in exchange for the credits to help offset their own income. Now, AIG is trying to survive the financial meltdown, Wachovia is being bought by Citigroup and Lehman Brothers filed for bankruptcy this year before being sold. Other companies that have helped finance the wind boom are being weighed down by the economy, meaning they aren't making as much money so they don't need the tax credits. The investment money flowing into the wind-energy business flattened in 2008 for the first time in several years, at about \$5.5 billion dollars. JPMorgan forecasts that flow will fall by more than 20 percent in 2009, to about \$4 billion. The projects most in jeopardy are those in which developers were looking for sites and financing when the financial industry meltdown began.

School's Structural Engineering Lab Partners with State, Industry

Courtesy NSPE's *Daily Designs* publication, Dec. 29, 2008

The [Norman \(OK\) Transcript](#) (12/28, Parker) reported on the **Fears Structural Engineering Laboratory at the University of Oklahoma**, where researchers seek "to come up with the best and most economical means of building roads and bridges, and then test them out with special machines." The article described some of the lab's projects, and noting that the lab provides "valuable tools for government and industry," and also gives students "important practical experience in their chosen field." For example, "One civil engineering class that uses the lab...requires students to build two concrete columns, one with steel to reinforce it and one without," and then has the "students use a machine to pound the columns" to see the difference. In addition to partnerships with industry, the school also partners with the Oklahoma Department of Transportation (ODOT). "The ODOT benefits from the contacts it maintains with the Fears lab, and the experience gleaned from working at the lab prepares the students for their profession."

CALL FOR DELEGATES -- 2009 Leadership Training Conference (LTC)

This year's ASME LTC will be in Los Angeles on March 5 to 8, 2009. Registration for the LTC 09 is now open and all delegate(s) must register. The early deadline is January 31, 2009.

Our Section should identify potential delegates to attend this event. Please contact Curtis Vickery or Albert Janco if you are interested in attending and we will supply all registration forms. For more LTC information visit <http://www.asmeconferences.org/ltc09/>.

A FORUM FOR THE PRESENTATION OF IN-PROGRESS OR COMPLETED WORK BY MECHANICAL ENGINEERING GRADUATE STUDENTS AND EARLY CAREER ENGINEERS

This year's **ASME District-E Early Career Technical Conference (ECTC)** and **Student Professional Development Conference (SPDC)** will be held **April 17-18, 2009 in Arlington, TX**, hosted by the University of Texas at Arlington. See their website at <http://districts.asme.org/spdc/tx/>. Deadline for abstract submission is February 15, 2009.

CONFERENCE PURPOSE: In today's competitive engineering job market, employers and engineering managers are looking for the technical credentials that separate one candidate from another. Our District, in keeping with ASME's mission of promoting and enhancing the technical competency and professional well-being of our members, has organized this conference as a forum for ME graduate students and early career engineers (practicing engineers graduating 5 years or less ago) to develop their technical credentials and to establish their professional identity. This program is designed to enhance the ability of graduate students and early career engineers to compete in an ever more demanding and changing global marketplace by providing and developing the skills and the demonstrated technical performance that will make them stand out among their peers.

In providing conferences such as this, the District also wants to establish a bond between ASME and the early career engineer that encourages continued participation in ASME activities, increased use of ASME resources and programs, and reinforces the concept of "ASME for a Lifetime."

WHO CAN ATTEND? Conference participation is open to all graduate mechanical engineering students enrolled in the 2008-09 school year including those graduating in December 2008 and all early career engineers who graduated after May 2004. Only graduate students and early career engineers will make presentations. Participants must be paid ASME members. (Apply for membership or pay dues at <http://www.asme.org/Membership/>).

WHY SHOULD YOU ATTEND? If you are an undergraduate ME student, attending the ECTC will give you an idea about the type of projects graduate students work on in order to obtain a MS or PhD degree. Moreover, if you have any aspirations to go to graduate school, you will have an opportunity to talk to graduate students from other schools in the District and ask them about their experience with the graduate program at their school. If you are a ME graduate student, you can either just attend the presentations to learn something new or take an active role by presenting your in-progress or near-completion research work. You will probably receive constructive comments from fellow students and other faculty on how you can improve your research results. All presenters can gain invaluable experience by practicing your presentation skills in front of a small and friendly audience before attempting to present your work at national or international conferences.

