

Where Have All the Young Engineers Gone?

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The editorial pages of *Sound & Vibration* magazine have given considerable coverage to the status of young engineers. Simply searching “editorial, young engineer” on www.SandV.com (which provides a treasure trove of past editions and articles) yielded 31 results. Browsing the articles, however, showed that all seemed to be written by the hall-of-famers – those members with 25 years or more of SEM membership.

With that in mind, my intention is to address this topic from the vantage point of a young engineer in hope of shedding some light on this area. I’ll start by discussing one editorial below and perhaps get the chance to discuss other editorials in the future (hopefully before my “young-engineer” status expires).

“Attracting Young Professionals to Technical Conferences,” by Raj Singh, appeared in the September 2007 issue. Raj (a professor at Ohio State University) commented that there seem to be few young engineers at most conferences and professional societies, and offered various suggestions for how to improve participation and convince young engineers that conference participation is valuable. I’d like to share reasons of my own for young engineers but follow it up with some ways more mature engineers can encourage participation as well.

For the young engineers, here are some reasons why I benefited immensely from going to conferences. You gain confidence in presenting technical information to a technical audience. I was fortunate enough to attend my first conference my first year in graduate school. In fact, I was privileged enough to be able to present at the conference, thanks to research I had done at the Los Alamos Dynamics Summer School

under Chuck Farrar. Aside from a few undergrad final projects, this was the first time I had ever presented technical information to an audience that could understand and ask intelligent questions about the topic. Although I’m sure I was nervous and rushed, the applause and words of encouragement helped convince me that I could make it as a grad student.

You make contacts that will help you in your career – and not necessarily just mentors. Again, I remember during my first conference meeting a wide variety of people at various social events. A five-minute chat with one person gave me a whole different perspective on my research, while another short conversation eventually led to a job interview. The ability to make connections at a conference can provide you with a range of resources that your colleagues staying home will miss out on.


Finally, you get exposed to so many different areas of research and technology that might otherwise never come up. Many of the engineers I have talked to have found specific solutions to an engineering problem by attending a conference. Years later, others have remembered a paper that allowed them to proceed down a whole new path. Because companies tend to self-isolate into silos, getting this sort of cross-pollination from others can be immensely valuable.

Now for the mature engineers, I have some recommendations. Companies need to be willing to take the short-term financial hit in getting young engineers involved with research, sales, or general conference attendance. Those of you who either have access to the purse strings or can more properly fight for the conference expense should understand that getting young en-

gineers to attend, benefits both the conference and the company. While I know not all companies do this, I am proud to say that my company, ATA Engineering, gives each engineer a training budget each year and actively encourages them to spend it – whether on classroom courses, webinars, or conferences.

Older members can take the initiative in reaching out to younger engineers. This can be a hard one, as they might obviously want to spend time with colleagues they’ve known for a long time and may only get to see once or twice a year. But new engineers will not necessarily have the contacts you have and may not feel comfortable approaching a clearly defined social group. (Remember being the new kid in school and the terror you felt having to walk up to strangers). So take the few minutes to meet someone new who looks unsure and invite them into your conversation.

On a personal note, I want to say a special thanks to Al Wicks (Virginia Polytechnic Institute and State University). I remember attending my very first conference (IMAC XXIX), and on the second day of the conference there were technical lunchtime sessions. Not knowing who to sit with, I was eating pizza in the lunch room as people started to file out to the sessions. Al spotted me obviously alone and came over to introduce himself while asking how I was enjoying the conference.

He only had a few minutes before he had to rush off to another meeting, but in that short conversation I took my first step into being part of the sound and vibration community. For that I am grateful. 

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