



American Society of Mechanical Engineers

Central Oklahoma Section Newsletter
Volume 6, Number 3, October 11, 2004

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.



Distinguished Lecturer Program Announcement

Speaker: **Ramesh K. Shah, Ph.D.** Research Professor
Rochester Institute of Technology

Topic: **“Fuel Cell Technology - A Myth or Reality”**

**WEDNESDAY, October 27th at the Oklahoma Engineering Center,
201 NE 27th St., OKC**

Fuel cells are an emerging technology for electric power generation for stationary, mobile and portable applications. Replacing fossil fuel based power with fuel cell power can significantly improve power generation efficiency and reduce emissions. A variety of bio-fuels from renewable energy sources and chemical intermediates can be used in fuel cells in addition to conventional fossil fuels, thus reducing the fossil fuel dependency in future as the fuel cell technology matures.

While tremendous technological progress has been made in the last 10 years, it will take another decade for considerable penetration of power generation by fuel cell systems. Starting with the basic operation of a fuel cell, **Dr. Shah** will summarize the current state of technology for stationary, mobile and portable power generation. This will include the basic operation of a few important fuel cells, such as: proton exchange membrane, solid oxide and direct methanol fuel cells. Major challenges in making these fuel cells commercially viable for portable, automotive and stationary power generation applications will also be summarized.

NOTE: This month's program will be held on the 4th **WEDNESDAY** & will qualify for **1.0 PDH** for PE attendees.

Schedule and Contact Information

Time: 6:00PM: Registration and Social. 6:30PM: Catered Meal.
7:15PM: Meeting & Announcements
7:30PM: Presentation 9:00PM: Conclusion

Cost: \$10 each for all Senior Members and Guests, \$5 for Student Section Members.

PLEASE PLACE RESERVATIONS BY 12:00PM (noon) TUESDAY, October 26

Students please make reservations at your respective university's Mechanical Engineering office.

Members make reservations with **ED REYNOLDS**; **edwin_c_reynolds@yahoo.com**;

Ph: (405) 721-6753 (with each reservation, please include the name of each guest and/or student)

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Additional October Meeting Information

Dr. Ramesh K. Shah is a Research Professor at Rochester Institute of Technology. Dr. Shaw received his B.E. from Gujarat University, India, and M.S., Engineer, and Ph.D. degrees from Stanford University. Active in the ASME at local and national levels, he is the Past Chairman of the Heat Transfer Division, a former Technical Editor of Journal of Heat Transfer and the Past Vice President of the ASME Board on Communications. He is Co-Founder and former Editor-in-Chief of an international journal: Experimental Thermal and Fluid Science. He is a member of the honorary Editorial Advisory Board of seven International Journals. He has been Co-Founder and the President of the Assembly of World Conferences on Experimental Heat Transfer, Fluid Mechanics and Thermodynamics. He has also been the President of Niagara Frontier Association of R&D Directors. He has taught short courses and presented keynote lectures/seminars at various universities and research institutes in 32 countries worldwide. He has published over 100 papers and 19 books/edited volumes, including a textbook on Fundamentals of Heat Exchanger Design published recently by John Wiley.

Dr. Shah is a Fellow of the ASME and SAE. He received a Technical Achievement Award from Region III of ASME in 1979, Outstanding Achievement Award from GM in 1986, Valued Service Awards from ASME in 1986, 1987 and 1991, 50th Anniversary Award of ASME Heat Transfer Division in 1988, Charles Russ Richards Memorial Award bestowed in 1989 jointly by Pi Tau Sigma and ASME, and ASME Heat Transfer Memorial Award, the highest award in heat transfer by the ASME, in 2000. He has been appointed as an Honorary Professor in four universities.

Engineers Provide Sustainable Solutions Through International Volunteerism



ASME members around the world have the chance to get involved in real-world engineering projects, gaining exposure and training in internationally responsible and sustainable engineering through ASME's partnership with Engineers Without Borders™ – USA (EWB-USA).

Offering a unique opportunity for professional engineers (active or retired) and engineering students, EWB-USA is a non-profit organization established in 2000 to help developing areas worldwide with their engineering needs.

EWB-USA projects may involve the design and construction of water, waste-water, sanitation, energy, and shelter systems. Projects are initiated by, and completed with, contributions and support from the local, host community, which is trained to operate the systems without external assistance. In this way, projects are appropriate and self-sustaining. The projects are conducted by groups of students under the supervision of faculty and professional engineers from partnering engineering firms and professional Societies.

