

IEEE WIE envisions a vibrant community of IEEE women and men collectively using their diverse talents to innovate for the benefit of humanity.

IEEE Women in Engineering  
WIE

The mission of WIE is to facilitate the recruitment and retention of women in technical disciplines globally.



### Engineers Week Global Marathon For, By, and About Women in Engineering and Technology: GM13 March 6-8 2013.

GM13 is a free, live 'virtual conversation' for, by and about women in engineering and technology. Please join us and let your friends and colleagues know about a unique event in March to celebrate the women who are in engineering education or employment. Women of all disciplines of engineering; all career stages and all nationalities will join in webcast conversations about the issues that affect them; the work they do and the stories that they want to share. The event is timed to support Engineering Week and International Women's Day. **This year's theme is: "Inspire. Inform. Change the World."**

#### ❖ **Leadership: Never Underestimate the Power of Example**

Wednesday, March 6, 2013

12 pm - 2:30 pm U.S. Eastern

Women in significant leadership roles share how they - and you - are poised

to change the world. Who inspired them, how and what are the best lessons they've learned to succeed?

#### ❖ **Emerging Leaders & Entrepreneurs**

Thursday, March 7, 2013

10 am - 12:30 pm U.S. Eastern

Women in E&T are charting exciting pathways for themselves, businesses and NGO's. What does it take?

#### ❖ **Changing the World: One Woman at a Time**

Friday, March 8, 2013

8:00 am - 11:00 am, U.S. Eastern

Every day women quietly change their communities for the better through work and service. Now let's shout about it. Are you one of these women?

More women around the world are choosing to study engineering and computing to join exciting careers - this event enables you to speak about the experiences you have and to help others. There is no other live event that connects all technically educated women to each other across the globe. **Register now, create your profile and join the conversation!**

### WIE Group of the Month Highlights



The joint IEEE WIE/Google Event: Enhancing the Sustainability of Women in Engineering was held on January 23-24, 2013, co-chaired by the two past WIE chairs Ramalatha Marimuthu and Karen Panetta, pictured with Megan Smith, Google. The two-day event was attended by approximately two hundred people from across the USA. For more details, see the full article on [Page 3](#).

**New WIE Posters Are Now Available.**

**Please see Pages 20-23 for the new [WIE Poster Series](#).**

Please visit our website at <http://www.ieee.org/women>

## Message from IEEE WIE Chair.

**AWESOME** (adjective): extremely impressive, inspiring great admiration. Synonyms: great, brilliant, terrific.

What a fabulous word to highlight engineers and our incredible impact on society! If you haven't checked out the profiles of awesome women who are making a difference in the world today, please take a look at our recently published WIE eBook: <http://www.ieee.org/ns/periodicals/WIE/issue1/index.html>

'Celebrate Awesome' is the theme for 2013 National Engineers Week, which is celebrated February 17-23 in the United States. This week-long celebration of engineering includes many different events all across the country.



Think about participating in the following:

### INTRODUCE A GIRL TO ENGINEERING DAY

Introduce a Girl to Engineering is a national movement that shows girls how creative and collaborative engineering is and how engineers are changing our world.

- [Resources for Girls, Teachers, Parents](#)
- [Día para Presentar una Niña a la Ingeniería](#)
- [Brownie try-it experiments for young girls](#)
- [Techbridge](#)

### GLOBAL MARATHON

The Global Marathon for, by and about Women in Engineering in Technology is a 24-hour "conversation," done through a combination of live Internet chats, webcasts, teleconferences and pre-recorded sessions on issues for, by and about women in engineering and technology, which are accessible to a worldwide audience.

This year's topics include: (a) Leadership: Never underestimate the power of example; (b) Emerging leaders & entrepreneurs: Inspiration at Work & University; and (c) One woman at a time: Change the World ([www.inxpo.com/events/globalmarathon](http://www.inxpo.com/events/globalmarathon))

### OTHER IDEAS

- Contact a teacher or principal to speak at a local elementary, middle or high school and provide hands-on experiments relevant to engineering and careers.
- Present a demonstration for high school science and math clubs.
- Contact a middle- or high-school and offer to have a student shadow you on the job.
- Open your college engineering lab for public tours.
- Contact your employer's internal communications staff and let them know when Engineers Week will occur. Present ideas for ways to celebrate the company's achievements.
- Contact a high school guidance counselor. Offer to talk with students and provide Engineering & You brochures or an Engineers Week video for the guidance office.
- Participate in an engineering fair at a local college. Many engineering schools host such fairs during Engineers Week.
- Contact a local speaker's bureau (try the Chamber of Commerce) and offer to speak before local civic and business groups.
- Plan a special recognition luncheon in your office and invite the CEO or chief technical officer to participate.
- Wear an Engineers Week t-shirt or cap.

I think this is also a good time for personal reflection. At the first "Enhancing the Sustainability of Women in Technology" conference held jointly by IEEE WIE and Google at the awe-inspiring Google Headquarters in Mountain View, CA (Thanks, Google!), we heard from awesome presenters who are making a difference in our communities and who challenged us to form communities, dream big, mentor others, share our stories, create social change, encourage students, love our work, enhance humanity through technology and touch the lives of others. I hope you stop to celebrate your awesome achievements, thank those who inspired you, share a personal success story and marvel at the impact you have in the lives of those around you.

Have a blast celebrating awesome!



nita.patel@ieee.org

## Joint IEEE WIE/Google Event: “Enhancing the Sustainability of Women in Engineering Conference”

The joint IEEE WIE/Google Event: Enhancing the Sustainability of Women in Engineering began on January 23, 2013 with a warm welcome by Ramalatha Marimuthu and Karen Panetta, co-chairs of the event as well as past WIE chairs. Approximately two hundred conference attendees got a first-hand glimpse of Google Headquarters located in Mountain View, California USA and its unique campus setting for this two-day event. Megan Smith, vice president, New Business Development, Google, kicked off the conference with an inspiring keynote on recognizing the importance of visibility and networks when discussing enhancing/improving the role of women within a community.



Marimuthu, Smith & Panetta

Smith spoke about Google’s networking initiatives and how they might correlate to recognizing and enhancing the impact women have had on communities throughout time. Following Smith’s speech, Lamia Youseff, also from Google, spoke on the different data analysis tools available from Google, i.e., MapReduce, Pregal, Dremel, etc. After this in-depth technical presentation on available cloud resources, Google’s Raquel Romano presented on different initiatives at Google regarding technology benefiting humanity and some of the challenges that come with providing real-time data to support such efforts (the humanitarian arm of Google, check out more at <http://www.google.org/>).

Following a wonderful lunch and a quick opportunity to network with women attending from all over the United States, Dr. Jeffrey Voas presented a story about the importance of standards and networks (and the importance of storytelling in getting your message across) in a presentation tracking the customization of smart-phones for intolerant environments (i.e., in military applications). Jennie Se, professor, Arizona State University, presented a fascinating talk about neural computing and how the brain’s neural network plays a part in trial-and-error learning. Pamela Jones, IEEE WIE Computer Society liaison, concluded the first day of the conference with a presentation on the importance of mentoring and a

reminder that each of us makes a difference, whether we know it or not.

