

St. Louis Section News

"The home of the American Society of Mechanical Engineers, St. Louis Section"

www.asmestlouis.org

December 2017

ASME helps the global engineering community develop solutions to real world challenges. Founded in 1880 as the American Society of Mechanical Engineers, ASME is a not-for-profit professional organization that enables collaboration, knowledge sharing and skill development across all engineering disciplines, while promoting the vital role of the engineer in society. ASME codes and standards, publications, conferences, continuing education and professional development programs provide a foundation for advancing technical knowledge and a safer world.

Next Section Meeting:

YEC Happy Hour

December 7th, 2017 @ 5:00pm

Orbit Pinball Lounge

7401 Hazel Ave St Louis, MO 63143

Next Board Meeting:

December 9th, 2017 @ 10:00am

St. Louis Bread Co.

21 Allen Ave, Webster Groves, MO 63119

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Year At A Glance

Dec

YEC Happy Hour/ Networking event @ Orbit Pinball Lounge

Jan

Student design presentations @ Engineers Club

Feb

Bissinger's Chocolate*

March

Mechanical/ Environmental Overview

Apr

Watlow* or Packaging Supplies Plant*

May

May Social @ Aloha Mini Golf & Shave Ice*

June

-

July

*Tentative



YEC Happy Hour



YEC HAPPY HOUR



SPONSORED BY:



WHERE: Orbit Pinball Lounge

7401 HAZEL AVE,

St. Louis, MO 63143

WHEN: Thursday, December 7th, 2017

(5:00 PM TO 7:00 PM)

- Come join us for an evening of fun and fellowship sponsored by <u>American Society of Mechanical Engineers.</u>
- Everyone will get two free beers!
- Happy hours are a great place to meet other young engineering professionals in the St. Louis Area.
- Bring a friend and they will get a YEC Koozie!



PLEASE FEEL FREE TO CONTACT ERICA RIDGWAY OR ALLISON MORRIS

AT ERIDGWAY@ACCENG.COM OR AAMORRIS@BURNSMCD.COM

January Meeting - Student Presentation and Design Competition Event

The ASME St. Louis Section is proud to provide the Student Presentation and Design Competition Event.

In years past, student sections of ASME at local universities have requested additional funds through the St. Louis Section to support their entries into student design competitions. The meetings were normally held during board meetings which were not attended by many other professional members. The requests were for costs such as materials or equipment purchase along with travel and lodging that was not covered by their college or ASME National.

The event will be separated into 2 categories: Funding for ASME competitions and non-ASME competitions

First, student sections are invited to present on their design project for the following ASME design competitions:

- 1. ASME E-Fest design competition- Goal is to develop a robotic soccer team to compete against other teams
- 2. Human Powered Vehicle Challenge Design and build a bicycle and race against other teams
- 3. Old Guard Oral Presentation or Technical Poster
- 4. Innovation Design Simulation Challenge
- 5. Innovative Additive Manufacturing 3D Challenge (IAM3D)

More information on competitions can be found here: https://www.asme.org/events/competitions
Presentations for each design team will be limited to 15 minutes each and must include a budget for materials, equipment and travel along with financial assistance provided by others.

Following a Q&A from the audience, the St. Louis Section Board will award \$500 for each presentation. The audience of professional members will then vote on the best presentation with the winning team receiving an extra \$250.

Second, presentations will be held afterwards by students competing in other design competitions. The best presentation, as determined by the audience, will win \$250.

Students are encouraged (but not required) to bring their models and provide handouts on their designs.

Professional members are encouraged to attend for a chance to possibly support their alma mater and actively engage in this section event. Professional development hours (PDH) will be provided depending on length of meeting.

Event Details:

When: Saturday January 27, 2018

11:30am-12:00 Sign-in and Networking

12:00-1:00: Lunch and Presentations from student sections for ASME design competitions

1:00-2:00: Presentations for other design competitions

2:00-3:00: Q&A, Discussion and Final Comments

Where: Engineers Club of St. Louis, 4359 Lindell Blvd, St. Louis MO 63108

Cost: \$25 for professional members and guests, FREE for students

Lunch provided: Chicken Piccata buffet with salad and dessert. Please note in the RSVP of dietary

restrictions.

RSVP: www.asmestlouis.org or to Ryan Neil at ryanneil84@hotmail.com

ASME Enhances Environmental Impact Through EED Education Support Program

Proposal Due Date: February 15, 2018

Environmental engineers use the principles of engineering, soil science, biology, and chemistry to make the air, water and land better and safer for humans.

