



Enthusiastic IEEE Women in Engineering student members at Ajman University of Science and Technology in the United Arab Emirates were winners of the 2013 IEEE Day photo contest.

STUDENT ENGAGEMENT

Today's students are tomorrow's innovators. They are the future of our professions and of IEEE. In 2013, IEEE student membership experienced remarkable growth, with the number of student members increasing 3.6 percent to 120,389. At IEEE, we are proud to develop the technology giants of tomorrow, today.

Change the World Competition Recognizes Young Leaders

The IEEE Presidents' Change the World Competition honors students who identify a real-world problem and apply engineering, science, computing and leadership skills to solve it. The contest inspires students by giving them an opportunity to see their ingenuity and enthusiasm for engineering and technology recognized by prestigious IEEE members around the globe.

The 2013 Grand Prize went to the Low-Cost Spirometer team of Andrew Brimer and Abigail Cohen of Washington University in St. Louis, Missouri, who received a check for US\$10,000. The team developed a pocket-size spirometer for the diagnosis and monitoring of asthma, chronic obstructive pulmonary disease and cystic fibrosis. Even in developed countries, spirometers historically have been reserved for pulmonologists and hospitals due to their high cost and painstaking

maintenance. The Low-Cost Spirometer team found a way to drastically reduce costs while maintaining accuracy. This will bring spirometry to developing countries as a diagnostic tool and equip patients in the developed world with an accurate method for proactive disease management.

Programming Competition Pushes Boundaries

The IEEEExtreme® Programming Competition 7.0 took engineering to new limits. The competition brought together 2,346 online teams of one to three students from 60 countries to address the serious challenge of solving 22 software-design problems in 24 hours.

One new problem was submitted approximately every hour. While there were no time constraints to solve any one problem, each team had 24 hours to get through as many as it could. The 2013 winners were Jonathan Durand Espinoza, Gian Franco Zevallos Gutierrez

and Miguel Tasayco Martinez of Universidad Nacional de Ingeniería in Lima, Peru. Each received a paid trip to an IEEE conference of his choice.

IEEE Day Puts Achievements in Focus

IEEE Day is an occasion for engineers worldwide to celebrate the anniversary of the first time IEEE members gathered to share their technical ideas in 1884. The theme of IEEE Day 2013 was "Leveraging Technology for a Better Tomorrow."

A highlight of the day was the Photo Contest, which is open to all IEEE members around the world. The aim is to motivate members to initiate, organize and coordinate events demonstrating the year's theme, then submit pictures of the events. The winner of the 2013 contest was a team of students and WIE members at Ajman University of Science and Technology in United Arab Emirates. The team organized an activity with autistic children at Sharjah Humanitarian City, which included a workshop where the children were introduced to new gadgets and software, taught to use computers and iPads, and paint tech logos together. The goal: **to bridge the gap between the privileged and challenged, and empower the children to understand and use technology.**



2013 IEEE President-Elect (left) and 2013 IEEE President Peter Staecker (right) presented Andrew Brimer and Abigail Cohen (center) with first prize in the IEEE Presidents' Change the World Competition.