ASEE Chemical Engineering Division Newsletter

Editor: Elif Eda Miskioğlu, Bucknell University (elif.miskioglu@bucknell.edu)

A Message from the Chair:



Ashlee N. Ford Versypt Oklahoma State University

In this issue...

Chair's Message

Page 1

CEE Corner

Page 2

Mentoring Grant Recipients & Call for Applications

Pages 2 & 3

<u>Award Recipients &</u> Call for Nominations

Pages 4-8

Call for Papers

Pages 9 & 10

Community Announcements

Pages 11– send any announcements you'd like included in future newsletters to elif.miskioglu@bucknell.edu

I am writing this first newsletter message as Chair of the ASEE Chemical Engineering Division on Sept. 10, 2020, almost exactly six months since the abrupt announcements to move university instruction online. As I reflect on the paradigm-shifting changes that have occurred over the past six months, three aspects relevant to the ASEE Chemical Engineering Division stand out starkly to me.

- We have all had to learn an incredible amount of new technology and constantly be resilient to a wide array of changes out of our control. I am particularly thankful for the innovative and impactful virtual communities of practice for chemical engineering courses organized through the AIChE Education Division and led by many of you.
- 2. Despite not meeting in person in Montreal for the ASEE Annual Meeting, I'm finding that through Zoom video conferencing and virtual meetings, social events, and other activities, we're staying connected throughout the year more than ever before. In a typical year, the primary interactions with this community are at the ASEE and AIChE conferences. In the last six months, I've had interactions and conversations with so many chemical engineering educators around the world at least once per week. While Zoom fatigue is real, I love that the distances between us seem to shrink with technology.
- I am continually encouraged and blessed by the caring community within the ASEE Chemical Engineering Division. At the ASEE conference in June, we had very thoughtful conversations about supporting students and colleagues through mental health challenges including suicide prevention and destigmatizing and normalizing conversations about seeking professional mental health services. I encourage you to submit ASEE papers or workshops on this topic if your department or institution has evidence-based impactful activities in this area. Also, at the conference open mic session, a number of people expressed concerns and uncertainty regarding the near-term future of professional track faculty as universities are dealing with COVID-19 in a host of different ways. A working group has formed to design programming to enhance support for the community of chemical engineering faculty who focus mainly on teaching and are not in tenure-track positions. Finally, for the last 7 weeks, I have had the great pleasure to facilitate the Conversation Series on Inclusion and Thriving where we meet via Zoom on Wednesday evenings to discuss ideas on how to enhance inclusion of those who have marginalized identities and to promote practices that foster thriving, care, and wellness of all within chemical engineering now and those to come in the future. We have centered most of our discussions on Black faculty and students and are working through the BlackInEngineering.org Call to Action. We have also discussed and learned from the AIChE LGBTQ+ & Allies Initiative. Thank you to all who have joined us for the Conversation Series so far. All are welcome. You can also contact me if you'd like to opt in to our weekly email of discussion summaries, even if you can't attend.

Even though the present situation is VERY different from when I ran, I am truly honored and thrilled to be able to serve as the Chair of the Chemical Engineering Division for 2020-2021. I look forward to staying in virtual community with you all.

Adde Ford Versypt



Introducing CEE Corner!

In the early part of September, I spoke with a member of an ASEE task force whose goal was to learn more about how ASEE can help the publications of its divisions. And while we had a good 30-minute conversation, I was most excited about the fact that ASEE is taking a deeper look at these journals of its Society.

The above interaction seemed like a good topic for this initial installment of "**CEE Corner**". After all, *Chemical Engineering Education*, which is the education journal for chemical engineering and related disciplines, is also the journal of the ChE Division (with an affiliation to the Education Division of AIChE as well).

Since I assumed the role of Editor of CEE almost one year ago, several changes have been made to the journal and its operation, with some important ones made in response to comments by <u>you</u> – the members of our division. For example, more formal workflow procedures have allowed for improved paper evaluations (and, ultimately, for accepted articles to appear sooner within the publication). Increasing the size of the editorial team has also helped with workflow and communications (e.g. the CEE twitter feed @chemenged). Detailed emails to Dept. Chairs describing the contents of an issue (with direct links to the paper page) both educate readers when an issue is published and allow them quick access to articles of particular interest. Our Publications Board now has a subcommittee structure, and several of these groups have provided important perspectives and insights (some of which you will see during the next year). We are working hard (with the help of our division and ASEE staff) to establish digital object identifiers for all past (back to 1962), current, and future publications in CEE. The digital archives of CEE publications are being moved to the OJS site for easy access and searchability – this could be completed by the end of the year. There's certainly more going on, but that is enough for now.