The last day of the conference began with a presentation on IEEE’s Cloud Computing Initiative, and general manager, Industry Standards Office, EMC Corporation. This informative presentation was followed by an inspiring talk by Jim Watson, president, Watson Associates, and founding father of IEEE’s Student Professional Awareness Conferences (SPACs). Ramalatha Marimuthu, a professor at Kumaraguru College of Technology and 2012 IEEE WIE chairperson, spoke about several initiatives in India to promote the role of women in society and her personal quest to use technology to provide resources for autistic and dyslexic individuals.



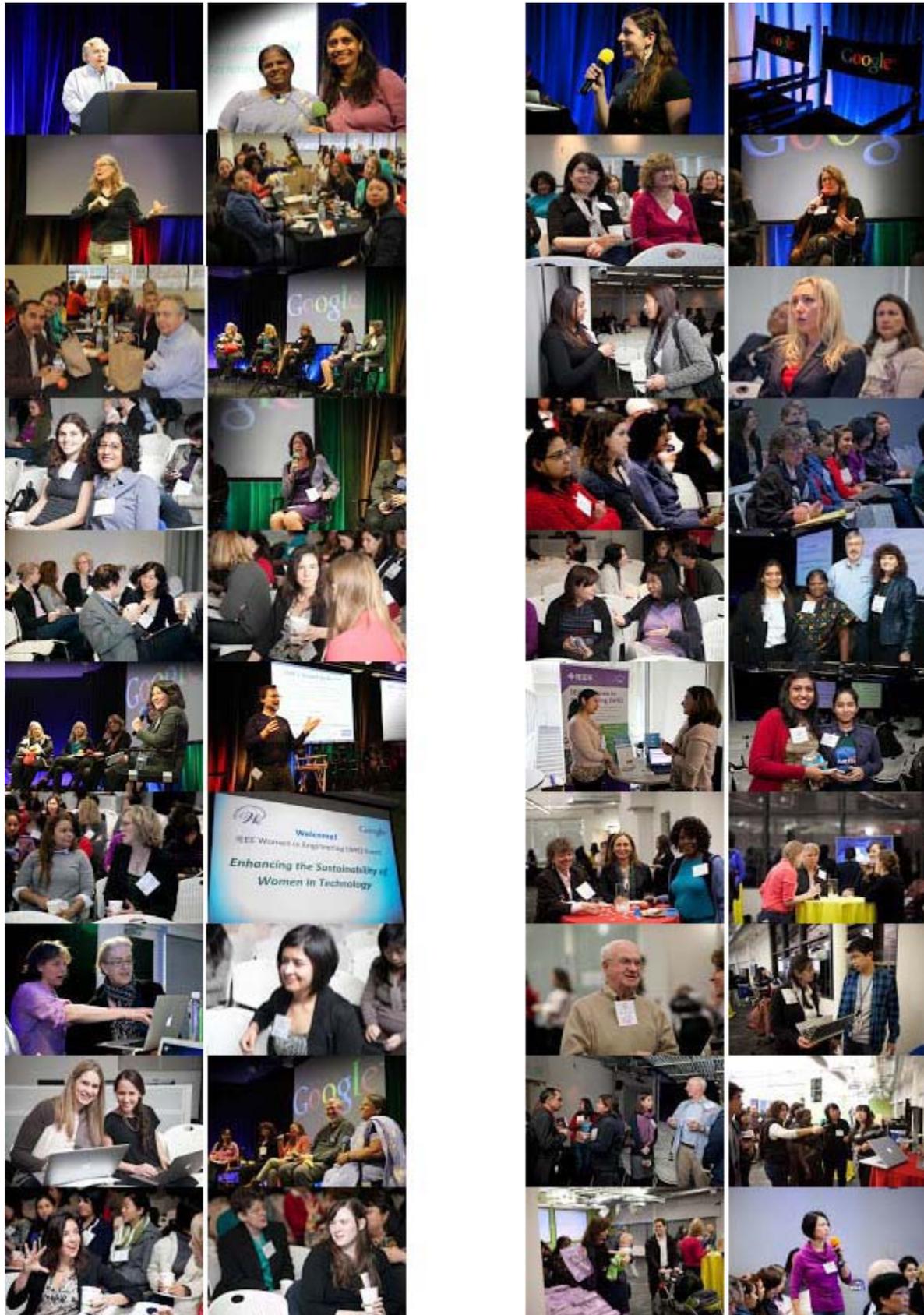
Baker-Harvey & Youseff

Miche Baker-Harvey, software engineer, Google, shared practical and applicable thoughts on “how to land your dream job” through personal stories of her own journey with the following key point: Identify your passion and go after it. A prestigious panel discussing topics of work/life balance and thoughts on how to pursue your dreams followed Miche’s high-energy presentation. Janet Flores, Global Accounts manager, Rockwell Automation, chaired the panel. Sue Shimoyama, vice president, Global Sales Operations, Rockwell Automation; Sheryl Chamberlain, senior director, Operations, EMC; Mary Pat Farrell, vice president, Sales, Rockwell Automation; and Bozenna Pasik-Duncan, professor of Mathematics, University of Kansas, spoke about their personal career journeys, the need to find a support community, and the importance of flexibility and prioritization.

The conference provided professional women an opportunity to network; learn about the latest technical developments in Cloud Computing; understand the many humanitarian applications of technology; and, to discuss topics of concern for many working professionals. This successful and inspiring conference would not have been possible without the vision and dedication of many volunteers and the hard work of WIE staff, Keyana Tennant and Paola Bringas. – **Submitted by Nita Patel, IEEE WIE Chair**