To engage students and educators in this discipline, and foster the impact of environmental engineering education in communities around the world, the ASME Environmental Engineering Division (EED) announces the 2018 Environmental Engineering Education Support Program. This program will fund a maximum of \$25,000 per year (no more than five proposals will be funded with a limit of \$5,000 per award) to students, educators and EED members who propose interesting ways to impact environmental education in their communities. Based upon judging of the final reports submitted, at least one proposer will be invited to discuss their project at the annual EED meeting. All travel expenses will be provided.

This will be the third year that EED has funded an education support program. Projects supported in the first two years of the program were:

- "Wind Energy Student Organization;" Iowa State University
- "Lab component for Sustainability Course;" Philadelphia University
- "Using Interactive iPython Simulations to Model Life Cycle Analysis of Ethanol Production;" Marshalltown High School (Iowa), Iowa State University
- "High School Student Laboratory Education Module: Use of Abundant Waste Materials in Concrete Mix Design;" University of Akron
- "Education of Rural Community Members and Leaders About the Health Effects, Current State, and Minimizing of Particulate Matter Exposure in Rural Households that Use Biomass for Cooking," FEU Institute of Technology, Manila, PH
- "Experimental Design: Development of a High School Environmental Research Program, " Hope College, Holland, MI.
- "Water for Life: A Project-Based Approach to the 7th Grade Science Classroom," Mission Achievement and Success Charter School, Albuquerque, NM
- "Citizen Science: Effects of Stream Restoration on Water Quality," George Mason High School, Falls Church, VA
- "Designing a Sustainability Makerspace," Rose-Hulman Institute of Technology, Terre Haute, IN.

Examples of Attractive Environmental Engineering Education Support Program Proposals

- An EED member paired with a local educator (at any level of education) to **develop a curriculum** unit over a summer that can be put into practice the following school year. Units that are successful will be shared with other educators.
- Funding support for a non-ASME member educator (primary and/or secondary school teacher) to **attend an ASME-sponsored environmental event** (e.g., conference, training/certification program, workshop, etc.) **in support of curriculum development**.
- Funding of **projects based on environmental engineering and mechanical engineering principles** that appear promising for environmental education.
- Funding support for a college, or a graduate student to **attend an ASME-sponsored environmental event** (e.g., conference, training/certification program, workshop, etc.).

Proposals, including a budget, (maximum 5 pages in length) should be submitted electronically by February 15, 2018 to edelsonm2@asme.org. Proposals describing projects that pair an EED member with an educator will receive the highest priority and must describe how funds would be shared between the two. The expectation is that the majority share of funding would support the educator.

Professional Engineer Refresher Course - 2018



These review courses are geared toward helping participants pass the Professional Engineer (P.E.) license exam. Spring classes will be held in the fields of:

- Civil-Water Resources, Geotechnical
- Transportation, Construction, Structural
- Electrical-Power

- Mechanical-Mechanical Systems/Materials
- Hydraulics & Fluids, Energy & Power Systems, HVAC/Refrigeration

Course fee includes a three ring binder, lecture notes, certificate of completion, and CEU's.

It is recommended that participants purchase their discipline's desk reference manual prior to the first class. Desk reference manuals can be obtained by going to the following website: http://ppi2pass.com

Registration Fee

Proceeds of the course go toward the MSPE Scholarship Fund.

Deadline for Registration:

Wednesday, January 24, 2018

How to Enroll

- Online To register online, go to <u>www.stchas.edu/learnforlife</u>
- In Person Walk into 103 HUM with completed registration form and payment.

Registration hours:

8 a.m. – 5:30 p.m. MonThurs.

8:30 a.m. – 4:00 p.m. Fridays

After hours drop box in HUM hallway

• By Phone – Call 636-922-8233 during the hours listed above.

Telephone registration: VISA, Discover, and MasterCard only accepted as payment.

Tom Bever Memorial Undergraduate Scholarship



The St. Louis section will be accepting nominations for a \$500 undergraduate scholarship for the fall semester. In order to be considered, the student must submit the following by August 1st:

- · Unofficial transcripts showing the student is an undergraduate pursuing a Bachelor's degree in Mechanical Engineering
- · ASME student membership include ASME membership number in submittal
- · Submit a short essay describing outstanding accomplishments including volunteer roles in ASME (member of design team, officer positions held, etc.)

