American Society for Engineering Education

# Middle Atlantic Section News

Annual Newsletter – Spring 2022 Edition

middleatlantic.asee.org



# FROM THE CHAIR

Dear Mid-Atlantic Section Members,

I hope you are all happy and healthy in the run up to our Spring Section Meeting. The past few years have been challenging to say the least, but I have been inspired to see how members of our Section, as well as the wider educational community, have risen to the occasion and adapted to the changing landscape of engineering education. It is clear that this time of upheaval has had a lasting impact on every single member of our community, yet I have seen how we have used new tools and techniques to not simply "muddle through" this challenge, but to improve our teaching, our pedagogy, and the experiences of our students. We will emerge as better teachers than we were before.

As we look to the future, I am excited to hear more about the amazing work you have all been doing in service to your students and perhaps, after what seems so long, to meet you all in-person again at NJIT in April. (*cont. on pg.2*)

## 2022 DISTINGUISHED TEACHING AWARD

Congratulations to Dr. Kaitlin Mallouk, Assistant Professor at Rowan University, recipient of the 2022 Mid-Atlantic Distinguished Teaching Award! Dr. Mallouk is an engineering educator and researcher who is dedicated to creating impactful learning experiences by valuing her students as individuals and designing curricula that employ evidence-based practices. She has been on the Rowan University faculty and an active member of ASEE since 2013.



Dr. Mallouk will be presented with the award at our 2022 Spring Meeting which will be held on April 22-23, hosted by the New Jersey Institute of Technology. She will also be giving a distinguished lecture to discuss some easy-to-implement ways to connect with students' humanity, a practice that has greatly enriched her classroom experiences.

# UPCOMING EVENTS

2022 Spring Middle Atlantic Section Meeting (in person) Theme: "Innovation in Engineering Education" New Jersey Institute of Technology, Newark, NJ April 22-23, 2022 Conference website

Chairs: Dr. Ashish D Borgaonkar & Dr. Jaskirat S Sodhi **Special workshop**: ASEE Learning is partnering with us to offer a 2-day workshop on the "Essentials of Effective Instruction". More information can be found in <u>the workshop link</u>:

2022 ASEE Annual Conference & Exposition Minneapolis, Minnesota June 26-29, 2022 <u>Conference website</u>

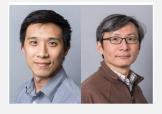
#### ASEE Middle Atlantic

# **BEST PAPER AWARDS**



## 2021 Spring Middle Atlantic Section Meeting

Congratulations to Dr. Eileen Haase (Johns Hopkins University), for her paper titled "Teaching Freshmen Empathy through a Health Inequity Design Challenge." This paper discusses the importance of teaching ethics in engineering through design projects focused on solving health inequity issues.



### 2021 Fall Middle Atlantic Section Meeting

Congratulations to Dr. WenYen Huang, Dr. Ping-Chuan Wang (SUNY New Paltz), Mr. Seth Pearl (Pennsylvania State University), for their paper titled "A Pilot Interdisciplinary Robotic Mentorship Project to Study Engineering Soft Skill Development." This paper discusses a robotics mentorship program as a platform to foster soft skill development of engineering students.

# GET INVOLVED!

Interested in becoming more active in our section? We are currently seeking members to fill the following positions:

- Secretary/Treasurer-Elect. Serve as understudy and assistant to the Secretary-Treasurer with responsibility for recording the minutes of the meetings of the Section, disseminating copies thereof as necessary.
- Meetings Chair. Responsible for arranging and coordinating the Section's conference activities for the year. Provides support to conference hosts.

Interested in hosting a section conference? We are currently seeking a host for our section meetings starting fall 2023 and beyond.

If you would like to help in a different capacity, please contact us! We are always open to new ideas for promoting excellence in engineering education.

# CONNECT WITH US ON ASEE HUB

ASEE Hub is a great way to easily connect with your fellow section members. This forum allows you to post announcements and discussions – an excellent way to form new collaborations and expand your network!

Check out our ASEE Hub Middle Atlantic Section Group page: <u>https://aseehub.asee.org/groups/home/86</u>

# FROM THE CHAIR (cont.)

The theme of this Spring's Meeting is "Innovation in Engineering Education", a topic that is particularly meaningful in this period when we have all had to improvise, get creative, and imagine new ways to do the things we all took for granted in the past.

I would encourage you all to join us at NJIT on April 22-23 for this event. ASEE Section Meetings are the perfect way to exchange ideas, showcase the brilliant work you have been doing, and receive feedback and guidance from others who are working towards similar goals in improving engineering education. This conference will also be our first held in concert with "ASEE Learning", who are offering a two-day workshop on the "Essentials of Effective Instruction" alongside the meeting.

On behalf of the executive committee of the Mid-Atlantic Section, I want to thank you all for your hard work and dedication to your students this past year and send you our warmest wishes for a productive Spring semester.