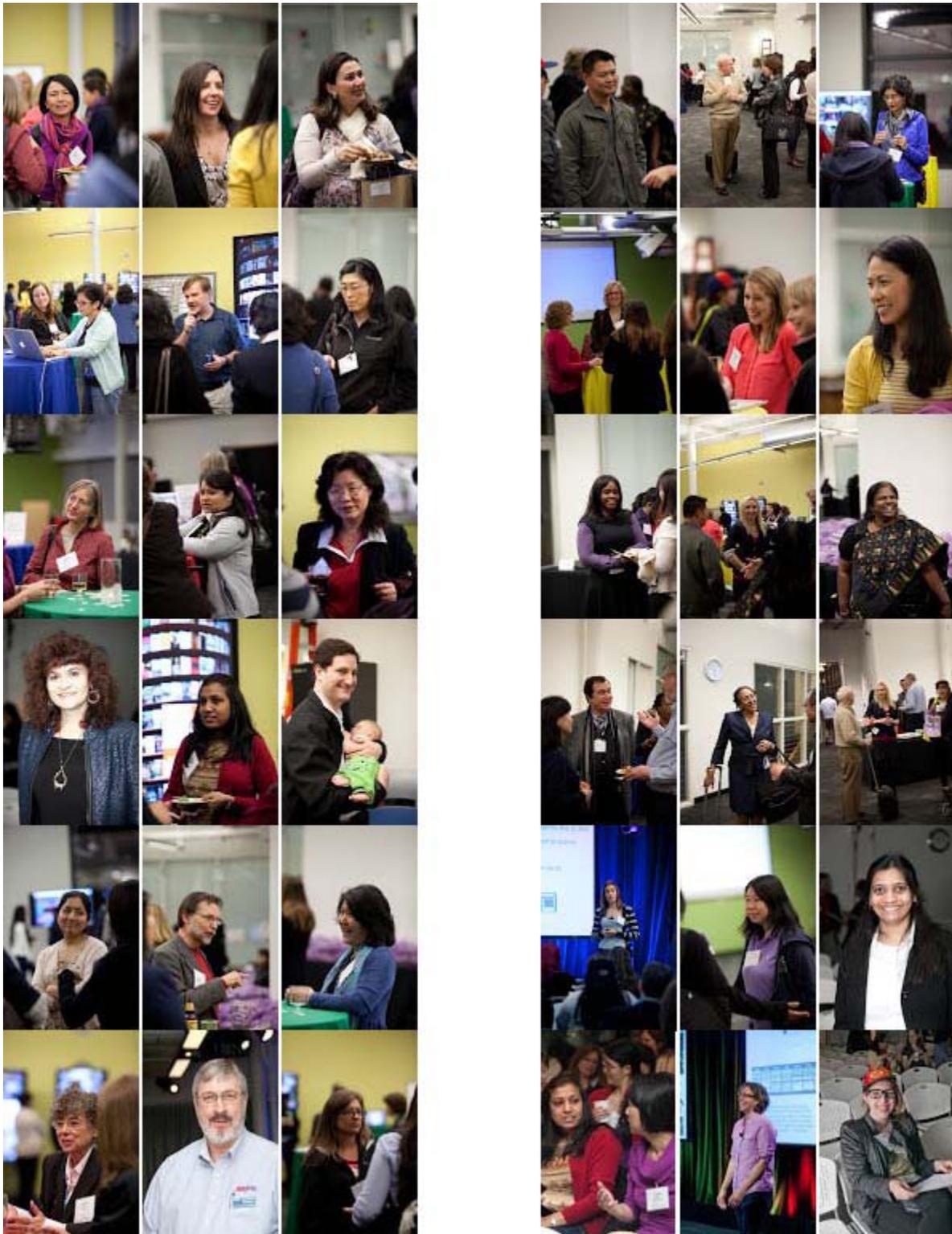
Please visit our website at <http://www.ieee.org/women>

## Joint IEEE WIE/Google Event: “Enhancing the Sustainability of Women in Engineering” Conference



Please visit our website at <http://www.ieee.org/women>

## Joint IEEE WIE/Google Event: “Enhancing the Sustainability of Women in Engineering” Conference



Please visit our website at <http://www.ieee.org/women>

Quote of the Month

*"We should always have three friends in our lives – one who walks ahead who we look up to and follow; one who walks beside us, who is with us every step of our journey; and then, one who we reach back for and bring along after we've cleared the way."*

-- Michelle Obama

**Psst.... Send in a picture of your WIE Affinity Group to be featured in the IEEE WIE Newsletter!**

**What group will be featured next month?**



IEEE Power & Energy Society  
**SCHOLARSHIP PLUS INITIATIVE™**

Preparing the Next Generation of Power & Energy Engineers

**IEEE Power & Society Scholarship Plus Initiative.** A Scholarship for Electrical Engineering Students in the US. Do you have what it takes to qualify for the PES Scholarship Plus Initiative™? If so, you can receive up to three years of financial support (total of US\$7,000) and gain career experience through internships and co-op work. If you're an undergrad in electrical engineering or considering it, you're eligible for

scholarship money and real-world experience in one of the most rewarding and future-facing careers for young graduates.

[Find out how.](#)

## code jam

print "hello, world!"

**Google's Code Jam. Save the Date:**

Google's [Code Jam](#) competition brings the world's coding community together to solve tough, algorithmic puzzles. Mark your calendars because registration for [Code Jam 2013](#) is less than one month away and you're invited to compete!

Tens of thousands of contestants compete annually to make it through three online rounds of puzzles. The top 1,000 win a Code Jam 2013 t-shirts but only the top 25 contestants compete onsite in Google's London office plus the chance to take home the \$15,000 grand prize. For more information about Google Code Jam and to register on March 12, please [visit the Code Jam website](#), join the Code Jam Community on G+ or follow/like our Twitter/Facebook page.



### International Women's Hackathon 2013

February 22–24, 2013 | Worldwide on university campuses

[International Women's Hackathon](#) kicks off during Engineering Week February 22<sup>nd</sup> -24<sup>th</sup>

**Microsoft Research, National Center for Women & Information Technology, Association for Computing Machinery Council on Women, Institute of Electrical and Electronics Engineers Women in Engineering, Microsoft Imagine**

**Cup and Skype are pleased to support the first annual International Women's Hackathon.**

The U.S. Bureau of Labor Statistics predicts that by 2018 there will be 1.4 million open technology jobs in the United States and, at the current rate of students graduating with degrees in computer science, we will fill only 29 percent of those openings with women graduates in computer and information science. We have created a kit to help you organize your local event and connect to all the International events. You get to determine how you want to organize your local hackathon; it can be as small as 16 women to as large as hundreds, use this kit as a guide to help you but you get to decide how best you want to launch your local hackathon. Keep it simple, fun and we look forward to learn from you so we can make this an annual event. We hope you will join us! More information visit: <http://research.microsoft.com/women-s-hackathon2013> or email [ranej@microsoft.com](mailto:ranej@microsoft.com) rules and regulations will be available on the website on January 25, 2013.

### IEEE Women in Engineering Frances B. Hugle Scholarship Award Program.

To commemorate its 25<sup>th</sup> year anniversary, TechSearch International has partnered with IEEE Women in Engineering (IEEE WIE) to form the IEEE Frances B. Hugle Engineering Scholarship Award.

This scholarship is in honor of the memory of pioneering legend Frances B. Hugle, an American serial inventor, scientist and engineer. TechSearch and its founder, E. Jan Vardaman, seeded the scholarship with a \$5,000 donation this year. The objective is to raise \$100,000 over the next few years to fully fund the scholarship award program.

This scholarship is established to encourage young women to follow in Hugle's footsteps and pursue their interest in Engineering. The IEEE

*Please visit our website at <http://www.ieee.org/women>*

WIE Committee will administer the program, and will select one scholar annually to receive a \$2,500 scholarship grant beginning as early as 2013. The scholarship will be presented to one female student in her third year of undergraduate study in an Engineering curriculum at an accredited university or college in the United States of America. Student membership in the IEEE is required.

Financial endorsements of the scholarship are being sought from organizations and persons to join in to support young women entering the field of Engineering by making a donation to this program. The IEEE Foundation, a tax-exempt 501(c)(3) organization in the US, is accepting and managing the donations as indicated below:

1. Online at [www.ieee.org/donate](http://www.ieee.org/donate) by selecting the Frances B. Hogle Memorial Fund.

2. By check, payable to the IEEE Foundation - Frances B. Hogle Memorial Fund. The mailing address for check payments is: IEEE Foundation, 445 Hoes Lane, Piscataway, New Jersey USA 08854

To learn more about the IEEE Foundation, please visit [ieeefoundation.org](http://ieeefoundation.org), call the IEEE Development Office at +1 732-562-3915, or email [donate@ieee.org](mailto:donate@ieee.org).

Please note: This e-mail address is protected from spambots; JavaScript will need to be enabled. For more information on IEEE WIE, please visit [www.ieee.org/women](http://www.ieee.org/women).