ASME members should contact **Diedra Hackley** (hackleyd@asme.org) if they are interested in any of the above projects, or would like to propose a project of their own. Additional information can also be found at <http://www.ewb-usa.org>.

New Member Distribution Map Added to Central Oklahoma Section Website



As part of the continuing upgrade of the Central Oklahoma Section website, a map showing the distribution of our members throughout Oklahoma has been added. Check out the map at <http://sections.asme.org/CentralOK/Distribution.html> and find out not only the enormous reach of our Section, but how many members are located within your own community. All together our Section has 401 members spread throughout Central & West Oklahoma. Other features have been added over the last couple of months and more are forthcoming. Check them out from time to time, at <http://sections.asme.org/CentralOK>.

Chair's Corner

Dear ASME-Central Oklahoma Section Members:

Our September 23rd meeting was attended by 18 to hear **Mr. John Harrington**, Director of the Water Resources Division, Association of Central Oklahoma Governments (ACOG), discuss "Planning for Water Supplies in Central Oklahoma-A Regional Perspective". This month's meeting on Wednesday (Note: Change of Day), October 27th, will be a presentation by ASME Distinguished Lecturer, **Dr. Ramesh K. Shah**, Research Professor at Rochester Institute of Technology. This presentation will provide ASME members, guests & students the opportunity to meet & listen to an outstanding engineering researcher & practitioner.

The annual Management Training Seminar (MTS) was held September 10-11, 2004 in Dallas, Tx. **Dan Metzger** & I attended representing the ASME Central Oklahoma Section. The MTS featured sessions designed to help delegates & attendees to better execute Section programs & responsibilities. An ASME overview on Section Operations & Administration was presented by **Brian Dietz**, past Vice-President of Region X. In the Regional Student Leadership Seminar (RSLs), the University of Oklahoma was represented by two students, **Brandon Mills**, Chair, & **Alicia Lopez**, Secretary. Congratulations to our student section RSLs attendees.

I would like to thank **Elizabeth Schwartz**, our COS Webmaster & Diversity/Outreach Committee Chairperson, for her efforts in designing our Central Oklahoma Section website. It is Awesome!!! I encourage each of our ASME COS members to visit this website at: www.sections.asme.org/centralok If any of our ASME COS members have suggestions/recommendations to further enhance our website, please e-mail Elizabeth at schwartz3@asme.org

Hope you can join us for this month's meeting on Wednesday, Oct 27th. Please plan to attend & bring a friend.

Ed Reynolds -- Chair



"Getting to Know You" -- Jon Akins

Jon Akins is the Chief Engineer at Rupture Pin Technology, Inc. in Oklahoma City, Oklahoma. Jon has been with Rupture Pin Technology for 9 months doing production design and research and development. He is also currently serving as a Director on the COS Executive Committee.

Jon was born in Tulsa, Oklahoma and moved to Grapevine, Texas at the age of nine. In Grapevine, Jon was a member of Boy Scouts Troop 7, earning his Eagle Scout, and played the alto saxophone in the school band.

Jon received his B.S. in Mechanical Engineering from Oklahoma State University in December 2003. His experience at OSU gave him many opportunities in engineering design and experiments. For example, Jon was chosen to lead his Senior Design Project team in designing and manufacturing a compression split Hopkinson pressure bar test apparatus. This test apparatus is used to measure mechanical properties of low impedance materials. Upon graduation, Jon began his career with Rupture Pin Technology.

Jon was recently married to Nancy Potter on August 13, 2004. She is scheduled for graduation from Oklahoma State in December 2005 with a B.A., and will continue on to law school the following fall. They enjoy rollerblading and cooking together.

ASME Launches 'Communities of Practice'

Want to talk to your peers about technical matters, career and personal interests? Do you need communicate with your peers without going to a meeting or even leaving your desk? Now ASME offers you a new tool to communicate, get the information you need and meet others with similar interests and concerns at the new ASME Communities of Practice site.

On the CoP site, you can join a community, suggest a new community, participate in discussions and polls, and post your own message or request to be notified when messages are posted on the community. It's your choice what communities you participate in, and how you choose to participate.

The Communities of Practice pages also allow you to customize your own personal page to include your communities, your own links and calendar and to access an ASME event calendar. You will need to register the first time that you use the page, and set your preferences for your home page. It only takes a few moments – then you are ready to participate, or just observe the discussions. To visit the site, and test the features for yourself, go to www.cop.asme.org.

