

## Newsletter Publication February 2008

*Welcome to the WIE!*

### IEEE Women in Engineering

#### WIE MISSION

Inspire, engage, encourage, and empower IEEE women worldwide.

#### WIE VISION

A vibrant community of IEEE women and men innovating the world of tomorrow.

### IEEE and the Institute News Briefs

**IEEE Women in Engineering Magazine Debuts.** IEEE Women in Engineering (IEEE WIE) Magazine, a new publication that will be issued twice a year to IEEE WIE members, has launched its premiere issue. The publication, sent as an interactive PDF file which enables easy navigation through the different sections of the magazine, aims to help attract, retain and sustain women in the engineering and science fields. Its articles integrate engineering subjects with current issues facing society including careers, health care, medicine, law, governance and women's issues. View the publication at <http://www.ieee.org/committee/women/13350.pdf> (PDF, 2.52 MB). To obtain information on how to submit an article, visit <http://www.ieee.org/portal/pages/committee/women/callforarticles.html>.

**White House Acknowledges 50<sup>th</sup> Anniversary of IEEE Global Communications Conference.** November 20, 2007 – President George Bush extended his personal congratulations to the IEEE Global Communications Conference (IEEE GLOBECOM 2007) on its 50th anniversary celebration in Washington, DC, USA held November 26-30, 2007. President Bush cited the conference for its international achievement in the “development and advancement of global communications” as well as “promoting achievement and innovation in technology and engineering.” President Bush and other Washington-area officials acknowledged the conference with public proclamations, declaring the week of 26 November 2007 “IEEE Global Communications Week”. [Read the full press release](#) and [proclamation](#).

**Marketplace of Ideas: Will Humans Marry Robots?** In a widely reported doctoral thesis, David Levy, an artificial-intelligence researcher at the University of Maastricht, in the Netherlands, holds that by 2050 there will be human-robot unions. Levy says that extremely realistic-looking robots will be programmed with attributes, including human-compatible characteristics, that could cause people to fall in love with them. He says that such programming will join with new attitudes about marriage. Do you believe humans will marry robots someday? Weigh in at <<mailto:institute@ieee.org>> or visit <http://www.ieee.org/theinstitute>.

Please visit our website at [www.ieee.org/women](http://www.ieee.org/women)

## news from around the IEEE

## Engineers Week to Emphasize Engineering Diversity

by Pender M. McCarter.

### National Engineers Week/EWEEK Activities

Celebrate **National Engineers Week**. Engineers Week to Emphasize Engineering Diversity, February 17-23, 2008, is co-chaired by IBM Corporation and the Chinese Institute of Engineers-USA. Including year-round activities, Engineers Week is expected to reach several million people worldwide, with an emphasis in 2008 on expanding diversity in the engineering field and in the workplace. For information, please visit:

<http://bmsmail3.ieee.org:80/u/9714/141554>.

## WIE Growing in Record Numbers

### IEEE WIE Membership Statistics December 2007

#### Grade

Fellow- 45  
Life Members 126  
Associates 606  
Member 3317  
Senior Member 288  
Student 8061

#### Region

US - 4040  
Canada- 509  
Europe, Africa & Middle East- 2838  
Latin America- 2488  
Asia & Pacific- 2568

#### Gender

Female- 7557  
Male- 3736  
Not Provided- 1150

Total WIE Membership for September 2007 is 12,443

**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.

#### 2008 WIE Committee Members

Karen Panetta, Chair 2008	Mary Ellen Randall (MGAB)
Loretta Arellano (EAB)	Lauren Jones
Irena Atov	Jane Lehr (TAB)
Bernadette Bouchon-Meunier	Susan Murphy (GOLD)
Joan Carletta	Sule Ozev

#### Liaisons

IEEE Executive Committee Coordinator Evangelia Micheli-Tzanakou	IEEE PSPB Jon G. Rokne
IEEE USA Carole Carey	

#### Regional Coordinators

Region 1 Darlene Rivera	Region 6 – TBD
Region 2 – TBD	Region 7 – TBD
Region 3 – Parveen Wahid	Region 8 – Maryam Al Thani
Region 4 – TBD	Region 9 – Maria Chiok
Region 5 – TBD	Region 10 Ramalatha Marimuthu

