SWE Engineering and Technology Masquerade

The first annual Engineering and Technology Masquerade, sponsored by the Society of Women Engineers, will take place Oct 30, 2013 at Founder's Hall, at the beautiful OU-Tulsa campus Learning Center from 6 to 10 pm. There will be food, music, prizes and a costume parade.

All local engineering organizations are invited to attend and participate. Entries should consist of a WEARABLE costume that exemplifies an aspect of engineering or technology. Although costumes are not required, they are highly recommended. Prizes will be awarded in the following categories:
- Most Likely to Win a Patent (Best Technology)
- Best Exemplifies Steve Jobs (Most Creative)
- Most Likely to Save the Planet (Most Environmentally Friendly or “Green”)
- Most Likely to Win a Nobel Prize (Most Relevant to Society)
- Most Likely to Reside in Silicon Valley (Best of the Masquerade)

As this is a scholarship fundraising event, we encourage all societies to sign up as sponsors at the $1000 or $500 level in order to offset the costs of the event and help SWE Tulsa setup their scholarship fund. However, individual entries will be accepted for a donation of $25. Students will not be required to pay an entry fee (with valid student ID).

You can submit this form which you can fill out online: https://docs.google.com/forms/d/1GfdttylKI7DnLZvAz69pRf9kbXAtF_KCvwrw0j4/viewform

Partners in Education

Xan Black, Coordinator for TAE and Trustee for TEF, shared the following comments at the Kickoff for the Partners in Education (PIE), a partnership with the Tulsa Regional Chamber and Tulsa Public Schools. Hundreds of companies across the city have stepped up to work with TPS. Xan addressed their key initiatives.

“My name is Xan Black and I am the coordinator for Tulsa Alliance for Engineering. I am a Texas Tech grad petroleum engineer turned high school math, physics, pre-engineering teacher, turned coordinator for Tulsa Alliance for Engineering. As an engineer I was constantly required to think on my feet and think well outside the box. Those creative and critical thinking skills are well honed by exposing students to STEM in all its beautiful facets.

In STEM, S stands for Science – that insatiable curiosity and love of learning about the world we live in and beyond. T stands for technology – all the tools we have developed to make our lives and jobs easier – from the first flint knife to iPads to the space station. E stands for engineering which is the practice of problem solving by bringing the big ideas of science and the tools of technology to bear in a wide array of settings. Finally M stands for mathematics which is that beautiful and universal language and art – it is the lifeblood of science, technology and engineering.

STEM is one of the three vital components that the Partners in Education Program has chosen to focus upon three areas: STEM; Literacy; and Drop-Out Prevention.

Literacy and attendance are two key elements for students' success. Even if we
have the best facilities, teachers, administrators, and partners – it's all for naught if our students aren't at school. Once they are at school, reading is the great foundation upon which the rest of education is built.

Schools may be large or small, rural or urban, new or old – one thing they all have in common is that they all need help in these areas and we are asking Partners in Education to support this important effort.

You are probably wondering how you can get involved—here are a few ideas to get you started:

**Literacy**
- Offer reading buddies to spend one-on-one time in the classroom. I had a chance to read with Tyanna at Jackson Elementary last year – I can tell you first hand – if you want a kick, don’t turn to espresso or 5 hour energy drinks. Go read with a 4th grader and I guarantee you will leave feeling energized!
  - Donate gently used books
  - Offer after-school tutoring

**STEM**
- Sponsor a science, math counts or robotics team
- Donate biology supplies
- Tulsa Alliance for Engineering hosted 107 events with almost 5,000 Tulsa area students over the last 15 months! We need sponsors, mentors and volunteers for these events as every other STEM related group in our beautiful city!