As always, I would like to remind you that all articles, except for editorials and the "Drawn to Engineering" comic, are externally reviewed. We welcome your submissions to the journal of our division. To submit your article, please follow the submission steps: https://journals.flvc.org/cee/about/submissions

Don Visco Editor, *CEE*

2020 ASEE ChED Mentoring Grant Recipient

ChE Division Young/Future Faculty Travel & Mentoring Grant

Catherine Fromen
Assistant Professor of Chemical & Biomolecular Engineering
University of Delaware



Have a colleague who would be perfect for a mentoring grant? Inspired to apply yourself? Check out the call for applications on the next page!

Call for Applications: Mentoring Grants

Inviting Mentoring Grant Applications for 2020!

Application Deadline for these Mentoring Grants is October 31, 2020!

Note: Applicants must have submitted an abstract for the 2020 ASEE conference by October 12, 2020 (see pages 9 and 10 for ASEE Call for Papers)

Send one file (see instructions on Page 8) to ASEE ChE Division Award Chairs:*

Margot Vigeant (<u>mvigeant@bucknell.edu</u>) and Milo Koretsky (<u>milo.koretsky@oregonstate.edu</u>)

ChE Division Young Faculty / Future Faculty Mentoring and Travel Grant

All chemical engineering or chemistry faculty within their first two years of teaching, or graduate students in chemical engineering or a related field and intending to go into teaching as a career are eligible. There will be at most one or two grants per year.

Applications are due October 31 of each year. Applicants *must have submitted an abstract to meet the mid-October deadline for the following summer's ASEE conference*. For faculty the application consists of a curriculum vita, a maximum one-page statement of interest in educational scholarship and a copy of any submitted abstracts. For graduate students the application consists of a one-page nomination letter by a faculty member who is a member of ASEE, the student's resume, and the abstract of any ASEE talks with the student as a coauthor. Applications will be reviewed by a committee consisting of the awards chairs and directors. If there is a conflict of interest, the directors will identify another member of the committee. Award announcements will be within two weeks of the application submission.

The amount of the grant is intended to subsidize travel to the conference, and will include a ticket to the ChE Division Banquet. A condition of the grant is that the winner attends the meeting and presents their paper. The grant will be presented at the ChE Division Banquet. The grant winner(s) will be provided with a ChE Division mentor (an individual determined by the ASEE CHED executive committee) who will meet with the grant winner for both formal and informal interactions during the meeting. Preference will be given to first-time attendees at the ASEE Annual Conference. For graduate students the grant is intended to build upon the existing ASEE "Bring-A-Student" program.

ChE Division "Engineering Education" Mentoring Grant

All chemical engineering or chemistry faculty who have not attended an ASEE Annual Conference in the past five years are eligible for this grant. More than one grant may be given annually. A faculty member may apply for this grant by the last day of February. The application consists of a curriculum vitae and a maximum one-page statement of interests in educational scholarship.

Applications will be reviewed by a committee consisting of the awards chairs and directors. If there is a conflict of interest, the directors will identify another member of the committee.

The grant will be a ticket to the ChE Division Banquet. The grant winner(s) will be provided with a ChE Division mentor (an individual determined by the ASEE CHED executive committee) who will meet with the grant winner for both formal and informal interactions during the meeting.

*A condition of receiving most awards and mentoring grants is attendance at the Chemical Engineering Division banquet at the 2021 ASEE Annual Meeting in Long Beach, CA, June 27-30, 2020.

2020 ASEE Chemical Engineering Division Award Recipients

William H. Corcoran Award

Sponsored by the ASEE Chemical Engineering Division

This award is presented to the author of the most outstanding article published in Chemical Engineering Education.

