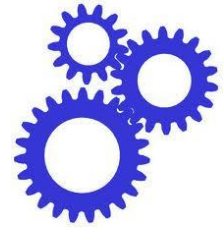




ME NEWS



NOVEMBER 2018

2018-2019 ME Division Chair: David Mikesell

Division Chair's Letter

Dear ASEE Mechanical Engineering Division members and fans:

First—thank you for your membership! We remain one of the strongest divisions in ASEE. I believe in the value of our organization to strengthen and mature engineering education, and to best meet the ever-changing challenges faced in our discipline.

The program for the 2019 conference in Tampa is well underway, and I am happy to see solid participation again in our division. A special thanks to Matt Gordon for doing the heavy lifting this year as our Program Chair.

I would like to again honor **Autar Kaw**, professor of mechanical engineering at the University of South Florida, who received the ASEE Ralph Coats Roe Award at this year's conference in Salt Lake City. This award, consisting of a \$10,000 honorarium and plaque, recognizes a mechanical engineering educator who is an outstanding teacher and who has made notable professional contributions.

Two other division members were recognized at the 2018 conference with significant awards. **Kurt DeGoede**, of Elizabethtown College, earned the Mechanical Engineering Division Best Paper with his work entitled "Competency Based Assessment in Dynamics." **Tahira Reid**, of Purdue University, was selected as the 2018 Outstanding New Mechanical Engineering Educator.

It is important to recognize excellence in our field, and that only happens through your efforts. Please submit nominations now for deserving ME educators both new and long-distinguished. This site gives more information about the Roe Award nominations, due January 15. Nominations for the Outstanding New ME Educator may be emailed to the Awards Selection

Committee Chair Anna Howard at Anna_Howard@ncsu.edu, no later than January 31.

The ME Division has been asked to provide a representative to the P12 Engineering Education Committee. If any of you has special interest in this area and would like to participate, please email me. Please also consider participation in any of the other important roles in our division, including awards or leadership positions. This division runs on 100% volunteer steam, and it is a great group of people whom I am blessed to work with. But all our positions have a fairly short commitment, so we are always looking for new folks to help.

Thank you for all you do with and for ASEE.

David Mikesell
Associate Professor and Chair
Mechanical Engineering Department
Ohio Northern University
ASEE ME Division Chair 2018-19
d-mikesell@onu.edu

IN THIS ISSUE:

<i>Section</i>	<i>Page</i>
Note from the editor	2
Officer List	2
Announcement from WearRAcon19	2
Positions Available	2
Member News	3
West Point Civil and Mechanical Engineering	3
<i>Suggestions, feedback, and contributions for future editions may be sent to the Editor, Diane Peters, email: dpeters@kettering.edu</i>	

ASEE ME Division Executive Committee 2018-2019

At our business meeting in June at the ASEE Annual Conference, we held officer elections, with several positions open for election or appointment. Several members took on new roles in the division.

Our division's officers are:

Chair: David Mikesell, Ohio Northern University
Program Chair: Matthew Gordon, Univ. of Denver
Program Chair-Elect: Tom DeNucci, USCGA
Secretary/Treasurer: Rungun Nathan, Penn State U.
Nominating Committee Chair: Michael Benson, USMA
Awards Selection Chair: Anna Howard
Webmaster/Newsletter Editor: Diane Peters, Kettering University
Members at Large:
Pavan Karra, Trine University (2018-21) and
Chuck Baukal, John Zink Company, LLC (2016-19)

Notes from the editor

Newsletter Contributions. I am always looking for great articles for this newsletter, similar in style and length to the type you see within this edition. Feel free to submit great articles anytime even though the newsletter is produced only in the fall and spring. Just email your articles directly to me or any of the Division officers (listed on page 6). The ME Division website is also a good place to find current events and lists of important contacts and dates. If you have details you would like the entire division to see, send them to me as well.

The division website location is the same as you have previously seen: <http://mechanical.asee.org/>. Watch for upcoming updates to the website. We look forward to serving the division and meeting your mechanical engineering educational needs.

Present Your Paper at WearRAcon 19!

March 26-28, 2019, DoubleTree Resort, Scottsdale, AZ

The Wearable Robotics Association (WearRA) is joining forces with IEEE to publish papers related to wearable robotics. Authors wishing to participate at the conference must register individually. Only papers registered for the conference will be included in the conference publications and be eligible for inclusion in the IEEE Xplore Digital Library.

Topics of Interest:

- Medical Exoskeletons
- Industrial Exoskeletons
- Human-robot interaction
- Advances in Exo component technology (i.e. sensors, motors, controllers, etc.)

SUBMISSION DEADLINE: November 15th, 2018

[Click here](#) for more information and to submit your paper proposal.

Positions Available

Saint Vincent College: Assistant Professor

The Department of Engineering at Saint Vincent College invites applications for a full-time, tenure-track assistant professor position beginning in August 2019.

Saint Vincent College offers a new Bachelor of Science program in Engineering Science in addition to a 3:2 program in Engineering. The successful candidate will teach courses that support both engineering programs, supervise student projects, advise engineering majors, and maintain an active program of scholarship in the broader engineering community.

