

Tulsa Engineering Foundation – Activity Reports

Announcements and Upcoming Events

FY19 – 1st Quarter Meeting October 25, 2018

Tulsa Engineering Foundation:

Executive Committee Meeting: - The ExCom met October 22, 2018.

Joint Engineering Scholarship Annual Golf Tournament was held on Friday, Sept. 28, 2018. It was hosted by APWA, ASCE, OSPE, and TEF. Over \$9,000 was raised for Engineering, Engineering Technology and Public Works scholarships.

Special thanks to Tournament Sponsors AAON and CEC Corp and Hole Sponsors ADS Environmental Services, Advanced Drainage Systems, Benham Design, BKL, Black & Veatch, Concrete Services, Freese and Nichols, Hartwell Environmental, Hobas Pipe USA, JACOBS, Kleinfelder, LMK Technologies, McClelland Consulting Engineers, McElroy Manufacturing, OCT Equipment, Premier Truck Group, RJN Group, Tetra Tech, T-G Excavating, Wallace Engineering, Warren CAT, and Yellowhouse Machinery. Haynes Equipment and Warren CAT contributed directly to scholarships.

Companies who sponsored teams were AAON (two), ADS Environmental Services, Advanced Drainage Systems, Benham Design, BKL, Black & Veatch, CEC Corp (two), Concrete Services, Freese and Nichols, Hobas Pipe USA, JACOBS, Kleinfelder, McClelland Consulting Services, McElroy Manufacturing, OCT Equipment, Premier Truck Group, RJN Group, Tetra Tech (two), T-G Excavating, Wallace Engineering, WARREN CAT, and Yellowhouse Machinery.

The 2018 Golf Tournament Committee members are: APWA members Sara Arzu, Keith Beatty, Philip Howery, Tom Prag, & Tommie Heltcel; ASCE member Irene Makune, OSPE members John McElhenney and Karen VanSchoyck, TEF members Jennifer Butler and Barbara Wollmershauser.

Scholarships

TEF awards several \$2,000 scholarships to high school seniors who will be pursuing an engineering/engineering technology degree at an ABET accredited university.

Applications are due Feb 1, 2019 and awarded at the EWeek Student Breakfast.

TEF also awards undergraduate scholarships. Applications are due June 1, 2019.

APWA has requested TEF to award a \$1,000 scholarship to an undergraduate who is pursuing a major in the Public Works field. This will be included in the scholarship selections in the spring of 2019. We greatly appreciate APWA's support with their Golf Tournament proceeds.

We encourage any society that awards scholarships, either locally or nationally, to provide a short description and link to post on our TulsaEngineer.org website.

<http://tulsaengineer.org/stem-outreach/scholarships/>

We already have listed links for AISES, ASCE, ASHRAE, ASME, OSPE, NSBE, SAME, SHPE, and SWE. *Action requested: **PLEASE check your link on the website and notify info@tulsaengineer.org if it needs to be changed.***

Tulsa Engineering Challenge (TECh)

Friday, March 1, 2019: 8:30 am – 12:30 pm; Tulsa Tech Riverside Campus.

Volunteers needed. Contact Jennifer Butler, tulsatechchallenge@gmail.com, 918-381-6825

This is a hands-on opportunity for youth to explore problem solving, designing and construction of devices that accomplish tasks. Students (4th – 12th grades) compete in activities such as Toothpick Bridge, Rubber-Band Powered Vehicle, Ping-Pong Launcher, Robot, Chemical Switch, Electric Motor, Paper Airplane (distance & duration), Wacky Wonder Works, Digital Poster and more. Walk-up competitions include Aluminum Boat, Academic Olympiad, and Mini-Math. Host organizations are AIChE, ASCE, ASME, IEEE, ISA, OSPE, SAME, SME, SWE, and TRSA.

For more information <http://tulsaengineer.org/tulsa-engineering-challenge-tech/>

Engineers Week – February 17 – 23, 2019

Theme: Engineers: Invent Amazing Celebrate. Volunteer. Connect.