"Building Individual
Accountability through
Consensus"



Jamie Gomez Senior Lecturer III Chemical and Biological Engineering



Vanessa Svihla Associate Professor Organization, Information, & Learning Sciences

University of New Mexico

Joseph J. Martin Award

Recognizes the most outstanding Chemical Engineering Division paper presented at the ASEE Annual Conference

"Using or Viewing a Demonstration of Inquiry-Based Computer Simulations: The Effectiveness of Both in Learning Difficult Concepts in Heat Transfer"









Katharyn Nottis*, Mike Prince^,
Margot Vigeant^, and Amy Golightly*
*Education & ^Chemical Engineering,
Bucknell University

2020 ASEE Chemical Engineering Division Award Recipients

Ray W. Fahien Award

This award is given in honor of Ray Fahien, who was editor of Chemical Engineering Education from 1967-1995, and who was effectively the founding father of the journal, establishing it as a premier publication vehicle in the field of chemical engineering education. This award is given to an educator who has shown evidence of vision and contribution to chemical engineering education within their first 10 years as faculty.



Ashlee N. Ford Versypt
Associate Professor of Chemical Engr.
Oklahoma State University



The Thomas and Donna Edgar CACHE Award for Excellence in Chemical Engineering Education

Sponsored by the CACHE Corporation

This award, is presented for significant contributions in the development of computer aids for chemical engineering education.

Matthew Liberatore
Professor of Chemical Engineering
The University of Toledo

Best Poster Award (for best poster at the previous ASEE Meeting)

"Using Active Learning and Group Design Activities to Increase Student Perceptions of a Course's Educational Value"



Jason White Assistant Professor of Chemical Engr. University of California, Davis

Inspired to nominate a colleague for an award? Check out the call for nominations on the next page!

Call for Nominations

Announcing 2021 ASEE ChE Division Awards!

Send questions and nomination packets (described on last page) to:
Margot Vigeant (mvigeant@bucknell.edu) and Milo Koretsky (milo.koretsky@oregonstate.edu)

Donald R. Woods Lectureship Award for Lifetime Achievement in Chemical Engineering Pedagogy

This award is presented to a distinguished engineering educator to recognize and to encourage outstanding achievement. This award will normally be given for lifetime achievement, recognizing a sustained career of contributions to pedagogical practice, scholarship, and/or mentoring that not only caused innovative and substantial changes, but also inspired other educators to new behaviors that benefit students in Chemical Engineering. Preference given to individuals who also demonstrate achievement through the formulation of fundamental theory or principles, improvements of lasting influence to chemical engineering education with books and/or articles, and the demonstration of success as a teacher. In addition, evidence of the ability to conduct original, sound, and productive research, and an interest in the progression of chemical engineering through participation in professional and educational societies shall be demonstrated. The recipient will be obligated to present a lecture at the ASEE annual conference. The award consists of a small honorarium, travel allowance, and a commemorative plaque presented at the Chemical Engineering Division Banquet of the ASEE Annual Conference. The nomination consists of a letter of support from the person making nomination, the CV of the nominee, and at least three letters of support gathered by the person making the nomination. The award will be presented on an as-merited basis, not necessarily annually.

The Thomas and Donna Edgar CACHE Award for Excellence in Chemical Engineering Education

This award, sponsored by the CACHE Corporation, is presented for significant contributions in the development of computer aids for chemical engineering education. The award consists of a small honorarium and a commemorative plaque presented at the Chemical Engineering Division Banquet of the ASEE Annual Conference.

Ray W. Fahien Award

This award is given in honor of Ray Fahien, who was editor of Chemical Engineering Education from 1967-1995, and who was effectively the founding father of the journal, establishing it as a premier publication vehicle in the field of chemical engineering education. Professor Fahien selflessly gave his time and talents to advance pedagogical scholarship, particularly in the careers of young educators, through his dedication to the journal and the profession. The award is given annually to an educator who has shown evidence of vision and contribution to chemical engineering education, consists of a small honorarium and a commemorative plaque presented at the Chemical Engineering Division Banquet of the ASEE Annual Conference. See the Division web site for more details on the award criteria. Educators who have been faculty members for not more than ten years as of July 1st in the year of the award are eligible.

Call for Nominations: Instructions for Nominating

The Chemical Engineering Division of ASEE presents awards to outstanding chemical engineering educators (described on previous page) at the Division Banquet during the annual ASEE meeting. Nominations of candidates for awards to be presented at the 2021 meeting in Tampa, FL are due by January 15, 2021, with the winners notified in Spring 2021. Mentoring grant applications are due by October 31, 2020.

Please consider nominating one of your faculty or a colleague at another school for an ASEE Chemical Engineering Division Award!