PAPER PUBLICATION: Proceedings will be published by ASME.

HOW TO PARTICIPATE: Graduate students and early career engineers planning to participate must send a 200 word abstract to Dr. Rick Couvillion (rjc@uark.edu) by February 1, 2009. Form is available on the web at: http://districts.asme.org/DistrictE/ECTC/2009_ECTC_Intent_To_Participate_Form.doc.

Abstracts will be reviewed, and invitations to submit full papers will be sent by February 15, 2009. Completed papers and Paper Submittal and Authorization to Publish a Technical Paper Form are due March 15, 2009. Form is available on the web at:

http://districts.asme.org/DistrictE/ECTC/2009_ECTC_Authorization.doc.

FORMAT:

- Full paper (prepared according to ASME Guidelines at http://www.asme.org/Publications/ConfProceedings/Author/Author_Resources.cfm) must be sent to Dr. Couvillion as an MS Word file. Only papers prepared according to ASME guidelines will be accepted.
- Each entry must be typed single-spaced, double-column on one side of 8½" x 11" white sheets. An author's Template is provided as a MS Word file available on the web at http://districts.asme.org/DistrictE/ECTC/ECTC_2009_Template.doc.
- All submissions shall use MS Word with portrait page setup. The margins are 1" on the left ½" on the right, top and bottom.
- Length of each submission, including cover page, abstract, references, footnotes and figures, should not exceed eight (8) pages.

- Page one (1) shall indicate the title of the paper, authors full name and affiliation.
- The paper title should be in all capital letters, 12 pt. Times New Roman boldface. The space between the lines of the title should be 13 pt. or your computer's default line spacing. The title should be centered on the page, with run-over lines also centered.
- The heading (e.g., ABSTRACT) should be in bold face and 10 pt. Times New Roman. Abstracts are limited to 100 words.
- The text should be 10 pt. Times New Roman.
- The first line of each paragraph should be indented ¼" from the last margin, with all run-over lines being justified on the right and left margins. There should be no extra space from the heading to the text that directly follows it. The preferred spacing is two (2) line spaces.
- Illustrations should be in black ink.
- Authors are urged to acknowledge their work to academia, employer, and industry, as they deem appropriate.
- In the preparation of the paper for other format items not covered above such as Tables, Figures, Mathematics, References, and Acknowledgements consult ASME Guidelines at http://www.asme.org/Publications/ConfProceedings/Author/Author_Resources.cfm.

AUTHORSHIP

- Authorship can include names of the student(s) and a faculty member(s). However, a student or early career engineer must be the primary author and presenter.
- It is ASME policy that all those who have participated significantly in the technical aspects of an ASME paper should be recognized as co-authors or cited in the acknowledgments.
- The author name shall consist of first name, middle initial, and last name. Affiliation shall identify the name of school and their location (name of place and state).
- Papers resulting from a US Military or Government project require written permission prior to submitting the paper.

INQUIRIES AS THEY RELATE TO THE TECHNICAL CONTENT: Direct all inquiries by e-mail to the Chair of the Conference: Dr. Rick Couvillion, Chair, ECTC; University of Arkansas; Email: rjc@uark.edu

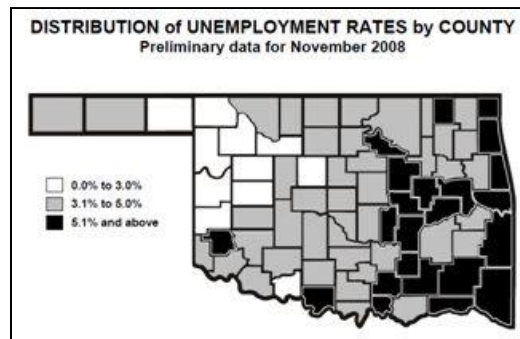
EDITOR'S NOTE: Last Fall we met ASME student members from the University of Texas-Arlington section who will be hosting this event. It should be a really good one to attend as they have good facilities, sufficient resources, and relatively close proximity. Our Central Oklahoma ASME Student Sections are encouraged to send multiple delegates to this conference.

