



**THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS®**

Central Oklahoma Section Newsletter  
Volume 15, Number 6, February 12, 2014

The Section is located at: Oklahoma Engineering Center, 201 Northeast 27<sup>th</sup> 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.

**\*\*\*\*\* ANNUAL JOINT ENGINEERING SOCIETIES BANQUET \*\*\*\*\***

**PROGRAM TITLE: “Engineers for the Next Generation”**

**SPEAKER:** Dr. Paul J. Tikalsky, Dean, OSU College of Engineering, Architecture, and Technology (CEAT)

**DATE:** Thursday, February 20 **LOCATION:** Gaylord Student Center, Okla. Christian Univ. Campus, 2501 E. Memorial Road, Edmond OK

Dr. Paul J. Tikalsky became Oklahoma State University’s CEAT Dean on July 12, 2012. He came from the University of Utah where he served as Head of their Civil and Environmental Engineering Department. Dr. Tikalsky is highly accomplished and promises to bring a fresh vision to the college.



“I look forward to developing the College into a great place of learning and discovery,” said Dr. Tikalsky. “I have a passion for students. I love to see them realize that science, math, business, and art can be used together to invent new technologies, solve environmental problems, design bridges & buildings, improve public health, preserve resources and make our lives better.” This program will highlight many of Dr. Tikalsky’s goals and objectives for developing next generation engineers.

**Please join us for the JESB banquet on February 20! PDH certificates will be available for attendees.**

**Time:** 6:00 - 6:30PM: Meet & Register at the Oklahoma Christian University Gaylord Student Center

6:30 – 6:50PM: Opening Remarks, Pledge & Invocation, Introductions 6:50PM: Dinner

7:30 – 8:45PM: Special Recognitions, Program by Dr. Paul Tikalsky.

**Cost:** On-line ticket orders are available via EventBrite: go to [www.eventbrite.com](http://www.eventbrite.com) and search for “joint engineering societies” (\$16.12 + 1.88 fee = \$18.00 total) per ticket.

To order tickets by check, please make checks to “OSPE Central/SW Chapter”, \$17.00 per ticket. Please mail checks to **Curtis M. Vickery**, Chair, OSPE Central/SW Chapter, 1700 Remington Road, Edmond, OK 73034.

**DEADLINE to order banquet tickets is Monday, February 17.** If questions arise please contact me at: ph: 405-248-0025 or e: [vickeryc1@asme.org](mailto:vickeryc1@asme.org).

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	<b>Nathan Weber</b> ..... Membership Development 405-595-7415; e-mail: <a href="mailto:weber2@asme.org">weber2@asme.org</a>	<b>Feng C. Lai, Ph.D.</b> ..... OU Bus: 405-325-1748 ; <a href="mailto:flai@ou.edu">flai@ou.edu</a>
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## ADDITIONAL FEBRUARY MEETING INFORMATION

Dr. Paul J. Tikalsky received his B.S. in Civil and Environmental Engineering from the University of Wisconsin, and both his M.S. and Ph.D. in Structural Engineering from the University of Texas at Austin. Prior to his position at the University of Utah, Dr. Tikalsky served as a professor of Civil and Environmental Engineering at Penn State University for more than a decade, and was professor of Civil Engineering at Santa Clara University from 1989-1995.

“My background in civil and environmental engineering, as well as my work in structural materials and industrial byproduct utilization, is highly interdisciplinary in nature,” said Dr. Tikalsky. “As we develop OSU-CEAT in the coming years, these collaborative skills will serve to guide me in helping others to see the power of solving large problems that improve our world and drive the Oklahoma economy.”

Dr. Tikalsky has been a Senior Research Fellow with the Czech National Academy of Sciences and the US Army Corp of Engineers. He is a registered professional engineer in the State of California and a Fellow of the American Concrete Institute and the American Society of Civil Engineers.

Dr. Tikalsky has received numerous awards including Utah Engineering Educator of the year, is a trained ABET Program Evaluator, and was recognized for Best Paper/Presentation at the 2011 International Conference on Durability of Building Materials and Components in Porto, Portugal.

He and his wife, Julie, have two sons; Peter age 11, and Daniel age 10.

### **ASME Student Section Members Note: Scholarship Application**

Our ASME Section will again award scholarships to Oklahoma ASME Student Section engineering students. **The application form is on pages 6-9 of this newsletter.** Deadline for scholarship application submission is March 31, 2014. Contact Frank Parker for more information (see page 1 for contact information).