**Call for WIE Webinar Presenters.** The WIE began conducting webinars this year during the summer of 2012. Each webinar includes a ten-minute introduction, and an hour long technical and/or non-technical session. WIE is looking for presenters! WIE has a dynamic membership with amazing talent and education whose participation as presenters would prove to be

valuable information that could be shared with others.

This information would offer great insight and knowledge to our members that would be of great interest to the public and the WIE membership. If you are interested in participating as a webinar presenter, please email Keyana Tennant at [keyana.tennant@ieee.org](mailto:keyana.tennant@ieee.org).

### WIE would love to Profile You.

WIE will highlight IEEE Women Technical Professionals in the IEEE WIE newsletter! In an effort to recognize IEEE women's achievements in STEM, the profiles will aim to increase the public's perception of women in STEM fields. This spotlight of women technical professionals:

- Aims to enhance the understanding of STEM careers.
- Describes how the work of engineers benefits humanity and makes a difference.
- Introduce IEEE women, hear their stories of why they were inspired to become technical professionals, learn about their work environments, and find out their advice to girls interested in technical fields.

The profiles submitted will need to contain the following information:

- Brief biography
- Why did you become a technical professional?
- What information or advice would you like to pass on to young girls interested in STEM?
- How does your work as a technical professional benefit humanity?

If you are interested in being highlighted in the newsletter,

please submit your profile to [keyana.tennant@ieee.org](mailto:keyana.tennant@ieee.org).

**Upcoming Awards of Interest.** Please view the upcoming awards listed below that may be of interest to WIE members and click on the link for each award for additional information:

**ACM SIGARCH Maurice Wilkes Award** - March 1, 2013: The award of \$2,500 is given annually for an outstanding contribution to computer architecture made by an individual whose computer-related professional career (graduate school or full-time employment, whichever began first) started no earlier than January 1st of the year that is 20 years prior to the year of the award. The award is presented annually at the International Symposium on Computer Architecture Awards Banquet.

**IEEE Fellows** - March 1, 2013: At the time the nomination is submitted, a nominee must: 1) have accomplishments that have contributed importantly to the advancement or application of engineering, science and technology, bringing the realization of significant value to society; 2) hold **IEEE Senior Member or IEEE Life Senior Member grade**; 3) have been a member in good standing in any grade for a period of five years or more preceding 1 January of the year of elevation.

**WITI Hall of Fame** - March 1, 2013: Key leaders in science and technology will be honored at the 18th Annual WITI Hall of Fame Awards Dinner on Monday, June 3, 2013 in conjunction with **WITI's Annual Women Powering Technology Summit in the Silicon Valley**. The WITI Hall of Fame was established in 1996 by WITI to recognize, honor, and promote the outstanding contributions women make to the scientific and technological

communities that improve and evolve our society.

**NSERC Canada Gerhard Herzberg Award** - March 1, 2013: The NSERC Herzberg Medal is awarded annually for both the sustained excellence and overall influence of research work conducted in Canada in the natural sciences or engineering. The Gerhard Herzberg Canada Gold Medal for Science and Engineering, NSERC's highest honor, recognizes research contributions characterized by both excellence and influence—two qualities that defined Dr. Herzberg's illustrious career. It is awarded annually to an individual who has demonstrated sustained excellence and influence in research for a body of work conducted in Canada that has substantially advanced the fields of natural sciences or engineering.

**ACM SIGMETRICS Lifetime Achievement Award** - March 1, 2013: Presented annually at the SIGCHI conference to recognize outstanding contributions to the study of computer human interaction, and includes a plaque and a \$5,000 honorarium.

**ACM Senior Member** - March 1, 2013: The ACM Senior Member program, initiated in 2006, includes members with at least 10 years of professional experience who have demonstrated performance that sets them apart from their peers through technical leadership, and technical or professional contributions. As one of ACM's prestigious **Advanced Member Grades**, ACM Senior Member status recognizes the top 25% of ACM Professional Members for their demonstrated excellence in the computing field. Along with **Fellows** and **Distinguished Engineers, Scientists, and Members**, ACM's Senior Members join a distinguished list of colleagues to whom ACM and its members look for guidance and leadership in computing and information technology.

**ACM SIGMOBILE Outstanding Contribution Award** - March 15, 2013: The SIGMOBILE Outstanding Contribution Award is

given for significant and lasting contributions to the research on mobile computing and communications and wireless networking.

**ACM SIGMOBILE Rockstar Award** - March 15, 2013: The RockStar Award is a new SIGMOBILE Award. The SIGMOBILE RockStar award recognizes an individual who has made recent outstanding research or product contributions to the field of mobile computing during the early part of his or her career.

**ACM-IEEE CS Eckert-Mauchly Award** - March 30, 2013: This is a technical award and the award nomination requires a minimum of 3 endorsements. A certificate and \$5,000 are awarded jointly by the ACM and the Computer Society for outstanding contributions to the field of computer and digital systems architecture. This award will be presented at the upcoming ISCA 2013.

**SIGCOMM Lifetime Achievement Award** - March 31, 2013: The SIGCOMM Award was initiated in 1989 as a means of honoring computer communication professionals for outstanding lifetime technical achievement in the fields of data and computer communications. The award consists of an engraved pyramid from Tiffany's and a \$2,000 honorarium. The award will be presented at the annual SIGCOMM Conference, at which time the awardee is invited to deliver a technical address.

**SWE Awards** - March 31, 2013: SWE Awards celebrate the lifelong contributions women engineers and technologists make to our society—and our world. We encourage and reward advancements in technological innovation, leadership, education, work/life balance, outreach and diversity. The **2013 New Faces of Engineering Award** nomination form is now available.

## 2012 IEEE Lahore Section Newsletter is available.

We are pleased to announce that the IEEE Lahore Section Newsletter for 2012 is now released, covering the activities of the student branches for the year. Reports of GOLD and WIE activities are also included.

To view the IEEE Lahore Section Newsletter 2012, please click on the link below:

<http://www.flipsnack.com/my-flipping-books/details?flip=fum2u4ys>

Please visit our website at <http://www.ieee.org/women>

## **WIE “Love” Engineering! Do “You” Love Engineering, Too? Do Tell....**

Do you go to work every day and do what you love? Do you love what you do? Do tell. WIE want to hear about it! WIE are excited about Engineering and the many women that are a part of WIE! Women, who go to work every day and do what they love, and love what they do.

You are the essence of the WIE, the heart and soul of what makes the purpose and mission of the WIE a reality. WIE delight in your success and your zest and passion for Engineering. And, we want to hear your personal stories so that they might be a means to guide, mentor, and encourage other women in engineering. In today's world, communication is at its peak, and so are technological advancements. But, behind all of this and the key to making this a reality are “people”, and they have a story to tell.... WIE want to hear about it.

WIE would like to profile your accomplishments in the monthly publication of the WIE Newsletter. WIE know that we have members out there who are doing a great job in the many fields and faceted disciplines of Engineering, and we want to recognize you within the WIE Community. If you or someone you know would like to share their story, WIE would be delighted to hear from you.

Please provide the person's name, job title, employment information, a picture, a summary of what the person does, and what the person likes about Engineering to be included in the monthly newsletter. WIE would like to profile members working in all facets of engineering, ranging from doctors, scientists, educators, engineers, analysts, technicians, support functions, etc. WIE will profile one to two individuals monthly. Send all correspondences to Keyana Tennant at [keyana.tennant@ieee.org](mailto:keyana.tennant@ieee.org) or Paulette January at [paulette.january@drs-c3.com](mailto:paulette.january@drs-c3.com).