Employment Data from the Oklahoma Employment Security Commission's "Economic Research & Analysis" report released Jan. 6, 2009

<http://www.oesc.state.ok.us/Research/News/2009/CountyUnemploymentRatesContinueToRiseInNovember.pdf>

In November 2008, Oklahoma's non-seasonally adjusted unemployment rate rose to 4.5 percent for the month. Although Oklahoma's statewide non-seasonally adjusted labor force and employment reported a small gain and a small loss for the month, respectively, non-seasonally adjusted unemployment expanded by 7.5 percent for the period. Compared to November 2007, statewide non-seasonally adjusted labor force, employment and unemployment have all increased, with unemployment recording growth of more than 11 percent.

If you are facing unemployment please take advantage of our [Situations Wanted](#) newsletter section. Fellow members and others can in turn offer help and recommendations. Send such information to Curtis Vickery, Newsletter Editor.



Chair's Corner

Dear ASME-Central Oklahoma Section Members:

Hello everyone! A new year has arrived and it's back to the grindstone! 2009, with an unsure economic outlook, will undoubtedly offer significant challenges to us all. An optimistic outlook can help you and those around you. Best wishes for continued success!

Out last Nov./Dec. 2008 Newsletter included a call for 2009-2010 Section Officer nominees. **Candidates are needed for Vice-Chair, Treasurer, Secretary, and Directors.** We need new folks on board to help here. Time demand of these offices is minimal and we try to work around folks' schedules. Any Executive Committee member can provide information on our various offices. **Please consider serving this year!**

Spring is when many terrific engineering and technology related events occur. Several involve our young people from Jr. and Sr. high schools. **Events include MATHCOUNTS, Future City, Engineer's Week, the Engineering Fair, the AIAA-ASME Symposium, ASME District-E conferences, and our annual Honors & Awards meeting.** Planning has commenced for all these events! Think about fellow members deserving of our local Section awards, and nominate them (see page 2)! Volunteers are also needed, especially for MATHCOUNTS and the Engineering Fair. Additional details will be provided in our Newsletter Calendar.

Make plans to attend our January Section meeting to be held together with the Oklahoma AIAA Section. Tom Betzen will offer a timely presentation on Michelin's energy efficient, "green" tires and associated technology. This is of interest to Mechanical and Aerospace Engineers alike. **Make plans to attend on Thursday, January 22!**

Curtis M. Vickery, Chair

Future ASME-Central Oklahoma Section Events

Date	Location	Program Topic and Speaker
Thursday Jan. 22, 2009	Oklahoma Engr. Center 201 NE 27 th St., OKC	January Section Meeting: Joint meeting with the Oklahoma AIAA Section. Speaker: Tom Betzen, Engr., Michelin North America Program: Michelin's new Green Tire Technology to decrease rolling resistance & reduce fuel usage & vehicle emissions.
Saturday Jan. 24, 2009	OC Campus Gaylord Center, Edmond, OK	Oklahoma Future City Competition – see http://www.okfuturecity.org/ for details.
Thursday Feb. 15 - 21, 2009	MULTIPLE LOCATIONS	National Engineers Week: Activities include Engineering Fair & Joint Engineering Societies Banquet (JESB). Our February Section meeting will coincide with the JESB.
Tuesday Feb. 17, 2009	Okla. Science Museum NE 50 th and M L King	Oklahoma Engineering Fair -- Volunteers needed to help with our Rubber Band Powered Car Contest
Late March to Early April	OC Campus Edmond, OK	AIAA-ASME Symposium Details to be provided week of Jan. 19

Please visit our Section website <http://sections.asme.org/CentralOK/> for event updates and other useful information!