

St. Louis Section News

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

www.asmestlouis.org

February 2018

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:

Bissinger's Handcrafted Chocolatier Historical Factory Tour

Thursday, February 22nd, 2018 @ 6:30pm 1600 N Broadway St Louis, MO 63102

Next Board Meeting:

February 15th, 2017 @ 5:45pm

C.J. Muggs

101 Lockwood Ave, Webster Groves, MO 63119

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Year At A Glance

Feb

Bissinger's Chocolate Factory Tour

March

Lunch and Learn -Engineering Inspection Services

Mechanical/Environmental Overview

Apr TBD

May

May Social @ Aloha Mini Golf & Shave Ice*

June

-

July

*Tentative



February Meeting - Bissinger's Handcrafted Chocolatier's Historical Factory Tour





The Bissinger family began its storied tradition of crafting confections in 17th century France, where our legendary chocolate was enjoyed by European nobility and heads of state. According to accounts passed down from generation to generation, Bissinger's confections were a delicacy among notable names such as Napoleon Bonaparte and the Rothschilds, and the family was even granted the title of Confiseur Imperial (Confectioner of the Empire) by King Louis XIV.

Some years later, in 1845, Karl Bissinger would leave France, bringing his loyal master confectioner and all of the Bissinger family secrets to the United States. He settled just outside of Cincinnati, where he opened the very first Bissinger's kitchen in America. In 1927, his son, also named Karl, would carry on the Bissinger's tradition, opening his own kitchen in St. Louis—the city our company still calls home.

To this day, many of our confections are made using original recipes from the Bissinger Family Cookbook, dated 1899. We pride ourselves on the ability to blend our rich tradition with a spirit of innovation, and we never sacrifice quality ingredients, taste or craftsmanship to produce more confections at a lower cost. Even in an age of high-tech production and immediacy, Bissinger's remains committed to the high standards, heritage and traditions that have made us who we are today.

High standards, integrity of ingredients and passionate attention goes into every piece we craft. In order to help us maintain these high standards, we ask you follow the Visitor's Policy Guidelines and Nondisclosure Agreement.

Everyone must read and sign these prior to taking the tour. Below is a link that will direct you to these documents .

Adults bringing minor(s): https://signnow.com/s/1dsXkFs

Just for adults: https://signnow.com/s/1e5XZNG

Upon arrival please make your way to the back of our building to our secured parking lot. When you pull up to the gate please press the call button and we will open the gate for you.

If this tour is scheduled outside of normal business hours, an access code for the gate will be provided for you in advance of your scheduled private tour.

Once you find parking then proceed to the third floor to our Viewing Room, where your tour guide will greet you.

When: Thursday, February 22, 2018

Time: 6:30 p.m. to 7:30 p.m.

Location: <u>1600 North Broadway Saint Louis MO 63102</u> Tour Fee: Free for ASME members (limited to 25 adults)

AICHE/ASME - Understand Common Damage Mechanisms

Come and hear Paolo Torrado and Marc Aydell from Engineering Inspection Services (EIS) talk about damage mechanisms in the average chemical facility. Gain a better understanding of the most common damage mechanisms affecting chemical manufacturing facilities. Learn about:

- Susceptible materials and the most commonly affected systems within a facility
- Critical factors required for damage mechanisms to occur
- Appearance of damage mechanisms and methods of detection
- Prevention and mitigation methods

Participate in a discussion with EIS Mechanical Integrity Specialist and Sr. Mechanical Engineer specializing in facility maintenance. Paolo Torrado, P.E. - Senior Mechanical Engineer with EIS - has 12 years of experience in the Oil and Chemical Industry. He is a subject matter expert (SME) in fixed equipment and piping systems. Marc Aydell -Mechanical Integrity Manager – has over 16 years of experience in static asset mechanical integrity management and program development.

This course is worth one PDH credit for all professional engineers attending.

When: Tuesday, March 6th, 2018

Time: 5:30 p.m. Dinner 6:00 p.m. Presentation 7:00 p.m.

Location: The Engineering Center

> 4359 Lindell Blvd St. Louis, Mo 63108

Fresh Baked Rolls & Butter Menu:

> Caesar Salad Orzo Pasta

Italian Roast Beef w/ Au jus Toasted Ravioli w/ Marina Coffee, Tea & Water

(A cash bar will be available)

Cost: AICHE/ASME Members \$23

> Non-members \$28 Students \$10

RSVP: Contact Sarah Bock at sarah.bock@mnk.com or 314-657-7036 to reserve your spot by 2/28.

EED/ASME - Lead Mining and Remediation

EED is pleased to announce a joint event with the St. Louis Section of ASME. Please consider attending if you are in the area.