Engineers Week--the only event of its kind--is a time to:

- Celebrate how engineers make a difference in our world
- Increase public dialogue about the need for engineers
- Bring engineering to life for kids, educators, and parents

More than a week-long event, Engineers Week is a year-round commitment to making a difference.

Website: www.DiscoverE.org Go to 'Shop' to get free 2019 Engineers Week Kit now

Tulsa activities: (If your society, university, or company is doing something, let TEF know. The Discovery Lab is going to help us promote all the activities.)

Introduce a Girl to Engineering Day. Sunday Feb 17th; 11:30 am, 1:30 pm and 3:30 pm: Discovery Lab. Girls (ages 8 – 13) and their mothers or other caregivers are invited to work together to solve an engineering challenge. Cost is \$6 per person. Register online at www.discoverylab.org. Role models needed for each session.

Engineers Week Luncheon. Wednesday Feb 20th, 11:30 am, tentative location - Tulsa Country Club. ASCE coordinates the event. Cost is \$25. Speaker suggestions requested. Contact Sarah Kellert SKellert@ContechES.com or 918-706-7792. Register online at <https://2019eweekluncheon.eventbrite.com>

Engineers Week Student/Professional EWeek Breakfast, Career Seminar, and Engineer Signing.

Friday, Feb 22, Wyndham Hotel, Sponsorship \$250/table, \$125/half table. Contact Sarah Kellert, SKellert@ContechES.com, 918-706-7792. Register online at <https://2019eweekbreakfast.eventbrite.com>.

7:30 – 9 am – Table Mentors (\$250 per table – 2 engineers, 6 students; \$125 per ½ table, 1 engr)

9 – 11 am – Panel Engineers (\$25 if joining us for breakfast)

11 – 12 noon – Engineer Signing and Reception.

American Indian Science and Engineering Society (OPC AISES)

Cara Cowan Watts, PhD, tulsapiedrilling.com cell: 918-859-6732 / office: 918-732-9678

American Institute of Chemical Engineers (AIChE):

Christina Bishop Jackson, christina.jackson@honeywell.com

American Public Works Association (APWA):

Tommie Heltcel, tommie.heltcel@ads-pipe.com 918-892-0739

November 14, 2018: Joint meeting with ASCE at the Tulsa Country Club.

Anyone attending as an APWA member will have their lunch costs covered by APWA. Please RSVP before November 7th to be included in the APWA lunch sponsorship.

LOCATION AND TIME: 11:30 am, Tulsa Country Club, 701 N. Union Ave., Tulsa OK

SPEAKER: Paul Zachary, Engineering Director, City of Tulsa

LUNCH SPONSOR: Advanced Drainage Systems

We are partnering with John 3:16 for a canned food drive. John 3:16 feeds hundreds of families at Thanksgiving with a “Turkey Dinner in a bag.” We are asking everyone in our organization to help us raise 100 items for donations to this worthy cause. Please bring 1-2 items from the list below for donation to John 3:16 (we will arrange for delivery to the mission).

Canned Vegetables (corn / green beans - 2 cans per dinner are provided by John 3:16)

Canned Sweet Potatoes/Yams (2 cans are provided to families)

Canned Cranberry sauce (usually 1 can is provided to families)

Boxed Stuffing/Mashed Potatoes (usually 1 box is provided to families)

SAVE THE DATE: December 5, 2018, 11:30am – 1:00pm, at the Oneok Building

The APWA NE Branch Christmas Party will include games and door prizes, and we will collect toys for the Marine Toys for Tots Campaign. APWA is the lunch sponsor.

Please let us know if your company can help sponsor door prizes.

American Society of Civil Engineers (ASCE-Tulsa)

Irene Makune, imakune@mce.us.com 918-250-5922

November 21, 2018 - Join us during our November meeting as we help support local food banks with canned food items. Please bring your donations to the lunch meeting.

December 1, 2018 – Habitat for Humanity, 8:30 am to 4:00 pm; location TBA.