## **WIE Featured Person of the Month.**

Greetings from WIE Regional Coordinators were included last month in the 60<sup>th</sup> issue of the IEEE WIE newsletter, and each greeting will be individually highlighted as part of the WIE Featured Person of the Month. Look to hear from other regional coordinators in upcoming months as part of the WIE Featured Person of the Month.

### ***Greetings from WIE Regional Coordinator 5***

**Name:** Maura Schreier-Fleming

**Occupation:** Sales Consultant and business writer, Author of *Real-World Selling for Out-of-this-World Results* and *Monday Morning Sales Tips*

**Company/University employed by:** Best@Selling

**Region(s) supported:** Region 5

**Area(s) covered by each Region:** USA - Texas, Oklahoma, Arizona, Louisiana, Colorado, Missouri

**How long have you worked in this field?** Since 1997

**What fascinates you or what do you think is fun about Engineering?** Working with equipment

**What motivates you to help and encourage the kids of today to pursue their dreams?** If you work at what you love, you will never work a day in your life.

**What is one fun thing you would tell a kid to do when they feel that studies are overwhelming or a bit too challenging?** Get help. There's no prize for struggling to teach yourself a tough concept. Get someone who is a good teacher to explain it to you. There's more than one way to teach a difficult concept and often there's another person who can explain the concept just the way you need to understand it.

**Is there anything special that you are planning for your region in 2013 or an upcoming event that you want to ensure that the WIE is aware of?** Not just yet.

## WIE AROUND THE WORLD

- News from IEEE WIE Section Affinity Groups
- News from IEEE WIE Student Branch Affinity Groups



## WIE Day 2012 held by WIE UET in Lahore, Pakistan



The WIE Affinity Group at the University of Engineering and Technology (WIEUET) came up with the exciting idea of celebrating "WIE Day" for the first time in Lahore Pakistan, in collaboration with the WIE Lahore Section. All WIE branches were invited and provided with the chance to interact with one another in hopes for a better and more secure future. The event was a huge success in bringing all branches under the WIE Lahore Section together, and gave



them a chance to join hands and participate in the creative activities organized by the teams.

Many professionals were invited as guests to share their working experience as female engineers. Their addresses motivated the audience and they were encouraged to participate in future WIE activities. Ms. Mehwish Zahoor, chairperson, WIE Lahore Section, Ms. Farhat-ul-ain, working at a renowned software house, and Ms. Sehar Idrees, counselor, WIE UET, were the chief guests of the ceremony.

The event's focus was to hold a WIE Training Session by the WIE Lahore Section, in which all branches shared information about their upcoming activities and discussed the problems they faced in running their respective WIE

Please visit our website at <http://www.ieee.org/women>

branches. Ms. Javeria, treasurer, and Ms. Adila Shaukat, secretary, both of WIE Lahore Region, answered all questions and removed any ambiguities that may have made exercising of the operations of the branch operations difficult.



After the discussion, every branch gave a summarizing presentation about their branch activities and inspired everyone. There was also a fun activity arranged by WIE GCUL. Ms. Farhat-ul-ain gave a lecture on CV-writing and research paper writing which turned out to be very helpful to attendees. The event ended with a cake cutting ceremony, refreshments and appreciative feedback by the attendees. --Submitted by: **Bushra Nayab Chairperson, IEEE WIE UET, Lahore**

2012. Approximately 30 IEEE members from Venezuela, Colombia and Ecuador attended the event.

The Reunion's objective was to gather women engineers or engineering students from the Andean Region to foster their participation and permanence in these areas of knowledge. As part of the reunion, four activities were organized: a poster contest; a talk with a Latin-American woman of success namely, Angélica Natera; a ginkana, and held an Andean Cosmology workshop.



## First WIE Andean Reunion held by UPS WIE in Cuenca,



The First WIE Andean Reunion took place on November 6-7, 2012, at the Universidad Politécnica Salesiana in Cuenca, Ecuador. The event was part of ANDESCON



Please visit our website at <http://www.ieee.org/women>



Universidad del Magdalena-Colombia, and Universidad Católica de Cuenca-Ecuador. To select the winning poster, two criteria were followed: the number of “Likes” on the Anderson’s Facebook page, and the number of WIE Region 9 votes.

The event concluded with a presentation entitled “Experiences of a Latin-American Woman of Success” presented by with Angélica Natera, associate director, Academic Innovation-LASPAU (affiliated with Harvard University). In this talk, Angélica presented several aspects she had learned in her personal and professional life. Having the opportunity to share experiences with a role model like her was awesome! She gave some great advice that is sure to be useful. WIE Ecuador sends wholehearted thanks to Angélica for her help. --*Submitted by Elena Duran*



## First Meeting of Women Engineers at CAPANA held in Managua, Nicaragua

Within the framework of the Thirty-Second Convention of Central America and Panama of Electrotechnology, CONCAPAN IEEE 2012, was held on November 15, 2012 in the city of Managua, Nicaragua. This event was titled the “First Meeting of Women in Engineering”, with delegates representing the Council of Central America and Panama (CAPANA) and included representatives from Guatemala, El Salvador, Honduras, Costa Rica and Panama.



As part of a previous activity, the WIE Ecuador Section organized the poster contest: “Yo cambio el mundo. Soy una Ingeniera”. It was a great success! The idea of this contest was to obtain WIE promotional materials in Spanish. Four universities participated: Universidad Simón Bolívar-Venezuela, Universidad Distrital-Colombia,

The First Meeting of Women Engineers began with a lecture by Sandra Vega focusing on the mission, vision, of women in engineering. She emphasized strengthening the group and started with the recognition of engineers with experience in industry, academia and government, and stimulating the active participation of students and professionals in the local activities of WIE.

For the second half of the meeting, the group was divided into two teams for a brainstorming workshop to facilitate the development of membership, invite students and professionals to join WIE, and collaborate to organize local activities. The session focused on how to achieve visibility, social networking, and highlight how WIE is involved in achieving the mission of IEEE. The discussion presented how through talks and professional development techniques usually organized by volunteers, that these activities benefited the members of their student branches.

Please visit our website at <http://www.ieee.org/women>



Delegates – WIE CAPANA

Conclusions of WIE CAPANA event were as follows:

1. Support the creation of a WIE affinity group in the countries of Nicaragua, Guatemala and El Salvador.
2. Activities of leadership and empowerment within WIE events: CAPANA CONESCAPAN and CONCAPAN.
3. Support the holding of the meeting of WIE under the Regional Meeting in El Salvador, September 2013.
4. Monitor the TISP program in the next CONESCAPAN continuing in Costa Rica, 2013.
5. Give more visibility to WIE in all activities in each section CAPANA.
6. Implement the ideas of the workshop: "Brainstorm" in local WIE Affinity Groups.
7. Maintain close contact with others responsible in CAPANA WIE through email and social networks.
8. Create e-tools in sections, websites, social networks, IEEE e-notice, publications, and mass mailings to increase WIE positioning in sections.
9. Sharing local experiences in the development of activities in order to emulate these actions in all of WIE CAPANA.
10. Continue the synergy of the First Meeting of WIE to maintain partnership and mutual motivation.