All materials should be entered on the <u>www.asmestlouis.org</u> website via the "Scholarship Application" link found on the main page. Selection will be based primarily on ASME volunteerism. Open to students attending a college in the St. Louis Section including: St. Louis University, Southern Illinois University Edwardsville, Missouri University of Science & Technology, Washington University, and University of Missouri in St. Louis.

Speaker For EED Joint Meeting Needed

EED (Environmental Engineering Division of ASME) will be sponsoring a joint meeting with the St. Louis Section of ASME and is currently looking for a speaker for the event. The meeting will be scheduled in either February or March of 2018 at the Engineers Club in St. Louis, MO. We are looking for a speaker to present for 1-2 hours on an environmental topic such as Remediation/Superfund sites.

If you are interested please email Ryan at ryanneil84@hotmail.com with a potential topic and availability.

Job Offers

Southern Illinois University - Edwardsville

Position Title: Instructor-Lab Manager

Hiring Unit: School of Engineering, Mechanical & Industrial Engineering

manager

<u>Fundamentals of Engineering (FE) Refresher Course Instructor Wanted for Mechanical Engineering</u>

Description: A Mechanical Engineer w/PE is being sought to help facilitate the mechanical engineering section of a an FE Review Course for the Spring 2017 semester at Washington University. The instructor will receive past notes, quizzes, text book, and syllabus to help with his/her efforts. The course runs 8-10 PM on Wednesdays and commitment will be approx. 8 weeks with possibility of the entire semester. The position has recently became vacant and we are in an immediate need to fill the spot. This is a great opportunity to work with engineering students, get paid and put your PE to good use while not taking time from other activities and your primary employer. Note: The FE Refresher Course is led by the St. Louis Chapter of NSPE and supports Dr. O'Sullivan, Dean of the UMSL/WUSTL Joint Undergraduate Engineering Program, at Washington University in its implementation.

Please contact the following if interested or with questions:

Bob Becnel

Email: bob@becnel.com Phone: 314-941-7641

ASME Auxiliary Scholarship Program

From Arnie Feldman, Chair EED to all EED Members:

You are likely familiar with the scholarship programs that in the past were sponsored and administered by ASME. The ASME Auxiliary currently sponsors a Student Loan Program (SLP). The terms and conditions for the SLP have recently been revised to make these loans more widely available to students in need of financial assistance to complete their degree requirements. Loan repayment terms have been revised to make it easier for students to find employment and to establish their careers or to complete graduate studies before beginning to repay their loans. The guidelines and loan application are attached to this email and also available at go.asme.org/loans.

The major points of this loan program are:

- 1. Maximum of loan amount of \$5,000 per student
- 2. Available to ASME Members or Student Members who are US citizens or permanent residents majoring in Mechanical Engineering or a closely related program
- 3. Loan interest at 4% on the outstanding loan principal
- 4. Loan interest does not begin accumulating until the first of the month immediately following graduation, change or termination of student status
- 5. Loan plus accrued interest is to be paid in thirty-six (36) equal consecutive monthly payments commencing within six (6) months after graduation. There is no penalty for early repayment.
- 6. Students must be an ASME Member or Student Member in good standing for at least one year and until the loan is paid in full.
- 7. Student must be enrolled in full-time academic studies in the U.S and making satisfactory progress in his or her degree program
- 8. Have a minimum GPA of:
 - 2.20 on a 0 to 4.00 scale (Undergraduate Students)
 - 3.20 on a o to 4.00 scale (Graduate Students)
- 9. Student must have a demonstrated financial need and have a written letter of recommendation from the Chair of the Department, the Dean of Engineering, or Faculty Advisor of ASME Student Section.
- 10. A one time graduate education extension may be awarded to qualified students.

Please inform all students in your programs who you feel qualify for these loans to submit an application, or to request additional information.

Ed Seiders

ASME Auxiliary Student Loan Treasurer

email: seiderse@asme.org

Engineering Center STEM Outreach Opportunity

Dear Members,

The Engineering Center of St. Louis respectfully requests your support and participation in creating outreach into regional schools encouraging local students to pursue an education in high-demand STEM fields. The STEM Alliance has launched the STEM Alliance Speakers' & Mentors' Bureau with the mission to connect professionals into classrooms to inspire and encourage the next generation to continue taking steps along STEM pathways. It will provide valuable links to mentoring, scholarship opportunities, university connections, and eventually careers. Encouraging local students to follow STEM pathways in education will help to fill the STEM talent pipeline that is critically needed for the region to continue to grow and create prosperity for St. Louis. This is a call for volunteers to participate in the bureau. Please consider completing the attached application and forwarding it to joy.david@engineeringcenter.org. Thank you for your consideration and support to this much-needed community outreach program. Please feel free to forward the application to members, colleagues, and other STEM professionals you feel would be a valuable asset to this program.

