



Washington, DC Section Newsletter

February 2018

SECTION LEADERSHIP:



Chairman:

Paul Bizot
301-648-5945
bizotp2@asme.org

Vice Chair:

Roger Schaffer
202-781-1336
roger.schaffer@navy.mil

Treasurer:

Martin Schmidt
martin.schmidt@us.af.mil

Secretary:

Jason Florek
210-854-2626
jrflorek@gmail.com

Group Page Admin:

Sam Violette
samv@wll.com

Executive Advisor:

Kaykham Sysounthorn
571-357-3011
sysounthornk1@asme.org



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YOUR SECTION:



Take control of your local ASME section! Feel free to offer suggestions at any time. The ASME Washington, DC Section is always looking for additional events throughout the year. Please submit any ideas to Jason Florek at jrflorek@gmail.com.



LOCAL SECTION NEWS

ASME UPCOMING EVENTS

DISCOVER ENGINEERING FAMILY DAY (DEFD)

Date: Saturday, February 17, 2018
Time: 10:00 a.m. – 4:30 p.m.
Place: National Building Museum
401 F St. NW
Washington, D.C., 20001
Fee: FREE (\$5 Donation Suggested)

Stop by our exhibit at DEFD, *Waves*, a series of short hands-on and interactive demonstrations of various wave phenomena related to sound and vibrations. Guests (including children and adults, alike) will participate in the demonstrations and have an opportunity to learn about topics such as wave propagation, frequency, amplitude, and resonance. The professional career engineers and college engineering students at the exhibit will assist in demonstrating and explaining the different wave phenomena.

Check out images of the fun activities from previous years at Discover Engineering Family Day at:

<http://www.engineeringfamilyday.org/about-defd/gallery/>

For detailed information regarding this event, please visit the event's website:

<http://www.engineeringfamilyday.org/>

LOCAL SECTION NEWS

ASME UPCOMING EVENTS

DCCEAS Proclamation Luncheon

Wednesday, 21 February 2018, 11:30 am

Holiday Inn Rosslyn

1900 N Fort Myer Drive, Arlington, VA, 703-807-2000

Complimentary free parking, or walk from the Rosslyn Metro

Keynote Speaker:

Eric Burger, Ph.D.

**Chief Technology Officer of the Federal Communications Commission
Washington, DC**

Dr. Burger is advisor to the Chairman on Technology and engineering issues.

Join us as we celebrate Engineers Week with the Washington DC Area engineering community!

The event features networking and a buffet lunch, followed by technical talk.

Tickets: \$35.00 per person, or Tables of 10: \$350.00 *

Awards Banquet

Saturday, 24 February 2018, 6:00 pm

Westin Arlington Gateway, Arlington

801 North Glebe Road, Arlington, VA 22203, 703-717-6200

3 Blocks from Ballston Metro. Valet parking at hotel.

Keynote Speaker:

Rachel Rath

Title: Engaging Globally: Implementing Sustainable Infrastructure with EWB-DC

**Deputy Director for the National Evaluation System for Health Technology Coordinating Center
(NESTcc) at the Medical Device Innovation Consortium MDIC)**

**Ms. Rath is President of the Washington DC Professional Chapter of Engineers Without
Borders-USA (EWB-DC).**

The program will include DCCEAS awards to local engineering students,
the Engineer and Architect of the Year awards, and a keynote address.

Tickets: \$60.00 per person, or Tables of 10: \$600.00 *

Dress: Black Tie Optional/Business Formal

Reservations are due to Michael Ozatarar by February 16, 2018, at treasurer@dcceas.org.

For each banquet reservation, please specify entrée choice: chicken, fish, or vegetarian.

Checks can be sent to: DCCEAS, PO Box 18842, Washington, DC 20036-8842

LOCAL SECTION NEWS

ASME UPCOMING EVENTS

VOLUNTEER OPPORTUNITY – SCIENCE FAIR JUDGING

Be a science fair judge for ASME and encourage kids who are already very passionate about science and engineering to learn more about and participate in a career in engineering! Many years we receive feedback from our awarded students and parents that our encouragement as judges has been a factor in their choice of mechanical engineering as an undergraduate discipline. While the awarding of students is part of our effort, our awards dinner has enabled genuine specific sharing from the kids and the volunteer career professionals.

Upcoming career fairs include:

Arlington/NoVA: March 3, 2018 at Wakefield High School (1 mile NW of Route 395 off of King Street)

Montgomery County: March 10, 2018 at Food and Drug Administration White Oak Campus (near New Hampshire Ave. and Colesville Ave.)

Fairfax: March 17, 2018 at Robinson Secondary School, 5035 Sideburn Rd, Fairfax, VA

DC: March 17, 2018 at Location TBA

Prince George's County: March 24, 2018 at Flowers High School (very close to Route 50 and the Beltway)

To sign-up for judging or for more information, please contact Washington, DC Section Chairman Paul Bizot at bizotp2@asme.org.

3-D PRINTED SUBMERSIBLE PRESENTATION

Date/Time/Place: TBD (More Information Coming Soon)



We are planning an interactive event where you can come learn about and see in person the Optionally Manned Technology Demonstrator (OMTD), a 30-ft long, 54-inch diameter prototyping and demonstration platform modeled after the MK8 MOD1 SEAL Delivery Vehicle used by the U.S. Navy. For more information, please contact Washington, DC Section Vice Chair Roger Schaffer at roger.schaffer@navy.mil.