<u>Instructions for Assembling Nomination Packets</u>

Please assemble the nomination package in the following order:

- 1. Nominee Information list the information found on the general ASEE awards form that may be found at http://ched.asee.org/wp-content/uploads/2016/01/ASEE-ChED_Award-Nomination-Form.doc.
- 2. Include a 100-word maximum Citation, which will be used if the nominee wins the award.
- 3. Include a 700-word maximum description of the Rationale for the Nomination.
- 4. Include a Curriculum Vitae containing the following information: Degrees earned (university and granting dates); other postgraduate study; record of positions held; publications, including all books, published papers and articles; ASEE activities and offices held; awards, honors and inventions, etc.
- 5. Other Supporting Information as required for that particular award. Please see the Chemical Engineering Division web site for details on particular award criteria.
- 6. Include a maximum of 8 Letters of Support for the nomination. These letters may be from peers, students, and/or former students as appropriate to the award.

These instructions parallel those available at www.asee.org. Nominating a faculty member for an award implies that the nominee has been informed and consents to the nomination and conditions of the award.

Instructions for Submission

Award packets should be sent (as a single Word or PDF file) to ASEE ChE Division Award Chairs:

Margot Vigeant (<u>mvigeant@bucknell.edu</u>) and Milo Koretsky (<u>milo.koretsky@oregonstate.edu</u>)

Deadline: January 15, 2021 (October 31, 2020 for mentoring grants)

It is the nominator's responsibility to assemble all of the pertinent information into ONE electronic document. Include separate sections for each of the six categories of submission materials.

Do not submit to ASEE headquarters or through their web page. Paper submissions will not be accepted.

Any unsuccessful nomination will be considered active for two additional years, unless withdrawn, as long as the nominee remains eligible. Nominators are allowed to submit additional materials for prior nominees, if desired.

Contact the Awards Committee Chairs, Margot Vigeant (<u>mvigeant@bucknell.edu</u>) and Milo Koretsky (<u>milo.koretsky@oregonstate.edu</u>) or consult the Division website (http://www.asee-ched.org) for more information; note amounts and dates on website may be out of date.

Call for Nominations: Other Awards

The following awards do not accept nominations, but we would like you to be aware of them:

William H. Corcoran Award

This award is presented each year for the most outstanding article published in *Chemical Engineering Education*. Nominations are not accepted. All published papers in a calendar year are automatically considered. The award consists of a small honorarium (per paper) and a commemorative plaque presented at the Chemical Engineering Division Banquet of the ASEE Annual Conference.

Best Poster Award

The Best Poster Award is presented for the most outstanding Chemical Engineering Division poster presentation at the ASEE Annual Conference. Nominations are not accepted. Papers must be presented at the chemical engineering division poster session to be considered. The award consists of a commemorative plaque presented at the Chemical Engineering Division Banquet of the ASEE Annual Conference.

Joseph J. Martin Award

The Joseph J. Martin Award is presented for the most outstanding Chemical Engineering Division paper presented at the ASEE Annual Conference. Nominations are not accepted. All papers presented that also appear in the conference proceedings are automatically considered. The award consists of a commemorative plaque presented at the Chemical Engineering Division Banquet of the ASEE Annual Conference.

For more information on national and other awards, visit the ASEE awards page at https://www.asee.org/member-resources/eward

resources/award

Call for Papers

2021 ASEE Annual Meeting June 27 - 30, Long Beach, CA

The Chemical Engineering Division (ChED) of ASEE invites papers for the 2021 Annual Conference and Exposition in Long Beach, California (June 27 – 30, 2021). While all topics of Chemical Engineering education will be considered, papers on the following general topics are strongly encouraged:

Innovative use of technologies to adapt to the COVID-19 pandemic.	Learning outcomes, assessment, and accreditation of chemical engineering programs.
Diversity and Inclusion initiatives on all fronts – (race, gender, etc.) in chemical engineering programs.	Contemporary perspectives (or new advnaces) in chemical engineering education.
Incorporating safety and regulatory compliance in chemical engineering curricula.	Teaching professional skills in chemical engineering courses - critical thinking, creativity, communication, and collaboration skills.
Non-traditional learning experiences such as experiential, inquiry-based, problem-based, and immersive learning in chemical engineering.	How are we helping our students with mental health issues – everything from recognition to resources and strategies?
Bring-your-own-experiment/demo in chemical engineering (hands-on, online, and virtual).	Business and entrepreneurship literacy in chemical engineering.
Works-in-progress you would like to discuss or solicit for feedback	All other topics related to chemical engineering education.