#### Society Coordinators

Antennas and Propagation Society (AP) Parveen Wahid	Magnetics Society Patti Sparks
Circuits and Systems Society (CAS) Pau-Choo (Julia) Chung	Nuclear and Plasma Sciences Society (NPS) Allan Johnston
Communications Society Heather Yu	Nuclear and Plasma Sciences Society (NPS) Allan Johnston
Computational Intelligence Society (CIS) Bernadette Bouchon-Meunier	Oceanic Engineering Society (OE) & Sensors Council Pamela Hurst
Computer Society (CS) Susan K. Land, CSDP	Power Electronic Society Ferdinanda Ponci
Engineering in Medical and Biology Society Carolyn McGregor	Power Engineering Society Karen Miu
Instrumentation and Measurement Society Ruth Dyer	Robotics and Automation Society Aude Billard
Intelligent Transportation Systems Society Emily Spoensky	Social Implications of Technology (SSIT) Emily Anest
LEOS Diana Huffaker	Product Safety Engineering Society Daniece Carpenter

**IEEE Launches Internet Television.** IEEE officially launched **IEEE.tv** on 27 September 2007. **IEEE.tv** is an Internet-based television network featuring targeted programming on technology and engineering produced by IEEE members. First launched as a beta site in August 2006, **IEEE.tv** includes programs available to the general public, along with special programming that can only be viewed by IEEE members. Improved features include a "flash" video format, a list of "most viewed" and "recently added" videos, and different options for RSS feeds, enabling Internet syndication. To learn more about the programs available from **IEEE.tv**, please visit the **IEEE.tv website**.



## what's new @ IEEE



**What Every Engineer Needs to Know About Leadership and Management.** Landing the perfect engineering job often means being able to showcase key leadership and management skills, according to an article from IEEE-USA Today's Engineer. Most engineering positions will require engineers to negotiate, plan, influence, direct, estimate and resolve conflicts – all important management skills. As engineers advance, leadership and management competencies become more important, regardless of whether or not they are on the "management" track. [Learn more](#)

## INTERESTED IN BECOMING A WIE

**MEMBER?** WIE membership is **FREE** to Student, Graduate Student, and Life Members, and just \$25 for other IEEE Members. To join WIE, please visit: <http://www.ieee.org/portal/pages/committee/women/oin.html>.

## IEEE Quick Facts. The IEEE has:

- more than 365,000 **members** in over 150 **countries**, almost 40 percent of whom are from **outside the United States**.
- over 68,000 **student members**.
- more than 27,000 **society affiliates**.
- 311 **sections**.
- 1,446 **chapters**.
- more than 1,430 **student branches** in 80 countries.
- over 300 **student branch chapters**.
- more than 147 **affinity groups**.
- 39 **societies** and 3 **technical councils**.

## DID YOU KNOW? ..... WIE Affinity Groups.

There are two types of WIE Affinity Groups: IEEE Section Affinity Groups and Student Branch Affinity Groups. Find one in your local area below. If there is not a WIE Affinity Group in your local area, [consider forming one](#). Affinity groups provide the opportunity for members to network at a local level. Activities may include guest speakers, workshops and seminars. All members are encouraged to join and participate in their local group activities to promote growth within the WIE. Currently, there over 150 WIE Affinity Groups worldwide.

Region 1 – Northeastern USA
Region 2 – Eastern USA
Region 3 – Southeastern USA
Region 4 - Central USA
Region 5 – Southwestern USA
Region 6 – Western USA
Region 7 – Canada
Region 8 – Europe, Middle Eastern & Africa
Region 9 – Latin America
Region 10 – Asia & Pacific



## WIE Around The World

### • News from IEEE WIE Section Affinity Groups

#### New WIE Affinity Group being formed in the IEEE Pittsburgh Section in Pittsburgh, Pennsylvania

A new affinity group is being formed as the IEEE WIE Pittsburgh Section Affinity Group. The National WIE program's mission is to inspire, engage, encourage, and empower IEEE women worldwide. The IEEE WIE Pittsburgh Section's program will maintain the same vision, but add the local connection and camaraderie between women electrical engineers.

"It will be refreshing to have a group around to discuss both the challenges of a high-tech career and those of being a woman in a male-dominated field," states Jennifer Ploskina, the organizer of the group. Members forming the IEEE WIE Pittsburgh Section Affinity Group hopes to collaborate with similar groups such as the Society of Women Engineers (SWE) as well as Women in Nuclear (WIN) which is a Westinghouse-sponsored organization. "Promoting the field of engineering to young girls is very important to the future of our industry", Jennifer continues. "We also hope to increase female IEEE members in the Pittsburgh area based on this additional opportunity for electrical engineers". For more information on WIE, please visit our website at <http://www.ieee.org/portal/pages/committee/women/index.html>. Please contact Jennifer Ploskina at: [JenniferLPloskina@eaton.com](mailto:JenniferLPloskina@eaton.com) to be added to the IEEE WIE Pittsburgh Section Affinity Group mailing list for upcoming news.