### **Engineer's Week: February 16 – 22, 2014**

Engineer's Week is celebrated annually during the third week of February, coincident with President George Washington's birthday. Many activities occur world-wide during Engineer's Week. In our central Oklahoma region, two Engineer's Week activities are the Joint Engineering Societies Banquet and the Engineering Fair. ↓



**Sponsored by the Oklahoma Engineering Foundation, the annual Engineering Fair will be Tuesday, February 18 at Rose State College in Midwest City** (Cafeteria/Student Union Building). Youngsters from all over Oklahoma will be in attendance so this event offers a great chance to introduce students to engineering and technology.

Students may participate in a number of activities including the Bridge Building Contest, the Eiffel Tower Contest, Electric Motor Contest, Essay Contest, Ping Pong Ball Launcher Contest, Rubber Band Powered Vehicle Contest sponsored by ASME (our Section), and Wacky Wonder Works.

**NOTE:** We will need volunteers to help with our Rubber Band Powered Vehicle Contest. **If you would like to help, please contact Ed Reynolds, Albert Janco, or Bill Green** (see page 1 for contact information).

## **NOMINATIONS NEEDED: Central Oklahoma Section Awards**

The ASME-COS 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 24th Central Oklahoma Section Honors & Awards 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. 96<sup>th</sup> Street, Oklahoma City, Ok. 73162, Phone: (405) 721-6753, E-mail: [edwin\\_c\\_reynolds@yahoo.com](mailto:edwin_c_reynolds@yahoo.com). **NOTE: Nomination deadline is March 26, 2014.**



### **Take Advantage of ASME Training & Development Continuing Education Solutions**

ASME Training & Development schedules courses in different cities in North America and Europe covering multiple technologies and disciplines, ranging from fundamental to advanced levels. Most ASME code courses are developed and taught by ASME Code Committee members who understand and can communicate code or standard relevance – and their impact of safety, quality and integrity.

To find courses by location and subject matter of interest to you, get the downloadable Spring 2014 ASME Course Calendar at [go.asme.org/springtraining](http://go.asme.org/springtraining).

For information, contact Jackie Oppenheim, Director ASME Training and Development at (ph) (212) 591-7526 or [oppenheimjs@asme.org](mailto:oppenheimjs@asme.org).

**Former OU-AME Professor Ajay K. Agrawal Receives Honor**

(courtesy ASME News publication, Vol. 33, No. 1, January 16, 2014)

ASME Fellow Ajay K. Agrawal, Ph.D., P.E., professor and Robert F. Barfield Endowed Chair in Mechanical Engineering at the University of Alabama, received the university's 2013 Blackmon-Moody Outstanding Professor Award on Nov. 15. The award recognizes singular, exceptional or timely work in the form of research, a product, a program, or published material.

Dr. Agrawal, whose research expertise include combustion and fluid flow, invented the "noise sponge" concept that uses strong, porous structures to reduce noise generated from gas flow in jet engines, power generating gas turbines and industrial burners without compromising the combustion process. Agrawal has been the recipient of several research grants and is one of the world's most published authors on the topic of rainbow schlieren deflectometry, an optical flow diagnostics technique used to quantitatively measure properties of fluid flows.

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## **CALL FOR PRESENTATION ABSTRACTS**

### **XXXIV Oklahoma AIAA/ASME Symposium**

**Saturday, March 29, 2014**  
*Oklahoma Christian University, Edmond*



American Institute of Aeronautics and Astronautics



The American Society of  
Mechanical Engineers

*Oklahoma Section*

*Central Oklahoma Section*

*Mid-Continent Section*

**SEE NEXT PAGE FOR ABSTRACT FORMAT INSTRUCTIONS**

#### **Submittal Information:**

E-Mail abstract as an attachment to Dr. David Cassel ([david.cassel@oc.edu](mailto:david.cassel@oc.edu))

Please use **“\*\*\* AIAA/ASME ABSTRACT \*\*\* ”** in subject line.

For additional information contact Dr. Bill Ryan, Symposium Chairman, at  
(405) 420-1987 ([bill.ryan@oc.edu](mailto:bill.ryan@oc.edu)).

