

WIE Newsletter

January 2004

Girl Day Pledges

Participants in Introduce a Girl to Engineering Day 2004 are signing on to the National Pledge Roster. Here are a few examples.

PBS&J in Tampa, Florida, is planning a luncheon for both high school and college students, with a goal of reaching at least 12 young women. They will invite students from the local high schools and from USF.

In St. Louis, Missouri, the U.S. Army Corps of Engineers will mobilize 60 engineers (30 women engineers) for a Mentor Day with teenage girls to tour the facilities and learn about engineering at the Corps, speak to local school groups and host an engineering exhibit at a local science center. See www.mvs.usace.army.mil

In Galveston, Texas, the Corps will host an "Introduce a Girl to Engineers Week" at a local middle and high school.

The Westinghouse Savannah River Company in Aiken, South Carolina, will contact all local middle schools to recruit 60 girls for an on-site visit, to interact with 30 engineers, including 25 women.

In Illinois, the College of DuPage's Gender Equity Program along with Molex and the DuPage County Girl Scouts are hosting 50 high school females to participate in "Introduce a Girl to Engineering" at Molex's headquarters in Lisle, Illinois. www.cod.edu.

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**IEEE Women
in Engineering**
• www.ieee.org/women

Reception Honoring Women Engineers

By Kiki Ikossi, Ph.D. IEEE-WIE Washington Area 2004 Chair

On Tuesday December 9, 2003 a reception in honor of the Women Engineers took place during the 49th International Electron Device Meeting (IEDM) held at the Washington Hilton and Towers in Washington, DC. This reception was a demonstration of hospitality to IEDM attendees visiting the Washington, DC. area, and was held by the local IEEE-Women in Engineering, (WIE) Washington Area Affinity Group and the Washington DC/Northern Virginia Electron Device Society (EDS) Chapter. The reception was organized and hosted by Dr. Kiki Ikossi, the Vice Chair of the local IEEE-WIE Affinity Group, Mr. Murty Polavarapu, Chair of the local EDS Chapter and Ms. Phyllis Mahoney the IEDM Conference Manager. The WIE reception was also made possible through the encouragement and support of the 2003 IEDM General Chair, Dr. Leda Lunardi in an effort to facilitate networking within the IEEE professional world for women engineers.

This first WIE reception after a hiatus of few years was a great success. Attendees included engineers from all subspecialties within our profession, from all over the world. Some of the women are successful company owners and corporate executives, scientists and young aspiring Electrical Engineers (some still in graduate school). The common denominator within the attendees (men and women) is their dedication to the study of Electron Devices and a yearning to meet other engineers and foster the camaraderie within our field.

Initially, the Farragut meeting room started filling up with IEDM attendees like any other social function, sipping drinks, catching up with old friends and meeting new ones. Soon the Chair of the conference arrived along with a group of IEDM Technical Program Committee members and Professor Hoyt, the guest speaker. The busy noise of welcomes, introductions and discussions was replaced with the official introduction of Drs. Hoyt and Lunardi.

Professor Hoyt, from Massachusetts Institute of Technology, 2001 IEDM General Chair (and the first woman to hold that position) addressed the audience emphasizing the importance of voluntary participation in IEEE technical societies and professional committees.

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IEEE and the technical societies are unique organizations where one can freely express their engineering, research and leadership skills in an open and collegial environment. Women engineers can volunteer for any position they have the time to pursue. Dr. Hoyt emphasized the importance of pride in our work and fulfilling the expectations of these voluntary positions to the best of our ability. Work that is less than outstanding tends to be noticed more so if the EE volunteer is a female. Therefore it is important to make sure that one can be fully committed to the task at hand.

Professor Hoyt emphasized the importance of finding a suitable mentor. Young women entering the profession starting from College and Graduate School education have to seek out mentors who can help them direct their careers. There are many professionally strong and knowledgeable engineers that take pride in guiding young engineers through the challenges of our profession.

Professor Lunardi, of North Carolina State University, and the 2003 IEDM General Chair emphasized that participation in IEEE technical societies and conference technical committees brings benefits to volunteers. This is particularly so in technically recognized conferences like IEDM, which bring experts together and keep high standards for technical content and integrity in the paper selection process. For example, the IEDM subcommittee membership has requirements that include expertise in the field and prior presentation/authorship of IEDM papers. Both Drs Hoyt and Lunardi noted that the senior female EEs who mentored them when they were graduate students seem to have disappeared from the IEDM conference. No one knows exactly how or why but very few of the senior female EDS members seem to be available. However, senior male EDS members of the same era continue to be very visible and active. The 1980's generation of female EEs has become the "senior women scientists" of our field when they are at the mid-point of their careers. The knowledge and experience of the more senior women EEs would be invaluable to this generation.

Professor Colombo Bolognesi of Simon Fraser University in Burnaby BC, Canada, described his experience as a past member of the IEDM Quantum and Compound Semiconductor (QEC) subcommittee and as QEC subcommittee chair this year. After participating in other conferences committees, he stressed the international spirit and scientific independence of each technical subcommittee at IEDM.

The meeting attendance in 2003 was almost twice the 2001 IEDM in Washington DC. Although hard statistics were not available for the gender participation at IEDM, the general feeling is that over the last few years fewer female Engineers are attending this particular conference. Considering the EE profession is one of the hardest stricken by the economic down turn of the last

years, it is unfortunate that females and minorities are the first to have decreased representation in poor economic times.