In addition, suggestions/proposals for panel discussions, workshops, and cross divisional sessions are welcome. During the brainstorming, there was a strong desire to have a ChED workshop after a short hiatus. We will consider all ideas submitted for workshop proposals and select the most appropriate to be presented during the Sunday/Wednesday workshop sessions.

Deadlines:

<u>Abstract Submission Opens</u>: **Tuesday, September 8, 2020** Abstract Submission Closes: **Monday, October 12, 2020**

Notification on Acceptance/Rejection of Abstracts: Monday, November 2, 2020

See author guidelines on next page

Call for Papers

2021 ASEE Annual Meeting June 27 - 30, Long Beach, CA

Author Guidelines:

Please note that both abstract and draft paper reviews are **double blind**, so do not include personal or institutional identification.

Abstracts: Submitted abstracts should be approximately one page or less in length, with a suggestion of 250-500 words (See **Appendix B** of the Author Kit for details).

Paper Submissions: Full paper submissions should be approximately 10-20 pages in length, inclusive of figures and other graphical elements (See **Appendix B** of the Author Kit for details).**Please limit Work-in-Progress papers to 3-5 pages** (see below).

ASEE Author Kit: Please make sure to follow the abstract and paper submission guidelines, available at: https://www.asee.org/documents/conferences/annual/2020/2020-Authors-Kit.pdf

<u>Work-in-Progress:</u> Papers describing ongoing work ("work-in-progress") are welcome in all sessions, including the poster session. Please title your WiP Papers in the format of "Work-in-Progress: Title of your project" in addition to indicating it is WiP in the abstract submission portal. This will help us easily identify these submissions. The Works-in-Progress oral sessions will include shorter presentations with time allotted to meet and exchange ideas with session attendees.

<u>Poster Presentations:</u> Poster papers can be in any topic related to chemical engineering education including the list above, including works-in-progress. **If you would like to submit a paper to the poster session directly, please clearly designate this request at the end of your abstract.** Please note that poster papers also go through ASEE's double-blind review process.

Conference paper submission is a two-step process:

- 1. Abstract submission, review, and acceptance, followed by
- 2. Paper submission, review, and acceptance.

As stated above reviews are double-blind, please *do not include* the names of authors, institutions, or other identifying information anywhere in the abstract, draft paper, or file names. At the end of your abstract, please state if you would particularly like your paper to be in a regular session or a poster session. Abstracts will be reviewed, and if accepted, authors are invited to complete full papers for further review. The ChED is a "publish-to-present" division: to present at the conference, you must have your paper accepted for publication and have at least one author participate in the peer review.

For questions regarding paper submission and review, and also suggestions for panels, workshops, or other non-traditional sessions or interdivisional sessions, please contact the 2021 ASEE ChED Program Chair, VJ Tocco, at vjtocco@ufl.edu.



ASEE CHED Conversion Series on Inclusion & Thriving

The Conversation Series is intended to serve as a virtual community of practice around diversity, equity, and inclusion.

Weekly, Wednesdays, 5-6pm Central Time Via Zoom

https://us02web.zoom.us/j/711295296?pwd=Z1IqT2MwbDNlakxXeUZySVNhSDRYdz09

Meeting ID: 711 295 296

Password: 029694

Supporting Professional Track/Non-Tenure Track Faculty

The ASEE CHED Division is planning new ways to support faculty who are in faculty positions that are different from the traditional tenure track (teaching faculty, research faculty, lecturers, etc.). Our aim is to foster connections among the Division for exchanging ideas and providing support through a virtual community.

If you would be interested in attending events, joining a virtual community of practice, or other opportunities focused on the specific needs of this faculty group, please fill out the following short form: https://forms.gle/zKvgKKWnk5R65Bvj9

This form will be used to gather your information as well as to better understand the interests of this community group. If there are any questions or ideas, please feel free to contact Victoria Goodrich (v.goodrich@nd.edu).

Photo Credits

Fall Colors: Forest Wander; https://www.flickr.com/photos/10922353@N03/6086519585, Awards: University sites or LinkedIn, ChemE

Summer School: Lisa Bullard