Sincerely, W. Dave Yates, PE President

Young Engineer and Student Section Website Offer



The St. Louis Section is offering any regional student section and young engineers monthly feature on our website. Your page will be complete with Google Calendar, Blogger and interests information in an effort to help the student sections and professionals entering the workforce, to keep organized even when they may lack the resources. If you know of a student member that would be interested, please have them contact us at asmestlouis@gmail.com.

Engineering Center Phase 1 Completion

ENGINEERING CENTER RIBBON CUTTING

Highlights - July 13th, 2017

The Engineering Center of St. Louis celebrated the completion of Phase 1 of a historic Capital Improvements Program. With construction work by United Construction, the first phase of the project converted the building's auditorium into a technologically advanced meeting space. The renovation project, designed by REMIGER DESIGN, seeks to give the center a new face for the engineering profession in St. Louis and creates a flexible and modern environment that will be used by the Center to collaborate with its affiliated organizations, partner with local schools and businesses and encourage greater student development in science, technology, engineering and math (STEM).









ASME Section Contributions

In past years, the St. Louis Section has covered section activities by receiving an allocation of funds from ASME National. This allocation was based on how active the section was and what types of events were hosted by the section (i.e. offering professional development and holding joint meetings with other engineering groups). Since 2014 year, ASME National has stopped contributing to the local sections and instituted regulations on how sections can spend their money. The section is now using money that was saved from past conferences held in St. Louis and contributions from members.

When completing your ASME renewal, please consider contributing to the St. Louis Section. This will help to sustain the group that has survived since 1909 and is run entirely by volunteers in the St. Louis area. You can contribute by completing the voluntary contribution for sections on the ASME renewal form.

We are also looking into the potential to utilize relevant sponsorships to help alleviate the continuing costs as well.

St. Louis Section Events and Links

The St. Louis Section is continuously looking for new events and activities to offer members. This includes tours and presentations.

If you have ideas or would be interested in being an event captain please contact any of the officers on the next page.

Check us out online at the following links

- · Main Website
 - www.asmestlouis.org
- ASME Community Section Page
 - https://community.asme.org/st_louis_section/default.aspx
- · LinkedIn Page
 - https://www.linkedin.com/groups?goback=%2Egmp_4115637&gid=4115637

ASME Referral Drive & ASME Special Offer

From ASME:

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As a valued ASME Section Member, we are requesting your assistance to help us <u>spread the word</u> to non-members about <u>two</u> exceptional opportunities we have for them to <u>join ASME</u>:

1. The ASME Referral Drive: Current members can simply provide us with the names and email addresses of their non-member peers and colleagues and we do the rest! The prospective member will receive a <u>special discount offer to join ASME</u> including a <u>free gift</u>, and the referring member may also be eligible to earn great prizes when they do. <u>Please encourage your section members to make their referrals today at: http://go.asme.org/ReferralDrive</u>

- and -

2. The ASME Join Today Special Offer: Members can also share the ASME Join Today Special Offer URL directly with friends and co-workers by: email; placing it on their university or company intranet; posting it to their favorite social networks such as Facebook, Twitter, Google+ and LinkedIn, or however they wish! Joiners will enjoy a special dues discount plus a free gift. Please urge your section members to post this special offer URL in as many appropriate venues as they can: http://go.asme.org/JoinToday

We rely heavily on your ongoing support to introduce ASME Membership to as many prospective members as possible, and we thank you in advance for your help in spreading the word about these very special membership opportunities - each of which include a generous 25% dues discount plus a free ASME bag for new members!

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Two **Great Ways**to **Help ASME Grow Membership!**

Next Board Meeting

Please join us at the next Board Meeting on December 9th, 2017 @ 10:00am

Location:**St. Louis Bread Co.** 21 Allen Ave, Webster Groves, MO 63119



Officers

Chair Mesrou Mehmed Weissman's Theatrical Supplies, Inc. mesrou m@yahoo.com	Vice Chair Paul Hibbeln Medtronic hibbelnp@gmail.com	Treasurer Louie Woodhams Washington University louis.woodhams@gmail.com
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