**CENTERED TITLE OF ABSTRACT IN 12-POINT**

F. Author, P.E.\*\* , S. Author, and T. Author, P.E.\*\*  
Department, Group, or Division  
Organization  
Your City, OK 7xxxx  
(918) 555-1234  
emailname@hostaddress.com

**ABSTRACT**

The Oklahoma AIAA/ASME Symposium XXXIV will be held at Oklahoma Christian University on Saturday, 29 March 2014. 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 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. The registration fee is only \$5 for students and \$15 for other professionals. 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 **February 28, 2014** in order 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 must not exceed 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 email address are centered 12 point single-spaced Times New Roman. Please indicate AIAA and/or ASME membership 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. Please submit your abstract as an email attachment in .doc or .docx format.

\* This work has been supported by Generous, Inc.

\*\* Member, AIAA and/or ASME

**Submittal Information:**

Send email to [david.cassel@oc.edu](mailto:david.cassel@oc.edu) and include abstract as an attachment. Please use "AIAA/ASME Abstract" as your subject line.

## **Chair's Corner**

I would like to express our thanks to Prof. Jamey Jacobs, the Oklahoma AIAA Section, and the OSU ASME & AIAA Student Sections for hosting our January joint meeting at OSU in Stillwater, OK this past month. The program was both interesting & informative on the “Development and Testing of a Guidable Extended Range Tube Launched-UAV”

Noted on page 2 of this newsletter, our ASME Section is sponsoring the Rubber Band Powered Vehicle Contest at the Engineering Fair to be held on Tuesday, February 18<sup>th</sup> at Rose State College (RSC). You all are encouraged to join in at this great annual event.

Our Section meeting coincides with the annual Joint Engineering Societies Banquet that will be held Thursday, February 20<sup>th</sup> at Oklahoma Christian University. The program will be Dr. Paul Tikalsky, Dean of Engineering at OSU with topic “Engineers for the Next Generation”. Hope you can join us for this banquet/meeting as the event brings together many folks from our local engineering community along with interested students. Bring a friend!

Edwin C. Reynolds  
Chair, ASME Central Oklahoma Section

### Future ASME-Central Oklahoma Section Events

Date	Location	Program Topic and Speaker
Saturday Feb. 15, 2014	Cameron Univ. McMahon Centennial Complex Lawton, OK	Southwest Oklahoma Regional MATHCOUNTS Competition Contact Jonith Grundmann < <a href="mailto:jgrundmann@cityof.lawton.ok.us">jgrundmann@cityof.lawton.ok.us</a> > for more information or to volunteer to help.
Tuesday Feb. 18, 2014	Rose State College Cafeteria/Student Union Midwest City, OK	Annual OEF Engineering Fair – our ASME Chapter to host the Rubber Band Powered Vehicle Contest. See <a href="http://oef.org/programs/engineeringfair">http://oef.org/programs/engineeringfair</a> (Ms. Amanda Soderberg) for more information or to volunteer to help.
Thursday Feb. 20, 2014	Okla. Christian Univ. Gaylord Student Center Edmond OK	Joint Engineering Societies Banquet Speaker: Dr. Paul J. Tikalsky, Dean, OSU CEAT Program: “Engineers for the Next Generation”
Thursday March 27, 2014	TBD	Section Meeting: Annual Ethics Meeting Speaker TBD
Thursday April 24, 2014	TBD	Section Meeting: Honors & Awards Meeting Speaker TBD

**Please visit our Section website:**

[https://community.asme.org/central\\_oklahoma\\_section/default.aspx](https://community.asme.org/central_oklahoma_section/default.aspx)

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

**ASME Central Oklahoma Section Engineering Scholarship Application**

**E-Mail or Postmark Deadline: March 31, 2014 - Please follow-up e-mail applications with a mailed signed copy**

Applicant: \_\_\_\_\_  
                                     Last Name                                    First Name                                    Middle Initial

Home Address: \_\_\_\_\_  
   Street Address  Apt No.