More information on how to get involved can be found at <http://www.asme.org/students/ewb.html>.

Local IEEE Meeting on RFID Technologies in Aerospace Industry

The IEEE Oklahoma City Section will be hosting a meeting on Thursday, October 21, at the Oklahoma City Engineering Center. Debbie of Boeing Wichita and Dr. Ron Ogan, (a Systems Engineer in dealing with RF technologies) will speak on the development of the Boeing Wichita RFID based automated material handling system, used to track parts and material for manufacturing Boeing 737 fuselage sections Contact or Wayne Ashcraft wayne.ashcraft@exxonmobil.com (405-878-8263) if you plan to attend or need more information.

Future ASME-Central Oklahoma Section and Other Events

Date	Location	Program Topic and Speaker
October 27, 2004 (Wednesday)	Engineering Center. 201 NE 27 th St., OKC	Distinguished Lecturer Program Fuel Cell Technology - Dr. Ramesh Shah
October 29-30, 2004 (Friday, Saturday)	See http://www.pels.state.ok.us for location information	FE (Fundamentals of Engineering) and PE (Professional Engineers) Exams
December 9, 2004 (Thursday)	TBA	More Information Next Month.
January 27, 2005 (Thursday)	TBA	More Information Next Month.
February 12, 2005 (Saturday)	Advance Tech Research Ctr Oklahoma State University, Stillwater, OK	25th Oklahoma AIAA/ASME Symposium (Abstracts Due on January 7, 2005)
February 20-26, 2005	Omniplex and Additional Venues in Oklahoma	Engineers Week -- Engineering Fair (Feb 23), Joint Engineering Society Banquet (Banquet Date TBA – Either February 22 or 24)

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

[**http://sections.asme.org/CentralOK**](http://sections.asme.org/CentralOK)

ALSO VISIT THE ASME SOUTHERN FIELD OFFICE, DALLAS, TX AT

[**http://www.asme.org/regions/sro/**](http://www.asme.org/regions/sro/)

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CALL FOR PRESENTATION ABSTRACTS

25th Oklahoma AIAA/ASME Symposium

Saturday, February 12, 2005

*Advanced Technology Research Center
Oklahoma State University, Stillwater*



American Institute of Aeronautics and Astronautics

Oklahoma Section



The American Society of
Mechanical Engineers

Central Oklahoma Section

SEE REVERSE FOR INSTRUCTIONS FOR
ABSTRACT FORMAT AND SUBMITTAL

ABSTRACT DEADLINE

Friday, January 7, 2005

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Organization
Some City, Oklahoma 7-ZIP
(405) 555-1234
emailname@hostaddress.com

ABSTRACT

The 25th annual Oklahoma AIAA/ASME Symposium will be held at Oklahoma State University in Stillwater on Saturday, February 12, 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, chairing a session, presenting a paper, and/or attending 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.

A one page abstract must be submitted by **January 7, 2005**, to be included in the meeting program and the symposium proceedings. Presentations will be 15 minutes (12 minute presentation and 3 minutes for questions). This is a sample format of the text for an abstract. The abstract should be submitted in 12 point, single-spaced Times New Roman font with right and left justified margins. The lines are to be 6 inches long with 1.25 inch right and left margins and 1 inch top and bottom margins. The abstract can be no longer than one page. The title is centered 12 point, all caps, single-spaced bold Times New Roman. Acknowledgments may be indicated in a footnote. Leave two lines between the title and the authors. The names, address, phone and e-mail address are centered 12 point single-spaced Times New Roman. Please indicate membership in AIAA and ASME with a footnote. Professional titles are not required. Leave two lines between the author information and the centered, all caps, "ABSTRACT." Please leave one line between "ABSTRACT" and the text. E-mail attachments are the preferred submission mode.

*This work has been supported by Generous, Inc.

**Member, AIAA and ASME

Submittal Information:

E-Mail attachment as MS Word or RTF file in message to symposium2005@acl.okstate.edu. Use "ABSTRACT" in subject line.

Or

Disk to Dr. F.W. Chambers, MAE, EN 218, Oklahoma State University, Stillwater, OK 74078-5016

Or

Paper submission to the above address or (last resort) fax to (405) 744-7873

For additional information, phone (405) 744-5900 or symposium2005@acl.okstate.edu with "INFO" in subject line.