

## St. Louis Section News

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

#### www.asmestlouis.org

October 2021

**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 Events:**

#### November Event - Mini-Symposium

Tuesday, November 16<sup>th</sup>, 2021, 5:00-6:30 PM Join the Saint Louis section on Zoom to watch five-minutes talks on the latest mechanical engineering research from local universities.

#### Next Board Meeting:

Tuesday, November 15th @4:00pm on Zoom Email <u>asme.stlouis@gmail.com</u> for link

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### Year at a Glance:

#### September

Petroleum pipelines, ground movements, and geohazards October National event: Designing a Mach 3+ Jet Engine with a slide rule November Mini-Symposium December Virtual Holiday Social January Student Section Presentation February To be determined March or April Haptics and UAVs at Saint Louis University April To be determined May May Social



### Letter from the outgoing Chair

Hello St. Louis ASME members,

I'm sure I don't need to tell anyone what a crazy year this last year has been. I hope you are all well. As the outgoing chair of the St. Louis Section, I thought I would write a letter to recap our section's year, talk about the coming year, and introduce the incoming leadership for the next fiscal year.

#### Life Events:

There were some exciting life events for some of our board members and past board members. Firstly, Brad Tissi (Chair 2016-2017) and his wife Stephanie Kline-Tissi welcomed their son, Malcolm Tissi, into this world in July 2019. That's over a year ago now, but I think it belongs in the year in review. Congratulations Brad and Stephanie!

Several of our active members also left the St. Louis area to move on to new ventures. Paul Hibbeln (Chair 2018-2019) and his wife Sue moved to Florida this last Fall. Igor Povarich (Vice Chair 2019-2020) moved to Colorado this Spring. Ryan Neil (Chair 2014-2015) and his wife Sara moved to Maryland this Spring.

Congratulations to everyone on the big life events, but this has also left us a little short-handed, so if anyone is interested in participating in the local section – helping to organize events and build and maintain connections – now is a great time to get involved. Just email us at <u>asme.stlouis@gmail.com</u>. If you don't want to get involved, but have a good idea for a local ASME event, please send it along. We'd love to hear it.

#### ASME St. Louis events (in review):

**September**: *Internet of Things – A window of Opportunity*. This was a great presentation and tour of a robotics lab at Saint Louis University hosted by Professors Sridhar Condoor and Srikanth Gururajan. Thanks Dave and Sridhar for setting this up.

October: Past Chair even at 4Hands Brewing Co. Thanks Igor for setting this up.

**November**: *David D. McBride – Director, NASA Armstrong Flight Research Center*. Free talk on the Washington University Campus. Thanks Jonathan Richter (WashU undergrad!) for organizing this.

**December**: *Tour of the Melvin Price Locks and Dam*. This was a fascinating and freezing tour! Thanks Dave!

**January**: *Student Design Competition Event at Washington University*. Thanks to all the teams that participated and showed off the amazing design work they are doing to their peers and to the panel of professional members.

**February**: *Tour of the Chocolate Chocolate Chocolate Company* (Valentine's Day Theme). I couldn't make it to this one, but thanks Julian for organizing it.

March: Tour of the Jubel Hall Makerspace at Washington University. - Cancelled due to Covid19

#### April: Tour of Patriot Machine – Cancelled due to Covid19

May: St. Louis Soccer Club Game social event. - Cancelled due to Covid19

#### **Coming year:**

Hopefully in the coming year, we will get to a point where we can start having in-person events again, though certainly we will wait until we are sure it is safe to do so. At that point we can hold some of the events that were cancelled last year due to the pandemic. Until that point, we will start out with some virtual events held through Zoom or some other video conferencing software in September. We will send out emails and post events to our website <u>asmestlouis.org</u>, as always.

#### **Change of Leadership:**

In the St. Louis section, volunteers usually start in the position of Secretary and incrementally advance positions to Chair. This year, we were short by one position, so Dave is going to advance to Chair, and I am going to fill in the Vice Chair position. Again, please reach out if you are interested in getting involved.

#### 2020-2021 Board:

Chair: David Seidensticker (MSC Software)

Vice Chair: Louis Woodhams (Washington University in St. Louis)

Treasurer: Julian Elson (Null Aerospace)

Secretary: Emma Seidel (Nidec Motor Corp)

Webmaster: Brad Tissi (HTE Technologies, Inc.)