Missouri's lead mining legacy

The lead that won World War II was mined in the Tri-State district southwest Missouri. Lead mining began in 1720 and continues today in the New Lead Belt, which along with lead recycling results in an estimated \$5 billion GDP impact. Much of that impact is use in automotive batteries, but in the past use in gasoline and in paint was significant. Lead in gasoline and lead paint were banned in the 1970s; epidemiology demonstrated lead exposure lowers child IQ. Although lead paint remains the major threat for lead exposure throughout Missouri, tremendous quantities of mine tailings and deposition from smelting have resulted in Superfund listing which in turn has created remediation jobs. The talk will describe the history of lead in Missouri and focus on the methods used in remediating land and water impacted by lead mining.

Bio of Presenter

Mark Fitch is an associate professor at Missouri S&T where he runs the Environmental Engineering program. His two areas of research are remediation of lead and treatment of air pollution by membrane bioreactors. Dr. Fitch has been a senior environmental engineer TI at Burns & McDonnell and an environmental scientist/remedial project manager with the USEPA at Region 7. He advises the S&T chapter of Engineers Without Borders, which works with four communities in Latin America and has impacted hundreds of students while improving the lives of more than 13,000 community members.

When: Wednesday March 7, 2018 5:30pm-6:00 Sign-in and Networking 6:00-7:00 Dinner and Presentation from EED Board Member Martin Edelson 7:00-8:30 Presentation from Mark Fitch on Lead Mining and Remediation

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

Cost: Free

Dinner provided: The Hill Dinner Buffet - Caesar Salad, Fresh bread & butter, Orzo Pasta, Italian Roast Beef w/ Au Jus, Toasted Ravioli w/ Marinara - Coffee, Tea and Water, Dessert Cookies (Please indicate if you have 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.

Engineers Club of St Louis Scholarships for 2018

The Engineers' Club of St. Louis, in cooperation with the Engineering Foundation of St. Louis, announces the following scholarships for students who are pursuing a degree in an accredited engineering program and who reside in the Missouri counties of St. Louis, St. Charles, Franklin or Jefferson, or the Illinois Counties of St. Clair, Madison or Monroe.

The 2018 Jake Jare Memorial Scholarship is awarded to a high school senior pursuing an engineering education. This scholarship is for \$2,500, for each of up to four years, provided the individual meets the scholarship renewal requirements.

The 2018 Leon Adler Memorial Scholarship is awarded to a high school senior or any undergraduate pursuing an engineering education. This is a one-time \$2,500 scholarship.

The 2018 Engineers' Club Member Recognition Scholarship is awarded to a high school senior or any undergraduate pursuing an engineering education. This is a one-time \$2,500 scholarship.

The 2018 David X. and Sarah Greenberg Memorial Scholarship is awarded to a high school senior or any undergraduate pursuing an engineering education at the Missouri University of Science and Technology. This is a one-time \$2,500 scholarship, made possible by a donation from their son and daughter, Aaron and Zelda.

Contact the Engineers' Club at 314-533-9333 if you have any questions or visit our website HERE for application forms with instructions and criteria. The application deadline is end of business, February 23, 2018.

THANK YOU!

Job Offers

Southern Illinois University - Edwardsville

Position Title: Instructor-Lab Manager

Hiring Unit: School of Engineering, Mechanical & Industrial Engineering

 $\underline{http://www.siue.edu/employment/employmentopportunities/engineering/FY17-072.shtml\#instructor-lab-particles.pdf.}$

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

Engineer's Club - Young Engineer of the Year Award

The Engineers' Club of St. Louis (Club) presents several acknowledgements each year. One such acknowledgement, the Young Engineer of the Year Award (Award) is presented to a young member for distinguished service to the engineering profession, the community, and the Engineers' Club.

Click <u>HERE</u> for application forms with instructions and criteria. Submit the nomination form to Kurtis Eisenbath at <u>kurtis.eisenbath@edm-inc.com</u> by April 20, 2018. Forms received after the deadline will not be considered for the Award. Questions on the nomination form should be forwarded to Kurtis Eisenbath.

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 assession3 assession3.

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 February 15th, 2018 @ 5:45pm

Location: **C.J. Muggs** 101 Lockwood Ave, Webster Groves, MO 63119



Officers

Chair Mesrou Mehmed Weissman's Theatrical Supplies, Inc. mesrou@gmail.com	Vice Chair Paul Hibbeln Medtronic hibbelnp@gmail.com	Treasurer Louie Woodhams Washington University louis.woodhams@gmail.com
Secretary Igor Povarich Watlow IPovarich@watlow.com	Past Chair/Webmaster Brad Tissi HTE Technologies, Inc. btissi@gmail.com	Student Liaison Ryan Neil Tetra Tech, Inc. ryanneil84@hotmail.com
	Historian John Saufnauer Retired johnsaufnauer3@att.net	