#### Brainstorming Workshop





WIE Promotional Items



Please visit our website at <http://www.ieee.org/women>

**WIE PC Wallpaper Is Now Available.** The IEEE Women in Engineering Wallpaper is now available for use. You may use this on your PC and share with others. If you require a different format size, please contact Keyana Tennant at [keyana.tennant@ieee.org](mailto:keyana.tennant@ieee.org). Enjoy!



## WIE RESOURCES

Scholarships, Internships, Grants & Awards For Girls

Informative Publications History

Women in Engineering Statistics

Women in Science/Engineering Societies & Groups

Mentoring & Educational Resources

National Engineers Week/EWeek Activities

[More Interesting Links](#)

[Electronics & Electrical Engineering Laboratory \(NIST\)](#)

[Science and Technology Resources](#)

[Engineer Your Life](#)

[Women and Minorities in Science and Engineering](#)

## IEEE GEOGRAPHICAL EVENTS AND ACTIVITIES

MGA - Region Meetings Calendar

[http://www.ieee.org/web/volunteers/mga/home/meetings\\_calendar.html](http://www.ieee.org/web/volunteers/mga/home/meetings_calendar.html)

### LET'S ANSWER A RIDDLE.

*What does a polite doctor say when he is about to operate?  
Answer: "May I cut in?"*

### CAN YOU FIGURE THIS RIDDLE?

*What should you say when the Statue of Liberty sneezes?  
(Tune in next month for credits and the answer.)*

**IEEE WIE Committee.** The IEEE Women in Engineering Committee (WIEC) consists of 10 voting members appointed by the Board of Directors. The WIEC is responsible for facilitating the development of programs and activities that promote the entry into and the retention of women in engineering programs, enhance the career advancement of women in the profession, and promote IEEE membership and retention of IEEE women members.

Please visit our website at <http://www.ieee.org/women>

**WIE Committee Members - 2013**

Nita Patel, Chair  
 Ramalatha Marimuthu, Past Chair (2011-2012)  
 Parveen Wahid (2012-2013)  
 Bernadette Bouchon-Meunier (2012-2014)  
 Deepa Shenoy  
 Nury Ramirez  
 Takako Hashimoto  
 Noel Schulz (TAB) (2012-2013)  
 Prabhathy Viswanathan, Student Member (2012-2013)

**WIE Staff**

Keyana Tennant, Program Manager – WIE  
 Paola Bringas, Administrative Assistant – WIE

**WIE Project Champions – 2013**

Dr. Karen Panetta, Editor, WIE Magazine  
 Keyana Tennant, Associate Editor, WIE Magazine, WIE Newsletter  
 Paulette January, Editor, WIE Newsletter  
 Stephanie White, Awards

**2013 WIEC Liaisons**

EAB – TBD  
 IEEE-USA - TBD  
 Carmen S. Menoni (PSPB)  
 Pamela Kumar – Standards Association  
 Noel Schulz (TAB) (2012-2013)

**2013 WIE Regional Coordinators**

Darlene Rivera (Region 1)  
 Katherine Duncan (Region 2)  
 Anastasia Davis (Region 3)  
 F; Ayhan Sakarya (Region 4)  
 Maura Schreier-Fleming (Region 5)  
 Shirin Tabatabai (Region 6)  
 Zahara Ahmadian (Region 7)  
 Joyce Mwangama (Region 8)  
 Nury Ramirez (Region 9)  
 Takako Hashimoto (Region 10)

**2013 Society Coordinators**

AEROSPACE & ELECTRONICS SYSTEM SOCIETY, TBD  
 ANTENNAS AND PROPAGATION SOCIETY, Parveen Wahid  
 BIOMETRICS COUNCIL, TBD  
 BROADCAST TECHNOLOGY SOCIETY, TBD  
 CIRCUITS AND SYSTEMS SOCIETY, Pamela Abshire  
 COMMUNICATIONS SOCIETY, Marie-Jose Montpetit

COMPONENTS, PACKAGING, AND MANUFACTURING TECHNOLOGY SOCIETY, TBD  
 COMPUTATIONAL INTELLIGENCE SOCIETY, Jennie Si  
 COMPUTER SOCIETY, TBD  
 CONSUMER ELECTRONICS SOCIETY, TBD  
 CONTROL SYSTEMS SOCIETY, Linda Bushnell  
 COUNCIL ON ELECTRONIC DESIGN AUTOMATION, Ayse Coskun  
 COUNCIL ON SUPERCONDUCTIVITY, Cathy Foley  
 DIELECTRICS AND ELECTRICAL INSULATION SOCIETY, Azam Nekahi  
 EDUCATION SOCIETY, Lynne Slivovsky  
 ELECTRON DEVICES SOCIETY, Thuy Dao  
 ENGINEERING IN MEDICAL AND BIOLOGY SOCIETY, Lisa Lazareck  
 GEOSCIENCE SOCIETY, Gail S. Jackson  
 INDUSTRIAL ELECTRONICS SOCIETY, Leila Parsa  
 INDUSTRY APPLICATIONS SOCIETY, Janet Flores  
 INFORMATION THEORY SOCIETY, TBD  
 INSTRUMENTATION AND MEASUREMENT SOCIETY, Ferdinanda Ponci  
 INTELLIGENT TRANSPORTATION SYSTEMS SOCIETY, Emily Sopensky  
 MAGNETICS SOCIETY, TBD  
 MICROWAVE THEORY AND TECHNIQUES SOCIETY, Rashaunda Henderson  
 NANOTECHNOLOGY COUNCIL, Carmen Lilley  
 NUCLEAR AND PLASMA SCIENCES SOCIETY, Allan Johnston  
 OCEANIC ENGINEERING SOCIETY (OE), Marinna Martini  
 PHOTONICS SOCIETY, Hatice Altug, Ph. D.  
 POWER ELECTRONICS SOCIETY, Maryam Saeedifard  
 POWER & ENGINEERING SOCIETY, Shay Bahramirad  
 PRODUCT SAFETY ENGINEERING SOCIETY, TBD  
 RELIABILITY SOCIETY, Marsha Abramo  
 ROBOTICS AND AUTOMATION SOCIETY, Xiaorui Zhu (2012-2014)  
 SENSORS COUNCIL, TBD  
 SIGNAL PROCESSING SOCIETY, TBD  
 SOCIAL IMPLICATIONS OF TECHNOLOGY (SSIT), TBD  
 SOLID STATES CIRCUIT SOCIETY, Wanda Gass  
 SYSTEMS COUNCIL, Stephanie White  
 SYSTEMS, MAN AND CYBERNETICS SOCIETY (SMCS), Maria Pia Fanti  
 TECHNOLOGY MANAGEMENT COUNCIL, Jennifer Trelewicz  
 ULTRASONICS, FERROELECTRICS, AND FREQUENCY CONTROL SOCIETY (UFFC), TBD  
 VEHICULAR TECHNOLOGY SOCIETY, Carmella Cozzo

*EXCITED ABOUT WIE?*  
*Do you want you to*  
*have some fun.....*



Welcome to Nerd Girls  
 Reality Television!

Hey **ENGINEER GIRL**,  
 Check Out These **PROFILES!**

View more information on [Engineer Girl](#) or find Women Engineer profiles.

Turn imagination into reality with a future in engineering!  
 You'll have the power to make a difference!