RSVP to: SherryJacobs@pec1.com

American Society of Heating Refrigerating & Air Conditioning (ASHRAE):

Engineer's Society of Tulsa (EST):

Mike Miller, mmlrmnd@aol.com 918-494-0344

The Engineers' Society of Tulsa (EST) has been involved with the Tulsa Engineering community since 1935. EST members were instrumental in founding the Tulsa Engineering Foundation (TEF) back in the 1980's. As EST has not been able to identify any existing members to continue leading EST, the officers have decided the time has come to dissolve EST as an independent professional society. EST is proposing that TEF structure an EMERITUS COMMITTEE allowing EST to merge with TEF, transferring EST funds, assets and a few key programs to TEF.

FIRST Robotics and Tulsa Engineering Academy at Memorial HS (TEAM):

Lane Matheson mathela@tulsaschools.org 918-991-8326

On Saturday November 17, 2018 Tulsa Memorial High School is running a FIRST LEGO League (FLL) Qualifier for 37 teams. FLL is a robotics competition that also includes project research and solution development, teamwork, and programming/design judging. Teams vary in size from 4-10 students.

We desperately need adult volunteers for 7 judge positions and 4 referee positions. Without enough volunteers, the students will not get the competition experience they deserve after weeks of hard work. The times are 7:30 am to 4:00 pm. We serve a wonderful lunch for the volunteers!

To volunteer, you must sign up through the firstinspires.org website. If you will email mathela@tulsaschools.org, I can send detailed instructions for how to sign up.

December 8th: FIRST LEGO League Championship in Shawnee, OK

March 6th -8th 2019: Oklahoma FIRST Robotics Competition in Oklahoma City

FIRST wants to start a FIRST Robotics Competition Regional in Tulsa in 2020. Contact Lane Matheson (info above) if you know of any person or group who would be interested in supporting this effort through volunteering time or financial support.

Tulsa University - FIRST LEGO League Qualifier

November 17, 2018 - Tulsa University - FIRST Lego League (FLL) Qualifier at TU - Volunteers Needed. Contact Melissa Hamby melissa-hamby@tulsa.edu or Christopher Smith christopher@sixbyte.com or www.firstinspires.org/ways-to-help/volunteer

Institute of Electrical & Electronics Engineers (IEEE): Tulsa Community College (TCC)

Tommy Henderson thomas.henderson@tulsacc.edu 918-595-7492

TCC - Engineering and Electronics club meets every 2nd Monday of the month.

Announcements:

- TCC Electric Motor Cycle set a new 1/8 mile record of 6.9 sec at 108 MPH
- IEEE and TCC served over 50 students building and soldering circuits at the Tulsa Maker Fair in August.

International Society of Automation (ISA):

Mike Miller, mmlrmnd@aol.com 918-494-0344

Bonnie Kaiser-Gambill, with OSU CEAT Professional Development, and Brandy Mays are working with Dr. R. Russell Rhinehart to host a three course program over Engineering and Business Modeling, Optimization, and Control. The first class will be November 8th & 9th and we want anyone interested to be aware it is available.

These are the three courses being offered:

Nonlinear Regression Modeling 2018

Nov 8th 8am - 5pm and Nov 9th 8am – 3pm

Applied Probability and Statistical Methods 2019

Jan 10th 8am - 5pm and Jan 11th 8am – 3pm

Nonlinear Optimization: Techniques for Engineering

Feb 21st 8am - 5pm and Feb 22nd 8am – 3pm

The short courses are offered individually or as a full program package. Discounts are available for students and full program enrollees. See the following link to enroll.

<https://ceatpd.okstate.edu/content/engineering-and-business-modeling-optimization-and-control>

MATHCOUNTS: Gaylon Pinc, ggpinc@pmsgtulsa.com Office: 918-582-7595

We are beginning our 34th year of MATHCOUNTS!

Mock (practice) competitions held throughout Oklahoma:

December 7, 2018 – American Fidelity

January 11, 2019 – Holland Hall, Tulsa, OK

January 16, 2019 – Oklahoma School for Science and Mathematics, OKC

January 25, 2019 St Pius, Tulsa, OK

Regional Competitions:

January 26, 2019 – Southwestern Regional competition

February 2, 2019 - East Central Regional at TU. Volunteers always welcome.