In closing, I'd like to welcome Dave to the position of Chair, and thank everyone who participated in events this last year. If you did not attend any events last year, maybe you can come to a virtual event this Fall. We will keep you posted.

Louis Woodhams,

Vice Chair (2020-2021), Chair (2019-2020)

### The new ASME St. Louis Section Board is active:

Chair	
David Seidensticker	
MSC Software	
Vice Chair	
Julian Elson	
Treasurer	
Emma Seidel	
Nidec Motor Corp	
Secretary	
Alyssa Quinn	
Nidec Motor Corp	



#### The current board is:

### **Engineer's Club - Engineering Explorers**

# Join the Fun! ENGINEERING EXPLORERS

Meets every First & Third Wednesday

Open to all age 14+



4359 Lindell Blvd. St. Louis, MO 63108 engineeringcenter.org

### The Next Generation of Engineers! - STEM CUBES



Engineering Center of St. Louis 4359 Lindell Boulevard St. Louis, Missouri 63108

April 8, 2019

Dear Fellow Engineer,

Did you know that most students start to opt out of STEM fields in FOURTH GRADE? This is really hard to believe!

You have an opportunity to help us change this trend for the better. Please offer an hour or two of your time to assist 4<sup>th</sup> graders with classroom activities to keep them interested and excited in STEM fields.

We need you for one, or two class periods this May. Not to fear, as we will pair you with a past STEM volunteer, teacher and a classroom and give you all the materials and tools you need to work with them on an activity. Grab someone from your office or a member of one of your professional organizations to go with you and make a fun team building activity while helping the next generation of engineers.

Volunteer today at dmoore@lochgroup.com.

Pass this along to others!

Please let me know if you have any questions.

Sincerely,

Scott J. Smith President

### **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 1<sup>st</sup> 2020:

• 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.

### **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 to members, colleagues, and other STEM professionals you feel would be a valuable asset to this program.

Sincerely, W. Dave Yates, PE President

### **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 <u>go.asme.org/loans</u>.

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 0 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: <u>seiderse@asme.org</u>

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 <u>asmestlouis@gmail.com</u>.

### Young Professionals in St. Louis

In this new section, we would like to present young professionals who are looking for opportunities to establish themselves on the career path of Mechanical Engineering. Our first profile is Kevin Belgeri, who is an active ASME member and many of you have met at our events.

Kevin is a graduate of UMSL with BS in Mechanical Engineering with a GPA of 3.63. He is a Certified Engineering Intern and his interests are in Mechanical Design, 3D modeling, Fabrication and Engineering Support.

Most notable projects he has worked on are the design and construction of a vehicle capable of autonomously following a 3D path and the assembly of a plasma speaker at St Charles College Engineering Club.

Feel free to reach out to Kevin at <u>kjbelgeri@gmail.com</u> with any advice and project ideas.

### Mechanical Engineering Instructor Needed for Missouri Society of Professional Engineers (MSPE) PE Refresher Course

MSPE has been giving PE refresher courses to help engineers prepare for the PE licensee exam for the past more than 20 years. MSPE currently has an opening for Mechanical Engineering instructors.

Eligible candidate is required to be a Missouri registered professional engineer (P.E.) in Mechanical Engineering with at least 5 years of related working experience. The instructor will give review courses to help participants pass the professional engineer (P.E.) license exam, and the covered disciplines includes HVAC and Refrigeration, Thermal and Fluid Systems, Machine Design and Materials. Two categories of instructors are needed:

(1) The instructor is required to be proficient in all three areas and familiar with the P.E. exam and can adjust the class content flexibly based on the student registration and their desired testing disciplines.

(2) The instructor is required to be proficient in one of the three areas and familiar with the P.E. exam and will either work with the other instructors for the mechanical classes (2-3 sessions per instructor) or work alone on the specialized area (7 sessions) based on the student registration and their desired testing disciplines

The classes are scheduled from January to March and includes 7 separate sessions that are held from 8 am to noon on Saturdays at St. Charles Community College (Address: 4601 Mid Rivers Mall Dr. Cottleville, MO). For details regarding the class and payment, please contact Ehrin Sleet at esleet4@gmail.com

### **Become LEED Accredited! - Invitation to American Society of Mechanical Engineers St. Louis Section**

### LEED Green Associate (GA) Training - Webinar and Online self-paced options:

I will be offering live webinars that can be streamed on any of the following dates:

1. October 23 2021 – 1:00PM – 5:30PM EST

2. November 4 2021 – 5:00PM – 9:30PM EST

3. November 20 2021 – 1:00PM – 5:30PM EST

- 4. December 4 2021 1:00PM 5:30PM EST
- 5. December 18 2021 1:00PM 5:30PM EST
- 6. January 15 2022 1:00PM 5:30PM EST OR –
- 7. On-demand recordings completed at your own pace

A. LEED AP BD+C (Level 2) – December 11+12 2021

The above options are all identical.

