

## STEM Education and Its Impact on Instrumentation and Measurement

**T**his theme of the June 2018 *I&M Magazine* is Science, Technology, Engineering and Mathematics (STEM) Education, and the articles in this issue are focused on both significant social contexts related to encouraging broader participation of underrepresented groups in STEM and innovative efforts to engage students from K-12



through college levels by providing more hands-on approaches to conveying important foundational concepts in STEM. However, we also recognize STEM education is not limited to just the time period of the formal educational process. We all must remain life-long learners to keep abreast of the many, rapid changes that constantly occur in STEM fields.

Although the IEEE Instrumentation and Measurement Society (IMS) is obviously focused primarily on the *engineering* component of STEM, and in particular on the *instrumentation and measurement* aspects of engineering, we also understand how critical science, technology and mathematics are as foundational elements to engineering and integral to all we do as scientists and engineers. Thus, some of the articles present the more inclusive nature of STEM education and others concentrate more on the engineering component of STEM.

One of the essential features of many of these educational programs is the participation of practicing scientists and engineers. Incorporating the perspectives and experience of those who are engaged daily in the design, development and implementation of engineering projects truly brings to life the concepts educators are communicating to students. We hope the information in this issue will spark your own thinking

and discussions with your colleagues about ways to interact with educational communities where you live. We encourage you to inquire at your local primary or secondary schools or a nearby university about opportunities available to participate and share your experiences with students.

We also have opportunities within the IMS for all of our members to engage with undergraduate and graduate students, through our IMS Student Branch Chapters, and with our young professionals who are recent graduates, through our Young Professionals (YP) activities. Another opportunity is to provide a video tutorial about a topic in instrumentation and measurement. Check out information on the IMS website (<http://ieee-ims.org/evts/tutorials>) for how to submit an Expert Series Tutorial. Providing tutorials or industry track papers at our conferences is another excellent way to share important educational information with our student attendees. Sergio Rapuano, the IMS Vice President of Membership, Kristen Donnell, the IMS Vice President of Education, and Chi-Hung Hwang, the IMS Vice President for Conferences, also can provide more information on other opportunities to engage in our society's educational efforts and with our student and YP members. Part of our legacy is to inspire the next generation to pursue the exciting and rewarding careers associated with science and engineering. I look forward to hearing how our many IMS members contribute to these efforts.



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