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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.

NOTICE: We will NOT be having a May Section meeting as a suitable tour could not be arranged. Our 2014-2015 program year will begin in August.

We welcome all suggestions for potential programs and tours. Feel free to contact any Executive Committee member listed below.

See you this coming August!

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ASME STUDENT MEMBER RECOGNITION

ASME Central Oklahoma Section student member awards, recognizing individual students for their academic achievement and outstanding service to their ASME Student Sections, were presented to the following students at our April meeting:

- The Tom J. Love Award @ The University of Oklahoma: Berit M. Percy
- The Jerald D. Parker Award @ Oklahoma Christian University: No Award for 2014
- The James H. Boggs Award @ Oklahoma State University: Kalyan Boyina
- Mechanical Engineering Technology Award @ Oklahoma State University: Cash D. Billups

ASME Central Oklahoma Section Student Scholarship Recipient:

- Neil Torbett - Oklahoma State University/MET

Congratulations to these ASME student members!



OU Engineering Program Challenges Creativity through Contraptions

(courtesy Robert Rucker, Member, ASME Central Oklahoma Section)

Incoming freshmen students in the OU College of Engineering may participate in the AT&T Summer Bridge Program. This program challenges students to take a simple task, like turning a page, and make it complicated while still completing the task. The teams' off-the-wall contraptions are famously inspired by the designs of Rube Goldberg.

"It may seem backwards, asking engineering students to take something as simple as hammering a nail and make it as complicated as possible, but by thinking through the grandiose process, these students are learning the basic skills of engineering mechanics such as the value of experimentation, teamwork and design reliability," said Lisa Morales, program director.

The AT&T Summer Bridge Program is a four-week, on-campus residential program that prepares students for life as an engineering student. In addition to early exposure to course work, the students meet fellow classmates, faculty and staff and earn early college credit. The program is geared toward students who are African American/Black, Hispanic/Latino, Alaskan Native/Pacific Islander, American Indian or first-generation students; however, the program considers all applicants regardless of background.

"These students are highly motivated as they already see the value in planning ahead and investing part of their summer to increase success in the classroom this fall," said Tom Landers, Dean of the OU College of Engineering. "Because engineering coursework can be a challenge, this program prepares incoming freshmen academically for the rewarding road ahead."



A student with his Bridge Project

**LNG: Delivering on the
Promise of the Shale
Gas Boom**



Thursday, June 5, 2014 | 2:00PM – 3:00PM New York, ET

Some experts believe that the U.S. is in the middle of an energy revolution due to advances in the production of natural gas. But up to now, the effects of that revolution has been limited because natural gas is hard to store and transport globally, like oil - or distribute as a transport fuel, like gasoline. Now companies are working to build plants in the U.S. that can turn natural gas into a liquid to export and others are developing new LNG dispensing technology for engines to use liquefied natural gas instead of gasoline or diesel.

Join Ernesto Fisher, Chief Technology Manager at Technip USA, and Jonathan Harris, Merchant LNG Technology Manager at Linde LLC, for a live webinar to learn about these technologies and how they could deliver American shale gas to the world.

Presenters include Mr. Ernesto Fisher, Chief Technology Manager, Technip USA and Mr. Jonathon Harris, Merchant LNG Technology Manager, Linde LLC. Serving as Moderator is Mr. Jeffrey Winters, Sr. Editor, Mechanical Engineering magazine.

ASME Energy Forum is a multi-media series that explores the technical aspects and workings of a broad range of energy sources and related technologies. From fossil fuels to fuel cells, and from solar to hydro power, you'll get leading expert perspectives on how these energy technologies really work, the technical issues and market challenges, and the economic implications for businesses.



Application of Design Rules in Section VIII of the ASME Boiler and Pressure Vessel Code

June 9-12, 2014 • Houston, TX

ASME Training & Development is launching three new MasterClass sessions to explore and explain application of critical design rules in Section VIII of the ASME Boiler and Pressure Vessel Code. The MasterClass program will be held from June 9-12, 2014 at the Omni Hotel in Houston, Texas.

