What national societies can do for outreach programs, science educators, & K-12 students

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Abstract

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Summary

The national technical societies are in an excellent position to increase the quality and depth of contact with the masses of undergraduate students in engineering, physics, and science education credential programs. Low cost activities such as providing complimentary copies of conference proceedings, technical summary digests or meeting abstracts for distribution to undergraduate students in science and engineering will provide the novice student with some insight into the breadth of the professional area he/she has chosen as a career objective. Undergraduates will benefit from and be impressed by the technical content of meetings such as ETOP (Education and Training in Optics and Photonics), ECTC (Electronics Components and Technology Conference), Photonics East and West, OFC (Optical Fiber Conference), OSA Annual Meeting, etc. Registration at local or regional short courses, perhaps on a space available basis, will help undergraduates put their regular classroom courses into perspective. Attendance alongside professional engineers and scientists will help solidify the concept of continuing education to keep abreast of rapidly changing technical developments, and see life-long learning in action instead of simply hearing about it from their professors. This exposure to the post-graduate professional environment will stimulate undergrads (future professionals) to become accustomed to the idea of "paying back" and contributing to the education of their successors – the students still in high school, junior high school, and K-12, in general. Undergrads can do an excellent job visiting classrooms, performing demonstrations, and being role models for students not much younger than they are. In return, undergrads become more aware of the existence and importance of the national technical societies and the vital role they play in the continuing technical education and training of science and engineering professionals. This interest, if properly nurtured, will probably result in an increase in the number of student chapters on the campuses.

References

For more information, see http://www.ieee.org/kc