By becoming an engineer, you can help solve problems that are important to society. You could be controlling and preventing pollution, developing new medicines, creating advanced technologies, even exploring new worlds.

You'll have money and job security! You'll be working with other talented people! You'll have lots of options!

**You'll get to do cool stuff!**

Engineers will be involved in making all the wonders of the future a reality. Interested? Visit the website below for Engineer Girl at: <http://www.engineergirl.org/>



Learn More about the IEEE WIE **STAR** Program!



*WIE is coming to IEEE TV.*  
 Look for programming information coming your way soon!

Please visit our website at <http://www.ieee.org/women>

## IEEE WIE ASSISTANCE.

### The IEEE GirlsGoEngineering.org Project

IEEE GirlsGoEngineering.org Project, a pre-university science, technology, and engineering education and career preparation program of the IEEE, was founded in 2008 by IEEE Region 3 and the IEEE Richmond Section.

IEEE GirlsGoEngineering.org will provide girls, teens, educators, and adult leaders with programs, activities, material, and web resources to:

- Develop in girls an appreciation for engineering principles.
- Enable girls to learn to enjoy engineering practices.
- Energize girls toward careers in engineering, mathematics, and the physical sciences.

Find out more at: <http://girlsgoengineering.org/about/index.html>.



#### WIE Magazine Received APEX Award 2008, 2010, 2011, and 2012.

IEEE Women in Engineering Magazine includes topics that show the cross-cutting and interdisciplinary nature of engineering, containing articles that integrate engineering with current issues facing society such as Careers, Health Care, Medicine, Law, Governance, as well as international women's issues. For advertising, visit <http://www.ieee.org/ieee-media> and scroll down to the WIE Cover.

## The Engineer's Pledge

Engineer Your Life *"Dream big. Love what you do."*

Do you want to help give engineering a better image? Do you want to let people

know how exciting and rewarding an engineering career can be? Then change the way you talk about engineering!

Take the Engineer's Pledge. For more information on the Engineer's Pledge, please visit Facebook at: <http://www.facebook.com/pages/The-Engineers-Pledge/139865679358530?ref=ts#!/pages/The-Engineers-Pledge/139865679358530?v=info&ref=ts>.

## Awards, Scholarships and Competitions

IEEE offers a variety of awards, competitions, contests, scholarships and fellowships. Many are offered to IEEE student members, such as the Regional Student Paper Contests and the Student Enterprise Award. You will find contact information for each award listed when you click on the link. Two Student Branch awards to get you more involved include the [Darrel Chong](#) Student Activity Award and the [IEEE Xtreme](#) 24 hour Programming Challenge.

Please visit our website at <http://www.ieee.org/women>

## TryEngineering.org



The IEEE and IBM have created a new Web site that combines information on engineering careers with interactive activities. Intended for pre-university students, parents, teachers, school counselors, and the general public, TryEngineering.org lets visitors explore how to prepare for an engineering career, ask experts engineering-related questions, play interactive games, and more. Visit [www.tryengineering.org](http://www.tryengineering.org) today!



## Career and Employment Resources

The IEEE offers a range of opportunities for members and others interested in advancing their careers or finding employment. If you don't find what you're looking for here at <http://careers.ieee.org>, be sure to visit the [IEEE Education](#) section or [IEEE-USA](#) for additional resources to support your professional journey. **IS YOUR SALARY ON TARGET?** Check out the [IEEE-USA Salary Service](#) ... Click on this link to take the [IEEE-USA Salary Survey](#).



## View Premiere Issue of IEEE Women in Engineering Magazine

[Call for Articles](#)



## IEEE memberNet - The IEEE Member Directory Online

IEEE memberNet is an online search and networking tool that allows members to connect with technical and engineering experts worldwide. This tool can be utilized by members seeking peers who share a common technical interest, membership, or affinity. Visit the website at <http://www.ieee.org/web/membership/memberNet.html>

**IEEE eLearning Library (formerly Expert Now).** To view all available tutorials in the IEEE eLearning Library, please visit <http://iee-elearning.org/> and login with your IEEE Web Account.

facebook

WIE is now on Facebook! The WIE is on Facebook.

Please join us at our recently launched WIE Facebook Page at <http://www.facebook.com/home.php?#!/pages/IEEE-Women-in-Engineering/150443418299658?ref=ts>



IEEE Global History Network provides an opportunity for IEEE members to tell in their own words stories of their involvement in technology at <http://www.ieeeahn.org/wiki/index.php/Special:FirstHandHistories>.

Please visit our website at <http://www.ieee.org/women>

## 2012 IEEE WIE POSTER SERIES. NEW IEEE WIE POSTERS ARE NOW AVAILABLE.

Order your copies today for display and program events at <http://www.ieee.org/women>

**I am versatile.**



As an engineer, I have been able to use my expertise in a variety of applications—some are defense related, some agricultural, some environmental.

Advice to girls interested in technology:  
**"Work hard—there's a great payoff in the end."**  
 Kim Linder | Electrical and Mechanical Engineer

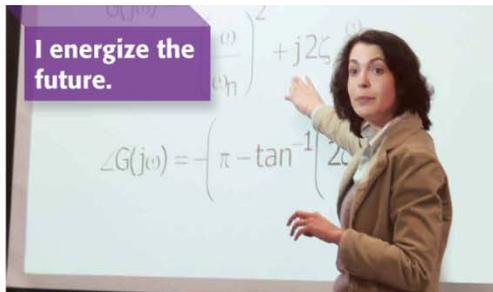
**I (really) use my imagination.**



"I love animals, animation, special effects, robotics, gymnastics, music, and dancing. Computer engineering lets me use all these interests to create really cool inventions that help people, communities, and the environment."

Advice to girls interested in technology:  
**"Be who you are on the inside, so you'll be happy on the outside."**  
 Karen Pasetta | Computer Engineer

**I energize the future.**



$$\frac{\omega}{\phi n} + j2\zeta \omega$$

$$\angle G(j\omega) = -\left(\pi - \tan^{-1} \frac{\omega}{\zeta \omega_n}\right)$$

"Energy is a primary need for every human being. Working on the betterment of energy means working on the enabler of a sustainable, good future for us all."

Advice to girls interested in technology:  
**"You'll be amazed how engineering brings out the best in you!"**  
 Fedihanda Poud | Electrical Engineer

# I Change the World. I am an Engineer.

**I strive for less.**



Elsa's work involves reducing energy use by researching data centers and the technologies impacting energy consumption.

Advice to girls interested in technology:  
**"Discover and develop your talents and don't be afraid to use them."**  
 Elsa Madrigal | Electrical Engineer

**I work with power.**



"I have an interest in the ability to power a nation, to define resources, and provide the basic utilities to all. Earth requires power—and so will the new planets that we populate in the future."

Advice to girls interested in technology:  
**"In my 20s, I lost my leg and continued my career. Don't give up."**  
 Janine Hiddlestone-Lea | Electrical Engineer

**I help humans and robots get along.**



"My passion is a field of study called robotics, which deals with the study of ethical and social implications of robotics...for safer and more positive human-robot interaction."

Advice to girls interested in technology:  
**"Be truly yourself."**  
 Abang Moon | Mechanical Engineering Ph.D. student

Read more about women in engineering at  
[www.ieee.org/women](http://www.ieee.org/women)

Poster Series sponsored by the IEEE Life Members Fund and the IEEE Foundation



**IEEE Women in Engineering**

IEEE WIE is the largest international professional organization dedicated to promoting women engineers and scientists.