Register for a webinar or start today with our on-demand recorded workshop which can be completed anytime at your own pace here - <u>https://leadinggreen.com/online</u>

**This course is instructed by a USGBC Faculty member** and is the most effective way to pass. The USGBC charges a \$100 (reduced for students) fee for the actual exam which can now be taken online from home. Save money by reserving your spot today and make a positive difference in your career!

Cost: \$200 - <u>Members can use the coupon code 'sust' for \$50 if you are paying out of your own</u> <u>pocket.</u>

Save your seat by registering here for our live or self-paced options - <u>https://leadinggreen.com/online</u>

Please contact the instructor Lorne directly with any questions at <u>info@leadinggreen.com</u> and for those new to LEED, here is a short introduction to it - <u>https://youtu.be/X9FUJpIW9bI</u>.

### Engineering Center College Engineering Mentorship Program

The Engineering Center is very excited to introduce to you a new program for engineering students. Starting Spring 2021, we will be launching the College Engineering Mentorship Program. The Mission Statement of this program is to provide guidance for students pursuing engineering to better understand engineering disciplines and what a career in engineering entails. This program will help engineering students identify their talents and explore their place in the engineering community.

UMSL/Washington University (JEP) and SIUE are partnering with us in our first year of the program. After meeting with them, we have established that this program will be targeted to mostly freshman and sophomores as that is where the colleges see the need for this type of experience for their students.

One of the missions of this mentorship program is to encourage practicing engineers to give back to the engineers of the next generation.

THIS IS WHERE YOU COME IN!

We are looking for engineers that would be willing to volunteer to mentor these students. Your involvement would include:

- 1 hour of training
- Written brief personal bio and overview of your company
- Communication emails with the student to set up mentoring day
- A half or full day of mentorship with the student (Virtual opportunities pending due to the current pandemic)
- Evaluation of the mentoring experience

We are looking for engineers of all disciplines. A training session will be held in November so that we are ready to accept student applications starting in December with the program launch in January 2021.

We realized that with the COVID-19 pandemic, college classes and programs will look different in the coming year. We feel that whatever the student's education looks like, we still need to encourage them to move forward and to continue their learning. The Engineering Center College Mentorship Program would allow them to experience this firsthand. We believe this is exciting for students and will give them hope about what the future holds.

Please consider volunteering to be a college mentor. We are attaching the brochure that outlines the program. If you would like to volunteer or would like more detailed information, please contact Gina Falvey at (gina@engineersclub.net) or 314-533-9333.

We look forward to hearing from our engineers and helping us to launch this exciting new program!

### **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 <u>https://community.asme.org/st\_louis\_section/default.aspx</u>
  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</u>: <u>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. <u>Please urge your section members to post this special offer URL in as many appropriate venues as they can: http://go.asme.org/JoinToday</u>

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!



Two Great Ways to Help ASME Grow Membership! "

Next Board Meeting					
Please join us at the next Board Meeting on <b>November 15th @4pm</b>					
Location: <b>Zo</b>	om - email <u>asme.stlouis@gmai</u>	<u>l.com</u> for link			
	Officers				
<b>Chair</b> David Seidensticker MSC Software <u>davesticker@gmail.com</u>	<b>Vice Chair</b> Julian Elson julian.m.elson@gmail.com	<b>Treasurer</b> Emma Seidel Nidec Motor Corp <u>emma.seidel@nidec-motor.cor</u>			
<b>Secretary</b> Alyssa Quinn Nidec Motor Corp <u>alyssa.v.quinn@gmail.com</u>	<b>Past Chair</b> Louis Woodhams Washington University	<b>2nd Past Chair</b> Paul Hibbeln Medtronic <u>hibbelnp@gmail.com</u>			
Member at Large Mesrou Mehmed Weissman's Theatrical Supplies, Inc. mesrou@gmail.com	<b>Historian</b> John Saufnauer Retired <u>johnsaufnauer3@att.net</u>	<b>Webmaster</b> Brad Tissi HTE Technologies, Inc. <u>btissi@gmail.com</u>			