ASME MasterClasses are learning programs aimed at experienced professionals emphasizing learning through discussion of real world case studies and practical applications. Recognized experts lead in-depth discussions of current issues and best practices to inspire interactive discussion and knowledge-sharing.

Explore how you can benefit from the following three Section VIII ASME MasterClass sessions:

Bases and Application of Heat Exchanger Mechanical Design Rules in Section VIII of the ASME Boiler and Pressure Vessel Code (MC104)

June 9-10, 2014 (Monday & Tuesday) 14 Hours - 1.4 CEUs - 14 PDHs

Urey R. Miller, P.E., Industry Consultant, Past Chairman of ASME Boiler and Pressure Vessel Committee

This MasterClass provides an in-depth review of the rules and parameters of Part UHX in ASME Boiler and Pressure Vessel Code Section VIII that can have a significant impact on the design of heat exchangers. By highlighting detailed example problems for "real world" heat exchangers, this MasterClass demonstrates how the rules are to be applied as well as how the options can influence the final design. Through both presentation and discussion, attendees will gain insight into the history and bases for the mandatory rules for the mechanical design of shell and tube heat exchangers supplied with the ASME Mark. **For more information and to register, visit: go.asme.org/MC104.**

Bases and Application of External Pressure and Compressive Stress Mechanical Design Rules in Section VIII and Code Case 2286 of the ASME Boiler and Pressure Vessel Code (MC106)

June 11, 2014 (Wednesday) 7 Hours - .7 CEUs - 7 PDHs

Wesley S. Jacobs, P.E.

This MasterClass provides an in-depth review of the rules and parameters of Code Case 2286-4 and Part 4.4 in ASME Boiler and Pressure Vessel Code Section VIII, Division 2 which can have a significant impact on the design of process equipment that operates in - or is subject to loading conditions - that cause compressive stress. This learning event will highlight the differences between present Division 1 UG-23, UG-28 and UG-29, as well as Division 2, Part 4.4 design, how the rules are applied, and includes design application examples. **For more information and to register, visit go.asme.org/MC106.**

Design by Analysis Requirements in ASME Boiler and Pressure Vessel Code Section VIII, Division 2 - Alternative Rules (MC107)

June 12, 2014 (Thursday) 7 Hours - .7 CEUs - 7 PDHs

David A. Osage, P.E., C.S.Q.E., C.Q.A.

President & CEO, The Equity Engineering Group; Principal Author, ASME BPV Code Section VIII Division 2

This one-day MasterClass provides an in-depth examination of the techniques used in pressure vessel Design by Analysis (DBA), and specifically the analytical methods found in Part 5 of ASME Section VIII, Division 2 as well as practical information on how to meet the requirements using FEA. Discussion on the background of the analysis methods and their application will be presented through ASME Pressure Technology Bulletins *PTB-1-2013 Section VIII - Division 2 Criteria and Commentary* and *PTB-3-2013 Section VIII - Division 2 Example Problem Manual*, to provide the attendees with a thorough understanding of how these analytical techniques can be applied to practical design situations. **For more information and to register, visit go.asme.org/MC107.**

For more information and to register for a single MasterClass session at this Section VIII event, visit **go.asme.org/masterclassviii**. *SAVE UP TO 20% WHEN REGISTERING FOR MULTIPLE MASTERCLASS COURSES *. For more information contact **John Yelavich at 1-973-244-2213**.



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the entire knowledge spectrum of interest to the mechanical engineer and related technical research communities.

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EPA ANNOUNCES LIST OF TOP 100 U.S. ORGANIZATIONS USING RENEWABLE ENERGY

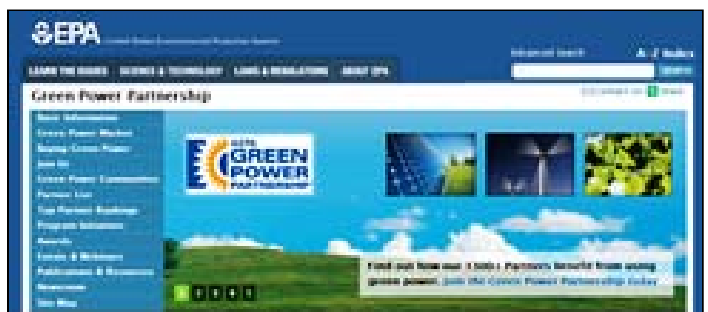
(courtesy ASME's *Capitol Update* publication, April 28, 2014)