Mr. Polavarapu, Chair of the Washington/Northern Virginia EDS Chapter, explained that IEEE volunteerism is a good start for enhancing professional standing and help shaping the EE profession. He described some of the recent successes of IEEE in making a difference for the future of the technological advancement in our Nation. He recommended that attendees contact the EDS or WIE Chapters in their home cities upon their return. He also reminded the audience that IEEE is the lead organization for National Engineers Week in 2004 and encouraged participation in going to Middle and High Schools as ambassadors of the engineering profession.

We received very positive feedback from the attendees, characterizing the meeting as a unique experience that makes them feel that someone cares for their efforts to be active EDS members and overcome the barriers of past generations. Some of the graduate students who attended the reception expressed their gratitude for Professors Hoyt and Lunardi for giving them an insider's look at the largest and most important conference of the EDS community. Several attendees noted that the 2003 IEDM conference stood out in their minds when compared to prior ones. IEDM 2003 not only had an excellent technical program, with excellent presentations and displays of semiconductor device technology, but also had the sincere personal touch of the Conference General Chair, who made this special group feel comfortable and involved.

IEEE-WIE is determined to make every effort to keep the WIE meeting a tradition for IEDM. By maintaining a network for the next generation of EDS professionals, hopefully the Women Engineers will be transparently integrated and readily accepted within the EE ranks.

The IEEE-WIE Washington Area Affinity Group gives special thanks to Professor Judy Hoyt for addressing our meeting, Professor Leda Lunardi for her support throughout this effort, as well as Mr. Murty Polavarapu, and Ms. Phyllis Mahoney for their assistance in the logistics of planning and implementation of this event. ❖



Left to right: Kiki Ikossi, Leda Lunardi & Judy Hoyt.

New Faces of Engineering

During National Engineers Week, 22 to 28 February, the engineering community recognized the new generation of engineers that is turning ideas into reality. These "New Faces of Engineering" were nominated as role models for their achievements by their employers and professional societies. The top 12 New Faces -- including IEEE member Dominique Green -- were featured in a full-page ad in USA Today. The ad is available for download at:

www.ieeeusa.org/eweek/files/NewFacesUS.pdf.

See all 57 New Faces of Engineering at www.eweek.org ❖

Regional & Chapter News

Regions 1-6 - USA

2004 – WIE SNJ volunteers as Science Fair Judges
Mar – WIE SNJ celebrates Women's History Month by visiting 150 8th grade girls about women in engineering
Mar – WIE supports Girl Scouts event in Dallas
Mar – WIE Santa Clara participates in the 4th Annual Expand Your Horizons Conference in Science and Math
Mar – WIE Central Texas to hosts lecture

Region 7 – Canada

2004 – WIE Manitoba formation in process
Mar – EWEEK Canada

Region 8 – Europe, Africa & Middle East

Apr – United Arab Emirates celebrates EWEEK by visiting middle and high school girls

Region 9 – Latin America

Mar – WIE San Buenaventura (Colombia) participates in university event with lecture by guest speaker

Region 10 – Asia & Pacific

2004 – WIE Kerala celebrates EWEEK
Mar – WIE Bombay celebrates Women's Day by hosting a lecture by Jayashree Firodia on "Health Awareness for Engineering Girl Students"
Mar – WIE Kerala celebrates Women's Day with a talk by Shilpa Anna Rajan on "Introduction to Corporate Culture".

To participate in an event or form a chapter in your area, please contact WIE at women@ieee.org. ❖

The Robert R. McCormick School of Engineering & Applied Science at Northwestern University, Evanston, Illinois, invites girls in grades 6-12 to their 33rd annual Career Day for Girls on February 21, 2004, from 8:30 am-3:30 pm. This year's theme is "Engineering: Expanding your Horizons."

An engineer from the Boston section of the American Society of Civil Engineers will go into the K-8 schools and do several short hands-on engineering programs, including ZOOM Into Engineering and Building Big activities. www.engineers.org/outreach.html.

The Student Engineers' Council at Virginia Tech is planning an evening of fun and hands-on activities geared toward girls and young women students of all ages and backgrounds. This will include tours of facilities and discussion with professors and students, as well as many activities to get geared up for engineering. www.sec.vt.edu.

On February 28, 2004, the Women in Engineering Program at the University of Texas - Austin will host an afternoon of ZOOM Into Engineering hands-on activities for girls in 1st through 12th grades. Women from the UT engineering community will be available to talk to the girls about all aspects of engineering. Please visit: www.engr.utexas.edu/wep/Precollege/Programs/girl_da
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Deadline Approaching IEEE Student Branch Web Site Contest

The submission deadline for the annual IEEE Student Branch Web Site Contest is 15 April 2004. Finalists will be chosen in each of the ten IEEE Regions to compete for 1st, 2nd, and 3rd place, plus runners-up prizes. Monetary awards range from US\$250 to \$1,000. The IEEE Student Activities Committee will announce winners on 15 May. For more information visit: www.ieee.org/membership/students/programs/websitcontest.xml.

Each year, IEEE Student Members compete for up to US\$250,000 in IEEE Awards & Scholarships. Many awards are for specific IEEE-related disciplines and range from travel grants to post-doctoral fellowships. For information, visit: <http://www.ieee.org/scholarships>. ❖