Requirements

All outstanding applications will be considered, but preference will be given to candidates with a Ph.D. in mechanical engineering and expertise in mechanical systems. Excellent communication skills are required. More information and application guidelines can be found at this

site: <http://www.stvincent.edu/about/work-for-svc>

The Saint Vincent College Office of Human Resources is a service department dedicated to providing timely, effective, high-quality development and administration of policies and programs which support all members of the College community and the achievement of the College's mission.

King's College: Assistant/Associate Professor of Mechanical Engineering

King's College, Wilkes-Barre, PA is seeking two Assistant/Associate Professors of Mechanical Engineering, tenure-track, beginning in August 2019. King's College has established a new Bachelor of Science program in Mechanical Engineering, which started in the Fall of 2017. This new program, coupled with a new

Bachelor of Science in Civil Engineering, enables students to earn an engineering degree within the environment of a small college committed to providing excellent professional programs and a strong liberal arts experience. With this in mind, the College is seeking new faculty members who have a passion for teaching engineering at the undergraduate level, and are excited by the opportunity to play a fundamental role in the development of an undergraduate engineering program.

Requirements include a Ph.D. in Mechanical Engineering, or a related field, and experience teaching at the college level. The successful applicants will be comfortable teaching a wide variety of undergraduate mechanical engineering courses. Preference will be given towards applicants with prior experience teaching mechanical engineering design, and applicants with industry experience.

Interested candidates should be committed to teaching at an institution where the liberal arts are emphasized, and are prepared to develop research opportunities suitable for the inclusion of undergraduate engineering majors at such an institution.

Successful candidates will support the Holy Cross Mission and Catholic identity of the College and there is an expectation of being actively involved in the College community outside of the classroom.

Send one *.pdf file containing a letter of application, CV, statement of teaching philosophy, statement of research interests, undergraduate and graduate transcripts to hrjobs@kings.edu. Three letters of recommendation must also be provided to receive full consideration. Complete applications must be received by November 15, 2018. Only complete applications will be reviewed.

King's College is a private, Catholic, teaching college of the liberal arts & sciences and pre-professional programs sponsored by the Congregation of Holy Cross. The College serves over 2400 FT & PT undergrad & graduate students. A rigorous core curriculum provides the foundation for all majors. The College is located near downtown Wilkes Barre, on the edge of the Pocono Mountains. King's is committed to recruiting a diverse faculty and student body and welcomes applications from persons of traditionally underrepresented groups. EOE www.kings.edu

Member News

ME Division Member Diane Peters was awarded the Kettering University Educational Scholar award on October 19. This award honors a Kettering University faculty member who has "demonstrated excellence in peer-reviewed educational or pedagogical research or scholarship."

West Point Civil and Mechanical Engineering: 216 Years in the Making

If you weren't aware, the Nation's oldest engineering program resides at the United States Military Academy at West Point. We've come a long way since we started in 1802, and this article is intended to let you know some recent accomplishments and initiatives we've included in the past few years. One update is to our mission statement, which now reads "*Educate, develop, and inspire agile and adaptive leaders of character who design and implement innovative solutions and win in complex environments as trusted Army professionals.*" West Point still teaches an undergraduate-only population, and provides approximately 30% of the officer corps for the U.S. Army; each graduate is commissioned as an officer in the active duty Army.

The Civil and Mechanical Engineering Department (CME) sees average annual enrollments of 40 Civil and nearly 100 Mechanical Engineers from inbound classes of 1200 Cadets. The department created a "Center for Innovation and Engineering" (CIE) in 2012 to enable the Department's mission by integrating current Army and Department of Defense research and development opportunities with Cadet project-based education, leveraging the unique relationship between future Army leaders and DoD and industry partners. The CIE augments our faculty and capabilities by providing relevant opportunities to synthesize cadets' engineering coursework to solve challenging problems.

Since the creation of the CIE in 2012, five major initiatives have had a profound impact across the Academy and beyond. We hired 13 faculty and staff within CME to provide the additional capacity required for our increased dependence on project-based education. Since 2014, 20 of our CME students have won a select few Army-approved graduate scholarships including five winners of the NSF Graduate Research Fellowship. We've had over 215 publications and presentations, including 87 in the past 2 years alone, a dramatic increase tied directly to the nature and quality of our students' senior design project efforts. Student design teams have filed for 6 patents, with two awarded and 44 others who

have sought intellectual property protection. Finally, the CIE has helped the department attract 16 current Department of Defense sponsors for student projects and facilitates their collaboration at the Academy's "Projects Day" held annually on the first Thursday in May.

If you have students who aspire to a lifetime of service, staff or faculty who are interested in great education, or just want to know more about the CIE or the Department of Civil & Mechanical Engineering, consider engaging with us in any of these initiatives or others as we seek to learn and adopt best practices that help advance a unique department mission statement, with a unique group of students – Army Cadets!



Projects Day Presentation by CME Cadets May 2018