#### IEEE Leaders Workshop in Cuernavaca, Morelos State in Mexico

IEEE Region 9 presented a leadership workshop on September 28, 2007 to members of the IEEE student branch from Latin America and the Caribbean with the purpose of sharing experiences and providing opinions on the current state of women in engineering as well as other



important topics. During this workshop, Diana Valadez, IEEE WIE Affinity Group Coordinator for Region 9, called upon all assisting leaders to support and nurture the creation of affinity groups in their student branches. Diana shared the goals and objectives of creating such groups, the benefits, available resources, statistics of Region 9, and a list of activities performed by current affinity groups.

Enrique Alvarez, 2008-2009 Director-Elect for Region 9, and Carlos Rueda, IEEE Education Society Representative for Region 9, also participated in the session. They answered questions from the audience and addressed major concerns such as how to persuade people that oppose the creation of these affinity groups to reconsider, as well as how to address people that have strong feelings against women in the engineering field.

### • News from WIE Student Branch Affinity Groups

#### Inauguration of the IEEE WIE Universidad Tecnica Del Norte Student Branch Affinity Group in Ecuador



*Student Participants at IEEE WIE Universidad Tecnica Del Norte Student Branch Affinity Group*

The inauguration event of the IEEE WIE Universidad Tecnica del Norte Student Branch Affinity Group was held October 19-20, 2007. The opening presentation informed participants about the platform of WIE. At the conclusion of the meeting, the participants had the opportunity to talk about activities to promote women in the profession and ways to enhance their career advancement.

#### "Women in Engineering Colombian Journey" Event held at Universidad Nacional de Loja in Colombia



*Student Participants at IEEE WIE Universidad Nacional de Loja Student Branch Affinity Group*

Following the objectives of WIE the IEEE WIE Colombia Section Affinity Group, with the support of the IEEE WIE Universidad Nacional de Loja Colombia Student Affinity Group members, organized the "Women in Engineering Colombian Journey". Assisting with the event were Santo Tomás de Aquino, Católica de Colombia, Jorge Tadeo Lozano, Militar Nueva Granada, Nacional de Colombia, and San Buenaventura. The event was held September 7, 2007 at the Universidad Nacional de Loja in Colombia with three topics addressed at the event. Mariana Medina, a Mechatronic Engineer and a Master Candidate in Bioengineering, led the technical conference to address biomedical engineering in the battle against cancer.

The second lecturer, Dr. Elsa Reyes, provided a presentation on the importance of human support of various technical, design and development, and engineering fields that could lead to a variety of careers. This presentation showed that the aspects of "women in engineering" is not limited to a person only "being an engineer", but can also include a person who wants to assist with the performance and support of technology and development applications. The final presentation was a forum led by Erika Duque, a Systems Engineer and Vice Chairperson of IEEE WIE Colombia Section Affinity Group, covering the organizational mission, vision, and goals of WIE. The "Women in Engineering Colombian Journey" was an event not limited to technical topics but covered different aspects of how a professional can develop and broaden their career in various aspects of the engineering field as a whole.



## INGteractiva: Creativity and Teamwork Come Together in Barranquilla, Colombia



Members of IEEE WIE Universidad del Norte Student Branch Affinity Group

Last semester the IEEE WIE Universidad del Norte Colombia Student Branch Affinity Group was approved as a student affinity group, and immediately needed to hold an event that could recruit members. They decided to work with the Electronics Engineering Department to introduce high school seniors, especially girls, to various aspects of engineering. The idea of **INGteractiva** was implemented to teach students basic principles of engineering by conducting activities such as how a diskette works, building a robot arm with simple materials, or understanding the working principles of a mouse.

Additionally, the program was designed to teach engineering students that ingenuity, creativity, and learning to work together in teams is also very important. This is why the activity was called "INGteractiva", taken from two words in Spanish: *Ingeniería* (Engineering) and *interactiva* (interactive). Some of these activities were based on lessons that can be found at [www.tryengineering.com](http://www.tryengineering.com).