**Drop-Out Prevention**
- Donate items that can be used as incentives for good attendance; prizes can range from toys to field trips
- Offer high school students an opportunity to shadow someone at your company when students are excited about a career; they are more likely to focus their education efforts toward that end goal.
  - Tulsa Alliance for Engineering had an opportunity to work with Julie Moeller at Street School last year on a weekly basis. One of the highlights of the year was bringing in a team of 10 midshipmen and some faculty from USNA to help build a community garden and do some STEM activities with the students. It was terrific to see the engaged students beaming with enthusiasm!
  - Offer your employees to assist teams with science fair projects. This fall TAE is working with INCOG to host a Renaissance Innovator’s Fair for K-12 students from across the Tulsa area. The focus of the fair is having students propose solutions to some of the transportation problems our city faces. Engaging students in relevant problems is one way to encourage them to stay in school.
  - Education is the first step in the talent pipeline; it is our duty to our children, our city and ourselves that we support these students and give them every opportunity to succeed.
  - I grew up in a single parent home where my mom worked as a secretary for Texaco in the engineering department. When we had football watch parties and Thanksgiving and Christmas dinners, there were always engineers at our table. I am the first person in my family to graduate from college.
  - There is no way I would have been able to graduate from Texas Tech, much less in petroleum engineering, much less been one of two women in my graduating class without the influence of those engineers who thought they were just coming over for my mom’s fried chicken. That’s the reason I am committing my time and energy to partnering with schools and businesses in Tulsa for the sake of education. When we show up and get shoulder to shoulder with students and teachers at our area schools—we show that we care about our schools. Beyond showing that we care, we show that we believe that there is a solution to the challenges we face and that we are all in to find those answers together. If you look around this room, there is enough might and light to make our schools the learning communities we all dream for our students. Let’s make those dreams come true!”

**Happy Hour Continues!**

The Society of Women Engineers, SWE, is sponsoring a monthly engineer’s happy hour at 5 pm every third Friday of the month (this month it’s October 18th) at Baker Street Pub and Grill, 6620 S. Memorial. Dr. Come join us.

**Proposed New EST/TEF Scholarship**

EST would like to thank Ruth Ann Willsey for a significant contribution to a scholarship in the name of EST member and former officer Bill Willsey. The EST Board at its September 9 meeting approved a drive to supplement this contribution to round out an endowed scholarship to be awarded annually with the earnings. Details will be announced soon.

**EST Programs for October at ONEOK Cafeteria**

We start assembling at 11:30 AM for lunch and start the program about 12:00 noon, finishing promptly at 1:00 PM.

**October 14:** Leo Schneider will speak on Cellulosic Ethanol as a Motor Fuel Source

**October 28:** Edith Newton Wilson will speak on: Mississippian Lime Play: Variations in Reservoir Geology East of the Nemaha Ridge

Exploration for oil accumulations in Mississippian low-permeability ramp sediments has accelerated vertical and horizontal drilling activity across Kansas and Oklahoma. This complex stratigraphic trap has channeled fluid movement through its brittle, fractured carbonates since Pennsylvanian time. Fluid migration culminated in the deposition of Mississippi Valley Type lead-zinc deposits of the Tri-State district and left scattered and breached oil and gas accumulations in its wake. The fluid carrier beds are comprised of crinoidal sediments, carbonate mudstones, and cherts. These rocks have been altered through time by a variety of processes ranging from early cementation and silicification, through regional migration of fluids from the basins to the east, west and south, multiple episodes of fracturing, and finally vertical migration of hydrothermal
Edith Wilson

Edith is currently the owner of Rock Whisperer LLC, a company providing consulting services and advice to oil and gas operators and investors. She is also a Research Associate of the Department of Geosciences at the University of Tulsa, Past President of the Board of the Arts and Humanities Council of Tulsa, Past President of the Tulsa Geological Society, and Chairman of the Geosciences Advisory Board at the University of Arkansas.

Edith is a native of Macon, Georgia, where her mother and grandmother were nationally recognized architects. Edith received her BA in Geology from Dartmouth College in 1982, and her MA and PhD in Carbonate Sedimentology from The Johns Hopkins University in 1988. Her career in the energy industry began in Houston where she was an international explorer, negotiator and manager with Amoco and BP.

In 2000, the Wilson family moved to Oklahoma where Edith worked with Phillips Petroleum on global new ventures and leadership development and then with Samson Resources on domestic shale gas projects. In 2008, she co-founded TallGrass Energy, which acquired and operated oil and gas properties in Oklahoma and Texas, and sold her interest in TallGrass in 2011. Edith shares a love of the mountains with her husband and teenage son. In 2004, she climbed Kilimanjaro (19,431’), the highest peak in Africa. Edith has traveled throughout the western hemisphere, and speaks fluent Italian and Portuguese. Her research interests include carbonate geology, petroleum geology, and basin analysis.
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AIChE American Institute of Chemical Engineers  
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AISES American Indian Science and Engineering Society  
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APWA American Public Works Association  
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ISA International Society of Automation  
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NSBE National Society of Black Engineers  
None Available at This Time

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