Best,

Alexander J. De Rosa Alexander.DeRosa@stevens.edu Section Chair, 2021-22 Stevens Institute of Technology

# CONFERENCE RECAPS

#### 2021 Spring Meeting (Virtual)

Villanova University, Villanova, PA | April 9-10, 2021 | Chairs: Dr. Pali Singh and Dr. Jacky Huang Theme: "Developing Humanitarian Engineers"

The Spring 2021 Middle Atlantic ASEE Section conference was hosted virtually by Villanova University, with a record high attendance – 51 oral presentations, 3 workshops, 7 faculty/graduate student poster presentations, and 58 student poster presentations. Due to the large number of attendants, the conference was organized over two days to allow participants to have a deep discussion on "Developing Humanitarian Engineers", the theme of the conference.

On the first day, a workshop was presented by Drs. Ted Howell, Kaitlin Mallouk, Scott Streiner, Jen Tole from Rowan University on the topic of "Engage Across Campus: Innovating Engineering Design Projects to Integrate the Humanities", which was followed by three tracks of presentations on "online education", "assessment" and "integration of the humanities in engineering education". A Workshop on "Design Thinking" was then presented by Drs. Abdullah Konak and Sadan Kulturel-Konak from Pennsylvania State University, Berks.

The section day started with the introduction of ASEE programs by Dr. Sheryl Sorby, the 2020-2021 ASEE President. The keynote presentation entitled "Demystifying the Duality of Research and Teaching" was delivered by Dr. Anurag Purwar, Research Associate Professor at SUNY Stony Brook. The conference continued with presentations in the following five tracks: "Humanitarian Engineering", "Pedagogy", "K-12 Outreach", "Electrical and Computer Engineering Labs" and "Curriculum". This was followed by a workshop on "Spatial Visualization" presented by Drs. Maxine Fontaine and Alexander De Rosa from Stevens Institute of Technology. The oral and poster presentations can be found here: <a href="https://www1.villanova.edu/villanova/engineering/newsevents/ASEE.html">https://www1.villanova.edu/villanova/engineering/newsevents/ASEE.html</a>

#### 2021 Fall Meeting (Virtual)

ASEE Middle Atlantic Section | November 12-13, 2021 | Co-Chairs: Dr. Ben Mendoza and Dr. Alexander De Rosa Theme: "Socio-Cultural Challenges and Impacts in Engineering Education"

With more than 90 participants from more than 40 different institutions, including industry, universities, and other organizations, our Fall 2021 meeting was a collaborative effort. The different sessions were hosted independently by various members and handled with a bit of centralized coordination by the organizing committee.

The ASEE Middle Atlantic Section meetings are excellent venues for exchanging ideas and learning from each other to prepare the next generation of engineers. This meeting's central discussion was about the context of engineering's practice and role in a global, multicultural, and technology-driven society. The event started with a presentation by Dr. Jenna P. Carpenter, ASEE President-Elect. She discussed the ASEE strategic priorities and how these initiatives align with the institution's Mission and Vision of the institution. Dr. Carpenters' speech was followed by the keynote talk magnificently delivered by Dr. Nicki Washington from Duke University. Dr. Washington shed some light on what we can do to become more culturally competent as a person, educator, or professional.

Something new in this conference was the Industry Panel, a partnership with INCOSE. We had a remarkable group of panelists representing different engineering fields and companies, such as Raytheon Technologies and the MITRE group. The talented panelists shared their experiences and addressed various aspects of Socio-Cultural Competencies in the Workplace. The panel wouldn't have been a success without the moderation, coordination, and planning of our Industry Liaison Eric Dano. Hopefully, this panel was the first of many more; having an industry perspective about engineering education is relevant for the members of our Section. Information about the conference, including a recording of the keynote presentation, can be found here: <a href="https://sites.google.com/view/asee-midatlantic-fall2021/program">https://sites.google.com/view/asee-midatlantic-fall2021/program</a>

# UPCOMING SECTION MEETINGS

- 2022 Fall Meeting | Penn State Harrisburg | Contact: Dr. Rajarajan Subramanian
- 2023 Spring Meeting | ASEE Zone 1 meeting
- 2023 Fall Meeting | TBD
- 2024 Spring Meeting | TBD

## OFFICERS (2021-2022)

**Chair** Dr. Alexander De Rosa Stevens Institute of Technology

**Chair-Elect** Dr. Maxine Fontaine Stevens Institute of Technology

**Secretary/Treasurer** Dr. Roger Subramanian Pennsylvania State University at Harrisburg

Secretary/Treasurer-Elect Dr. Eugene Kwak State University of New York, Farmingdale State College

**Past Chair** Dr. Benito Mendoza New York City College of Technology **Publicity Chair** Dr. Zuyi (Jacky) Huang Villanova University

**Meetings Chair** Dr. Pritpal (Pali) Singh Villanova University

**Historian** Prof. Orla LoPiccolo, M.Arch, PDip (CM) SUNY College of Technology at Farmingdale

#### Section Campus Representative

Dr. Amit Bandyopadhyay, P.E. SUNY College of Technology at Farmingdale

**Awards Chair** Dr. Ashwin Satyanarayana New York City College of Technology

## ADVISORY COMMITTEE

Dr. Kemi Ladeji-Osias Morgan State University

Dr. Andrew Grossfield Vaughn College of Aeronautics and Technology

Dr. Pritpal Singh Villanova University Dr. Sadan Kulturel-Konak Penn State Berks

Dr. Stephanie Farrell Rowan University

Dr. Nelson Macken Swarthmore College