February 9, 2019 – Central Regional

February 16, 2019 – Eastern Regional

February 23, 2019 – Northwestern Regional

March 2, 2019 – State MATHCOUNTS Competition

May 11-14, 2019 – National MATHCOUNTS Competition

National Society of Black Engineers (NSBE):

Andre Butler andre.butler@neo.edu 918-599-2411

OU-Tulsa: Thordur Runolfsson Runolfsson@ou.edu 405-317-3935

Society of Hispanic Professional Engineers (SHPE):

Chriss Chavez gichic7@gmail.com 918-408-4058

Still trying to get enough paid dues members to have a professional chapter election and get the activities going again

Society of American Military Engineers, Tulsa Post (SAME):

November 10, 2018; 8:30 a.m. – Fall Community Service Project, adults are welcome.

This is an important project to insure the opening of the recently expanded gravel parking lot at 61st & Elwood on Turkey Mountain. SAME Tulsa Post will need to install post and cable barrier to the parking lot. The area is currently blocked off from the existing lot so it's a safe place to work. River Parks will have all the materials staged on site. Attire: work boots and gloves. Meet at the Turkey Mountain parking lot at 61st and Elwood. RSVP: NLT Nov. 8th: Anna Childers anna.childers@jacobs.com

Society of Women Engineers (SWE):

Elly Towns, etowns@lcm-wci.com 405-306-8034

Announcements:

Congratulations to our Section! The Tulsa Northeast Oklahoma Section was awarded the following Society of Women Engineers Mission Awards:

Best Practice – Awards and Recognition- Professional
Silver –Professional

Activities / Comments:

Money Series Part III, November 13th 5:30pm – 7:00pm
See our November Newsletter for more information

Girl Scout Lego League Celebration, November 15th, 6:00pm – 8:00pm
Hardesty Leadership Center | 4810 S 129th E. Ave, Tulsa OK 74134
Celebrating a successful competition of the Four Girl Scout Lego League teams (K-8th grade). Six of the nine coaches are SWE members.

OERB Community STEM Night , November 27th, 4:00pm – 7:00 pm
Payne County Fairgrounds | 4518 Expo Cir E, Stillwater OK 74075
Help SWE host a booth at the Oklahoma Education Research Board's Community STEM Night in Stillwater. The booth will include a small, hands-on activity for the students.

Tulsa Regional STEM Alliance (TRSA):

Xan Black, Xan.Black@tulsastem.org 918-724-5291

Engineer Games - October 31st, 9 am - 2pm - We need 10 engineers to mentor the teams through this Hunger Games themed engineering challenge for area high school students. If you have any engineer friends who would attend the Engineer Games and serve as mentors to high school students who are interested in engineering, we would be so grateful! The event is on held at TCC's Northeast Campus from 9 am - 2 pm and involves engineers working with high school students to solve a series of engineering challenges. No special diplomas, college majors, spreadsheets, gpa's or slide rules are required - just a healthy love for problem solving and engaging the next generation of engineers! [Here is a link for event details and registration>>](#)

Drone Fly-In - November 2-3, TCC Riverside Hangar. November 2nd - 9 am - 1 pm day of presenting research by K-20 students on drones as well as an industry panel and drone expert speakers. <https://tulsastem.org/tulsa-research-kids/>

If you are a drone enthusiast or would like to learn more about this emerging technology, please join us for these exciting events!

Thanks so much for your incredible support of the Tulsa Regional STEM Alliance!

Tulsa Tech: Shea Ferrell, shea.ferrell@tulsatech.edu 918-828-1351

Hire Tulsa Tech Grads is a new initiative connecting students and industry for employment. Go to HireTulsaTechGrads.com to sign up your company

Activities: STEM Expo / Tulsa State Fair / Women in Science
Mock interviews November 9, 2018 highlighting December completers in Welding, Carpentry, Electrical, and Masonry.