\_\_\_\_\_                                      \_\_\_\_\_                                      \_\_\_\_\_  
   City  State  Zip Code

Telephone: (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_ (Ext \_\_\_\_)

ASME Student Member\* #: \_\_\_\_\_

E-mail: \_\_\_\_\_

Attending University: \_\_\_\_\_  
 (Central Oklahoma Institution with ABET Accredited Program Only\* - See Below)

**\* APPLICATION RULES & AWARD REQUIREMENTS \***

*Applicants must be in their Sophomore or Junior year when applying and enrolled full time (12 Credit Hrs per Semester Minimum) in a Mechanical Engineering or Mechanical Engineering Technology Degree Program at the following Oklahoma ABET accredited Universities within the Central Oklahoma Section's Geographic Area:*

*The University of Oklahoma (Norman), Oklahoma State University (Stillwater), & Oklahoma Christian University (Edmond).*

*Applicants must be members of their University's ASME Student Section to be eligible for a grant under this scholarship program. If you are not currently an ASME student member, you must be a member in good standing by the time of application submission.*

*Grant recipients must be ASME student members and be fully enrolled in a Mechanical Engineering or Mechanical Engineering Technology curriculum during the semester of their award. Those whose qualifications change during the award semester will be disqualified and have their grant rescinded and re-directed to the runner-up candidate.*

*Grant recipients are requested to keep their address information (residential and/or e-mail) current to allow the Central Oklahoma Section to contact them in the future to gage the outcome of their education, for statistical feedback purposes.*

**ACADEMIC OR PROFESSIONAL REFERENCE INFORMATION**

Name: \_\_\_\_\_ ASME Member (Yes/No): \_\_\_\_\_

Title, Employer: \_\_\_\_\_

Address: \_\_\_\_\_  
   Street Address  Apt No.

\_\_\_\_\_                                      \_\_\_\_\_                                      \_\_\_\_\_  
   City  State  Zip Code

Telephone: (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_ (Ext \_\_\_\_)

E-mail (if known): \_\_\_\_\_

Connection/Relation to Candidate (Parent/Advisor/Employer/Mentor): \_\_\_\_\_

**ACADEMIC DATA SUMMARY**

Academic Course Hours Completed: \_\_\_\_\_ Current GPA: \_\_\_\_\_ Major: \_\_\_\_\_

Currently Enrolled Course Hours: \_\_\_\_\_ Expected Graduation Date: \_\_\_\_\_

*Please attach a current transcript or complete college grade record: either an original, official transcript with embossed seal/stamp or a printed (unofficial) copy signed by your ASME Advisor.*

Fill in the Student Activities Information in the spaces below, complete with your dated signature.

**STUDENT ACTIVITIES INFORMATION**

List all activities for the areas below. Include any offices held and the year serving in those offices. You may attach a separate page if more room is needed. Please type, print legibly, or complete electronically all information.

<b>Honorary Organizations:</b>

<b>Scholarships and Awards:</b>

<b>University Organizations and Professional Societies: (including ASME Student Section positions held)</b>

<b>College or Departmental Organizations:</b>

<b>Extra-curricular Activities:</b>



**Work Experience and Community Service:**


Please write a short essay (1-3 paragraphs) of your professional goals and how you see your involvement in professional organizations (such as ASME) can aid in achieving them. Attach a separate page if more room is needed:


\_\_\_\_\_  
Applicant's Signature

\_\_\_\_\_  
Date

Attachments:

**Evidence of Attendance & Academic Performance** (transcript, resume/activity list w/ GPA info.)

**Financial Status/Need Data** (Financial Data worksheet, attached.)

**Return to: Frank Parker, Director - ASME COS**    *E-mail submissions to parkerfj@asme.org, must be followed-up with signed application, mailed to the address shown at left.*  
**6204 Waterford Blvd, No 28**  
**Oklahoma City, OK 73118-1107**

For the latest information on our Section Programs & Activities, please go online to:  
[https://community.asme.org/central\\_oklahoma\\_section/default.aspx](https://community.asme.org/central_oklahoma_section/default.aspx).

**ASME Central Oklahoma Section Engineering Scholarship Application - Financial Data**

Applicant: \_\_\_\_\_

Last Name

First Name

Middle Initial

**Estimated Annual Financial Data (from 1 June 2014 through 31 May 2015)**

Annual Sources of Funds	Amount	Annual Tuition & Expenses	Amount
Job Income	\$		\$
Student Loans	\$		\$
Other Scholarships/Grants	\$		\$
Support from Parents/Family	\$		\$
Personal Savings	\$		\$
Other	\$		\$
<b>Total</b>	\$	<b>Total</b>	\$

These figures reflect my financial situation accurately and completely.

\_\_\_\_\_  
Applicant's Signature

\_\_\_\_\_  
Date

Please note: this page must be submitted TOGETHER WITH the **Application Form** and **Evidence of Attendance & Academic Performance**, to form a complete application. Do not send this page separately!