

Dear IEC community,

I hope you are having a great summer and wishing you a productive Fall semester.

Over the past year, while the rest of us have been focusing on other critically important tasks like keeping our students engaged through ZOOM, WebEx and the like, IEC has been busy trying to better understand the needs of faculties and students at member institutions and showcase the research and educational capabilities of our departments. Recent requests from IEC to provide updated enrollment/graduation data and a single slide describing the research capabilities in your department are a continuation of these efforts. A forthcoming request to record a short and simple video introducing our department is another component of this initiative we hope will be wholeheartedly supported by all of us.

On the same theme, IEC has held focus groups to clearly characterize the kinds of collaborations with R1 or other institutions that would most benefit our departments but also individual faculties. What we have known all along has been confirmed once more by these exercises; namely, faculties at IEC have a lot to offer to the larger engineering community in research capabilities, engineering outreach how-tos, mentoring strategies for students from underrepresented groups and much more. What remains to be completely flushed out is, from the perspective of individual IEC faculties, what are the main interests in terms of types of collaborations and/or initiatives, emerging research topics; in a nutshell, what do we really care about? Defining these interests is one of the objectives of the upcoming IEC meeting planned for early fall. Also, given this newsletter is such an important vehicle for exchanging ideas and expressing views, IEC is forming an editorial committee that will help us collectively identify topics and initiatives we should focus on to improve engagement and possibly even incite participatory euphoria. To capture the views and mood of our entire super-department, this committee should optimally include at least one colleague from each institution. We therefore encourage everyone to favorably consider our invitation to serve.

In this issue, two articles from our corporate member L3Harris showcase its significant actions for improving disability inclusion and equity in the workplace, and how its space technologies are being utilized in the fight against climate change. In his featured article, John Kelly discusses the vision, objectives, and ongoing activities of IEC's Digital Systems Community of Practice working group where members work to collaboratively develop a much improved digital systems curriculum. In the spotlight article, the light shines on our colleague Miguel Velez-Reyes who has been named community champion by SPIE, on PVAMU for receiving a new grant from Fluor to establish an engineering scholarship program and on Morgan State University for securing a \$3.2M grant to train the next generation of cybersecurity professionals. In his "Thinking Outside the Box" contribution, Ken Connor introduces compelling arguments for considering the open-source software Octave as a viable and free alternative to MATLAB and directs us to the results of two surveys that should make the case that Python, like MATLAB (or

maybe Octave), should permeate all our student learning activities. Ken also invites us to start the conversations for the upcoming fall IEC meeting by answering three important questions.

Lastly, at the beginning of the year, in my infinite wisdom, I had postulated that lest we stay vigilant, that light at the end of this COVID tunnel may be an approaching train. With the exponential growth of the Delta variant, let us remain safe and even more vigilant so that we may mingle again soon at an IEC workshop near you.