

TAB teams up with WIE to encourage women's involvement in engineering

By Vawn Himmelsbach



Women in Engineering (WIE) was created to support women in a field dominated by men and give them a voice within the IEEE. In every region of IEEE there are now strong networks. More recently there's a move within IEEE to encourage participation and reward achievement at the Society level.

When Celia Desmond—now having just completed her term as Division III Director (Communications Tech.)—first joined the organization about three decades ago as Chapter chair in Ottawa, she saw a need for more women sitting on boards. This hasn't changed much, she says. In between, she has been IEEE Canada President, IEEE Communications Society President, IEEE Secretary and IEEE VP Technical Activities.

Early on, Desmond sat on the boards for the IEEE Computer Society and the predecessor to the Technology and Engineering Management Society (TEMS). "Sometimes there was another woman around and sometimes not," she said. "At that time there wasn't even a WIE group — it got started around 1994." And while WIE didn't have much clout at first, "over the years people did start to realize women are in engineering and it started to get more prominent."

A factor in how WIE is promoted internally is its "home" in the organization. It was decided, for

administrative purposes, WIE would fall under Member and Geographic Activities (MGA). Every Region would have a WIE rep that sat on the WIE Committee and reported to MGA. In Canada, Desmond says WIE does a lot of great work for the Region and beyond.

"At the same time, we have these 46 Societies and Technical Councils, and they reach a whole different level of IEEE members," she said. "They should also be active in WIE; they should be encouraging women to go into engineering, encouraging women engineers to become active in IEEE."

Considering the percentage of engineering graduates versus the percentage of female IEEE members, "we're not doing too bad, but we could do better," said Desmond. "If 12 per cent of graduates are women, it doesn't mean we can't get more than 12 per cent women members. We could do better if we reached out more — on the Society side we would reach different people and give recognition to those women who have moved up in their technical area."

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The Societies, which range in size from 2,000 to 50,000 members, tend to have a technical focus, and provide a home for many of IEEE's volunteers. "When I was the Communications Society president, we had 45,000 members from 160 countries, and more than 50 per cent of our members were in industry," said Desmond. "They all worked in a communications field of some sort."

One of TAB's goals is to nurture underserved segments of technical communities, including women. As a result, TAB created a one-year technical committee to conduct research into women in engineering, looking into issues such as why fewer than 25 per cent of WIE reps attended TAB meetings.

The results were interesting: In the IEEE brochure encouraging membership, for example, you didn't see any women. "You do now," said Desmond. "If you're looking at who got awards, and you go back the last 10 years, you don't find very many women there. You can find awards that have never been won by a woman." Those findings have led to a set of ideas and practices to improve women's involvement in IEEE.

This temporary committee was made into a permanent committee last year under the Strategic Planning division within TAB, with five members. The idea is to continually update best practices, which include flagship conferences, networking receptions and professional development activities. Publications will highlight prominent women and a dedicated WIE website is to be created.

To date, they have formed a sub-committee to identify and nominate women for awards, created the Ambassadors program, organized WIE presentations at schools, invited women to assume roles within IEEE, and worked on cross-Society or cross-Council activities.

They're also educating women on the value proposition of IEEE. "We want to get an inter-

Technical Activities Board (TAB)

- ✓ Increases efforts to drive technology within IEEE. Promotes, facilitates and supports a global volunteer organization of innovative and agile technical communities.
- ✓ Uses the best technologies to attract, access, and disseminate the highest quality technical information in the areas of interest to IEEE.

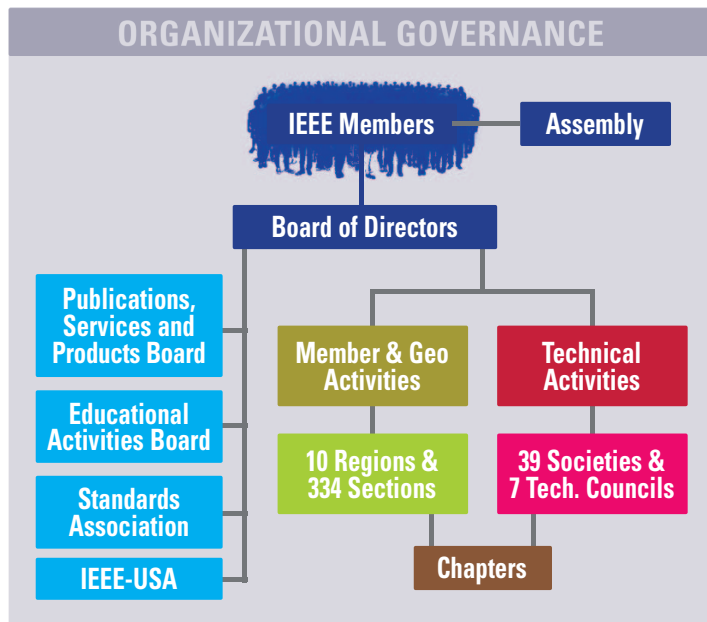
Since WIE was in its early stages, the Society came up with a Women in Communications Engineering (WICE) group, which still exists. "They aren't really conflicting with each other, but maybe collectively if we all worked together we could do better," she said.

The Technical Activities Board (TAB) has become involved, out of concern that more women aren't pursuing STEM careers or getting involved with IEEE. The aim of Technical Activities (TA) communities is to develop a volunteer-led environment where thought leaders converge and solicit, refine and disseminate quality technical information while nurturing and promoting innovative ideas and new fields.

relationship between the TA Committee and WIE Committee — that’s already started,” said Desmond.

That relationship could become more formalized. “If you look at the WIE group as a whole, they have been running leadership conferences, and those conferences have been extremely successful,” said Desmond. “People who are Society members have been helping, it just wasn’t structured. But those conferences are attracting a lot of attention and viewed very positively and giving good information to women.”

The Societies have stepped up their support for WIE — most, if not all, have a WIE rep. But Desmond says they’re still defining what those reps should do, alongside Region WIE reps. “They don’t have strong guidelines yet,” she said. “We’re at the beginning of pulling all the wheels together and getting them aligned in the same direction.” That involves



developing best practices that are available to all Societies.

Still, women have plenty of challenges within engineering and other STEM fields, and that’s what the relationship between TAB and WIE is hoping to

address. “Why is it that we aren’t seeing women get the awards and why can’t they get ahead in the C-suite? We’re not there yet,” said Desmond. However, she believes the word is getting out, and the time is right to get more women active in IEEE.

“We need to get them to go into engineering in the first place,” she said, pointing to research that shows when girls are five to eight, they do at least as well in math and science as boys, but when they turn 14 they decide they don’t like math and science. “Why do they go away? We’re also losing them in business: There are good numbers coming in at the lower levels, then they dwindle down as they move up. Women leave engineering and don’t come back; women feel they’re not being heard.”

That’s where TAB and WIE are stepping in — to listen to those voices, to recognize and reward achievements, and to provide role models and mentorship — in hopes of encouraging more women to pursue life-long engineering careers. ■

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