Last week, the U.S. Environmental Protection Agency's (EPA) Green Power Partnership released an updated list of the Top 100 organizations that are choosing to use electricity from clean, renewable sources like wind and solar power. In total, the combined green power usage of these Top 100 Partners amounts to nearly 24 billion kWh annually, which represents close to 83 percent of the green power commitments made by all EPA Green Power Partners. The list is calculated based on annual green power usage (in kilowatt-hours) by Green Power Partners.

Intel Corporation continues its seven-year run as the nation's largest voluntary user of green power, meeting 100 percent of its electricity load with renewable resources. Other technology companies in the top 10 include Microsoft Corporation, Google Inc., and Apple Inc. Apple increased its annual green power use by nearly 100 million kilowatt-hours (kWh), moving from No. 11 to No. 8 on the list.

The top 10 partners appearing on the Top 100 list include:

1. Intel Corporation (Santa Clara, CA)
2. Kohl's Department Stores (Menomonee Falls, WI)
3. Microsoft Corporation (Redmond, WA)
4. Whole Foods Market (Austin, TX)
5. Google Inc. (Mountain View, CA)
6. Wal-Mart Stores, Inc. (Bentonville, AR)
7. Staples (Framingham, MA)



8. Apple Inc. (Cupertino, CA)
9. City of Houston, TX
10. U.S. Department of Energy (Washington, DC)

In addition, for the eighth year in a row, EPA is encouraging increased green power use among higher education institutions through the College and University Green Power Challenge. Out of the 33 competing conferences, the Big 10 is this year's conference champion, collectively using more than 309 million kWh of green power annually and avoiding carbon pollution equal to that produced by the electricity use of more than 30,000 American homes. The University of Pennsylvania continues to be the top individual school in the challenge for the seventh year in a row, purchasing more than 200 million kWh of wind power annually - more green power than any of the 78 other competing schools.

For additional information on the Top 100 list and other Top rankings, visit: <http://www.epa.gov/greenpower/toplists>. For additional information on the Green Power Partnership, visit: <http://www.epa.gov/greenpower/>.

Chair's Corner

Our April 24th meeting was attended by 25 to hear Mr. Ford Benham, Manager-Operational Chemistry & Environmental, OG&E, program entitled, "Environmental Regulatory Requirements for the Utility Industry" providing first-hand update on current & future regulation of Oklahoma's coal-fired power plants & OG&E's response to same.

This was our Honors and Awards meeting as noted on page 2 of this newsletter. Our Section proudly recognized individual students at our area universities for their academic achievement and outstanding service to their ASME Student Section. We also awarded one Scholarship to a very deserving OSU-MET student. Our sincere Congratulations and Thanks go out to these students for their outstanding efforts!

This is our final 2013-2014 Newsletter and my last opportunity to write the "Chair's Corner" column. A very special THANKS to our dedicated Executive Committee members who contribute much to our Section's success. Tom Betzen will take over the Chair position in 2014-2015. Tom will do a great job in leading the Section and all of our members are encouraged to lend their support through participation in the activities of our ASME Central Oklahoma Section.

We are looking forward to a new program year this coming August, 2014. Thanks to you all for your continued membership and interest in ASME!

Edwin C. Reynolds
Chair, ASME Central Oklahoma Section

Future ASME-Central Oklahoma Section Events

Date	Location	Program Topic and Speaker
June 12-13, 2014	Warren Doubletree Hotel & Conf. Center Tulsa, OK	Oklahoma Engineering Conference sponsored by the Oklahoma Society of Professional Engineers Subject matter includes: Okla. Safe Schools project, tutorial on sand castings, Purcell-Lexington Bridge, OSHA's mission in Oklahoma, presentation on Asset Management, and an Ethics session. See http://www.ospe.org/ (follow link) for more information and to register.

Please visit our Section website:

https://community.asme.org/central_oklahoma_section/default.aspx

IT'S BEEN REVAMPED. Check event updates and other useful information!