Write to us at [women@ieee.org](mailto:women@ieee.org)



Please visit our website at <http://www.ieee.org/women>

**I work with friction stir processing.**



"My work includes non-destructive evaluation of weld quality using artificial intelligence and signal processing techniques at the Center for Friction Stir Processing."

Advice to girls interested in technology:  
**"Embrace the difficulties."**  
 Dr. Antonette Logar | Computer Science

**I nourish young minds.**



Prolific author of technical papers and renown in the field of control systems, Bozenna's contributions to bright minds and her solutions to complex technical problems have garnered many awards.

Advice to girls interested in technology:  
**"Do what you love to do, follow your passion."**  
 Dr. Bozenna Pasik-Duncan | Mathematician, Control Systems Engineer

**I live IT.**



Kathy is currently Deputy Program Manager for Missile Defense Agency Command, Control, Battle Management & Communications Spiral 8.2 Product Development

Advice to girls interested in technology:  
**"Stand out and highlight your intelligence."**  
 Kathy Land | Information Technology

# I Change the World. I am an Engineer.

**I design faster fibers.**



"I am a research engineer who designs new optical fibers, elevates their performance, and gives technical advice to support new standards."

Advice to girls interested in technology:  
**"Engineering jobs are interesting, rewarding, and helpful to humanity."**  
 Yi Sun | Communications Engineer

**I know nano.**



"One of my first undergraduate research projects was to grow zinc oxide nanowires using a low-temperature solution method. My senior thesis would later be designed around this work."

Advice to girls interested in technology:  
**"Ask as many questions as possible."**  
 Ashley Mason | Electrical Engineering Student

**I love collaboration.**



"Every day I get to see how our students and graduates are tackling the world's most pressing problems."

Advice to girls interested in technology:  
**"If you love engineering, you'll be great."**  
 Leah Jamieson | Computer Science and Electrical Engineer

Read more about women in engineering at [www.ieee.org/women](http://www.ieee.org/women)

Poster Series sponsored by the IEEE Life Members Fund and the IEEE Foundation



**IEEE Women in Engineering**  
 IEEE WIE is the largest international professional organization dedicated to promoting women engineers and scientists.  
 Write to us at [women@ieee.org](mailto:women@ieee.org)




**I work smart.**



Heather is a director of smart grid technologies and strategy. She leads research into technologies that improve electric systems and integrate renewable resources.

Advice to girls interested in technology:  
**"A degree in engineering is a great foundation."**  
 Heather Sanders | Electrical Engineer

**I partner with robots.**



"I wanted a career where I could merge my concern for people with my strong interest in technology, then I learned about human-robot interaction research."

Advice to girls interested in technology:  
**"Have confidence in yourself!"**  
 Cindy Bethel | Computer Science and Engineering

**I chose not to be a lawyer.**



Patricia's work supervising the operation and maintenance of electrical infrastructures makes oil exploration more reliable, which can help provide a better quality of life for her native Brazil.

Advice to girls interested in technology:  
**"Be flexible enough to accept change, and get involved."**  
 Patricia Lins | Electrical and Mechanical Engineer

# I Change the World. I am an Engineer.

**I test cold light.**



"I am the lead reliability and test engineer for the lighting program at Ingersoll Rand Climate Solutions, evaluating LED products specifically designed for refrigeration."

Advice to girls interested in technology:  
**"Don't allow stereotypes to determine the course of your life."**  
 Yoelle Hebert | Reliability and Test Engineer

**I lead.**



Pamela is not only a Lead Software Engineer, she enjoys leading roles with the IEEE Computer Society, the Technical Council on Software Engineering, and in her science, technology, engineering, and mathematics community.

Advice to girls interested in technology:  
**"Shoot for the moon. Even if you miss, you'll be among stars."**  
 Pamela Jones | Software Engineer

**I connect people.**



"In my work with an Internet service provider in Turkey, I provide people Internet, data, and voice services, which today play key roles in our lives."

Advice to girls interested in technology:  
**"Believe and have self-confidence about engineering."**  
 Ozge Gurel | Electronic and Communication Engineer

Read more about women in engineering at [www.ieee.org/women](http://www.ieee.org/women)

Poster Series sponsored by the IEEE Life Members Fund and the IEEE Foundation



**IEEE Women in Engineering**

IEEE WIE is the largest international professional organization dedicated to promoting women engineers and scientists.

Write to us at [women@ieee.org](mailto:women@ieee.org)





**I help heal others.**

Enid's career satisfies her passion for technology and helping others. As an electrical design engineer, she applies her expertise to design medical and educational facilities that improve, heal, and save lives.

Advice to girls interested in technology:  
**"Embrace being feminine and unique."**  
 Enid Cammarata | Electrical Design Engineer



**I power the grid.**

"I am currently upgrading components to the power grid structure to reduce blackouts, thereby benefitting hundreds of thousands of residents."

Advice to girls interested in technology:  
**"Celebrate your difference and let your passion shine."**  
 Shay | Electrical Engineer



**I explore tombs.**

Prof. Zhu developed a mobile robotic system, the first of its kind in the world, that was used for archeological Chinese ancient-tomb explorations.

Advice to girls interested in technology:  
**"Identify a role model to follow."**  
 Professor Xiaoni Zhu | Mechanical Engineering

# I Change the World. I am an Engineer.



**I train combat pilots.**

Paulette develops complex avionics, radar, unmanned aerial vehicles, air combat simulations, and flight training equipment for commercial and military applications.

Advice to girls interested in technology:  
**"Your talents and skills are much needed, and will be greatly appreciated."**  
 Paulette January | Software Quality Engineer



**I am in control.**

Laura, a university professor and prolific author, researches the modeling and control of mechanical, aeronautical, naval, and structural systems, and rescue and security robotics.

Advice to girls interested in technology:  
**"Believe in the power of ideas and their technical application."**  
 Laura Celestano | Computer Science Engineer



**I engineer aircraft.**

"I became an engineer to convince civilization, people in general, and initially myself that zero is impossible."

Advice to girls interested in technology:  
**"Trust in your brain."**  
 Suad Al-Shamsi | Aerospace Engineer

Read more about women in engineering at [www.ieee.org/women](http://www.ieee.org/women)

Poster Series sponsored by the IEEE Life Members Fund and the IEEE Foundation



**IEEE Women in Engineering**  
 IEEE WIE is the largest international professional organization dedicated to promoting women engineers and scientists.  
 Write to us at [women@ieee.org](mailto:women@ieee.org)




# Contact Us

Paulette January  
Editor, [pjanuary@drs.com](mailto:pjanuary@drs.com)  
+1 850 302-3383  
DRS Technologies, Inc.  
Training & Control Systems, LLC  
645 Anchors Street  
Fort Walton Beach, FL 32548

Keyana N. Tennant, MPA  
Associate Editor, [keyana.tennant@ieee.org](mailto:keyana.tennant@ieee.org)  
+1 732 981-3423  
Women in Engineering  
IEEE Educational Activities Department  
445 Hoes Lane  
Piscataway, NJ 08854

Dr. Nita Patel  
IEEE Women in Engineering Committee Chair 2013