Engineering in the News:

Protecting a New World of 3-D Printed Products

3-D printed components have made their way into vehicles, aircraft, medical devices, human bodies, and military applications. However, opportunities have increased to hack these products meant to improve our health and safety.

Funded through an NSF grant, a team of researchers from Georgia Tech and Rutgers University have developed a three-layer system designed to verify that 3-D printed objects have not been compromised. The system compares acoustic measurements, printer component tracking, and detectable nanorods to a “golden copy” to protect the integrity of the printed products.

Read more on the proof-of-concept that could be ready to protect the additive manufacturing industry for market next year at:

<https://www.asme.org/engineering-topics/articles/manufacturing-design/protecting-new-world-3dprinted-products>.

Salaries Are Up for Mechanical Engineers

Read about the results of a new ASME salary survey discussing median incomes of MEs based on factors such as experience, degree achieved, PE license held, and industry of practice at:

<https://www.asme.org/engineering-topics/articles/technology-and-society/salaries-up-for-mechanical-engineers>.

LOCAL SECTION NEWS

ASME EVENT RECAP

BIOMEDICAL ENGINEER PANEL

The ASME Washington, DC Section conducted a biomedical engineer (BME) panel discussion at Catholic University (CUA) on Thursday, January 18, 2018. The primary intention of the panel discussion was to help high school students learn about this field, and encourage them to consider it as a career path. Note that mechanical engineering is one of the key disciplines taught and used in biomedical engineering.

There were three panelists: Dr. Otto Wilson and Dr. Chris Raub, both faculty members at CUA, and Zach Glickstein, a consulting engineer who primarily provides design for BME items as part of a multidisciplinary team. There were 30 participants/attendees, including groups of students from Thomas Jefferson High School and the BME graduate program at CUA. Dr. Wilson, for example, presented a case study of the treatment of his own son, who had multiple occurrences of fractures in his leg from a bone cyst. Mr. Glickstein presented on a stent, a temporary structural element allowing passage through a previously blocked or clogged blood vessel.

Both Drs. Wilson and Raub shared a desire for deep medical knowledge and achievements within the field. Dr. Wilson indicated that if he had to do it over again, he would pursue both a Ph.D. in BME, as well as an M.D. A key component in Dr. Raub's formation was an 8-week externship, in which he followed several different disciplines in a hospital, including surgery. His preference was to remain analytical, so he chose a Ph.D. in BME, rather than going for an M.D. Mr. Glickstein indicated that a typical project for him might be 1-1/2 years from conception through delivery of a commercial product and the manufacturing process.

A look ahead was given for developing areas of BME. These included tissue engineering (e.g., building scaffolding that various organs or components of systems can be repaired or rebuilt with) and the direct exchange of electronic information within the brain or nervous system, currently an active area of research at CUA. The ASME Washington, DC section is grateful to the three panelists for taking the time to share their experiences.





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A. JAMES CLARK
SCHOOL OF ENGINEERING

NATIONAL SECTION NEWS

ASME UPCOMING CONFERENCES

IMECE2018: ABSTRACT SUBMISSION IS OPEN



IMECE®
International Mechanical Engineering
Congress & Exposition®

David L. Lawrence Convention Center, Pittsburgh, PA

CONFERENCE

November 9-15, 2018

EXHIBITION

November 11-14, 2018

IMECE is the largest interdisciplinary mechanical engineering conference in the world. IMECE plays a significant role in stimulating innovation from basic discovery to translational application. It fosters new collaborations that engage stakeholders and partners not only from academia, but also from national laboratories, industry, research settings, and funding bodies.

Abstracts are due February 26, 2018. For more information, see: <https://www.asme.org/events/imece>.

ASME CONFERENCES WITH UPCOMING ABSTRACT DEADLINES



IDETC/CIE

International Design Engineering Technical Conferences
& Computers & Information in Engineering Conference

Quebec City Convention Center, Quebec City, Canada

CONFERENCE

August 26-29, 2018

Abstracts Due: March 12, 2018

Website: <https://www.asme.org/events/idetccie>



SMASIS

Conference on Smart Materials, Adaptive
Structures and Intelligent Systems

Grand Hyatt San Antonio, San Antonio, Texas

CONFERENCE

September 10-12, 2018

EXHIBITION

September 11, 2018

Abstracts Due: March 21, 2018

Website: <https://www.asme.org/events/smasis>

ASME MENTORING PROGRAM

GET VALUABLE CAREER ADVICE FROM A MECHANICAL ENGINEERING PROFESSIONAL!

The **ASME Mentoring Program** is designed to provide rewarding experiences that both mentor and mentee can learn and grow from. This is a unique opportunity for you to get career-guiding advice from an engineering professional with broader experience or more advanced skills. Benefit and learn from their real-life expertise, while sharing your own valuable insight and perspective!

Participating in the program is easy with our Web-based platform, made available through a partnership with WisdomShare™. Our targeted matching system will pair you with someone who can provide anything from general advice and a fresh point-of-view, to help identifying the right training or niche in mechanical engineering, or even assistance with finding a non-traditional career path.

The valuable insight you can gain by participating in the **ASME Mentoring Program** can have a positive impact on your career for years to come!

If you are ready for a most rewarding experience, please go to: <http://go.asme.org/mentoring> to become an **ASME Mentor or Mentee**.