Several activities were performed as part of INGteractiva including activities identified as the Professional Orientation Program (POP), Professional Excellence Program (PEP), and activities exploring process communications and text messaging. Information explaining how inventions like the Morse code and the telegraph had a huge impact on society was also made available. Upon concluding the event, evaluation of the activities made it apparent that students had changed the perception they had of engineering, initially thinking it only dealt with physics and mathematics. They realized that logic, teamwork, and creativity are very important factors in engineering or technical career fields.

*Submitted by Alexandra Oliveros Villalba, Chair, and Professor Diana Carolina Gil, Counselor, both of IEEE WIE Universidad del Norte Student Affinity Group*

## New Officers Meeting for IEEE WIE Jordan Section Affinity Group and IEEE WIE Al-Balqa Applied University Student Branch Affinity Group in Jordan



Current Officers of both IEEE WIE Jordan Section Affinity Group and IEEE WIE Al-Balqa Applied University Student Branch Affinity Group

It was a very nice idea to end 2007 with a cheerful formal meeting that gathered the established officers of the IEEE WIE Jordan Section Affinity Group along with the IEEE WIE Al-Balqa Applied University Student Branch Affinity Group in Jordan to welcome in the newly ambitious elected officers. Suhair Al-Khatib, PhD Industrial Engineering and the new chair for the IEEE WIE Jordan Section Affinity Group, promised to utilize her long experience in raising projects for government and non-government organizations in the upcoming events of this WIE affinity group.

More responsibilities were added to Arwa Abbadi, the webmaster, by assigning her the vice chair position. Bushra Habashneh, an engineer and past chair of the IEEE WIE Student Branch at Al-Balqa Applied University, was chosen to represent the group as secretary. The attendees thanked the old officers for their great efforts during the last two years and wished the new officers a successful term.

*Submitted by Rana Ramadan*

## Report of the IEEE WIE Polytechnic University of Valencia Student Branch Affinity Group in Valencia, Spain

On October the 18, 2007, a presentation was conducted by the IEEE Student Branch as well as the IEEE WIE Polytechnic University of Valencia Student Branch Affinity Group in the Higher Technical School of the Telecommunications Engineers Section of the Polytechnic University of Valencia. For this presentation, the students of the IEEE Student Branch constructed stands at the entrance of the Telecommunications School. These stands were filled with flyers, course and



workshop information, and documentation organized by the student branch to inform students and professors about IEEE as well as WIE.

Many students and professors were interested in finding out more in depth information about IEEE. There were a high number of registrations of new members to the IEEE as well as WIE, regardless of gender. All of them agreed with the great importance and support of future female engineers by this association.

### Launch of IEEE WIE Dr. Manhalingam College of Engineering and Technology Student Branch Affinity Group in Pollachi, India



Participants of WIE Student Launch Program at DR MCET

The IEEE WIE Dr. Manhalingam College of Engineering and Technology (MCET) Student Branch Affinity Group of Pollachi launched a WIE Student Affinity Group on September 25, 2007 with approximately 21 members. Selvi J. Roopa Jyothi, chairperson of the IEEE WIE Student Branch, spoke on WIE scopes of interest, vision and mission, benefits of WIE, as well as available opportunities and various activities that could be carried out under WIE. Approximately 150 people were in attendance of the event. Current officers of the student branch are Selvi J. Roopa Jyothi, chairperson, P. Jayapriya, vice-chair, Ms. Priya, secretary, and J. Roopa Jyothi, treasurer.

## The number of WIE Affinity Groups around the world continues to grow!

### WIE AFFINITY GROUPS

Region	Regular	Student	Total
R1	7	0	7
R2	4	1	5
R3	4	3	7
R4	2	2	4
R5	6	0	6
R6	2	1	3
R7	7	7	14
R8	11	31	42
R9	6	36	42
R10	14	33	47
<b>TOTAL</b>	<b>63</b>	<b>114</b>	<b>177</b>

## WIE RESOURCES

<http://www.ieee.org/portal/pages/committee/women/resource.html>

[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](#)

[Other Interesting Links](#)

## More Interesting Links

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

[Online Resources For Women and Minorities in Science and Technology](#)

[Science and Technology Resources](#)

[Women and Minorities in the Sciences](#)

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

## LET'S ANSWER A RIDDLE.

If, having only one match, on a freezing winter day, you entered a room which contained a lamp, a kerosene heater, and a wood burning stove, which should you light first? **Answer: The match.** (Compliments: Riddles & More)

## CAN YOU FIGURE THIS RIDDLE?

How can a woman living in New Jersey, legally marry 3 men, without ever getting a divorce, being widowed, or becoming legally separated? (Tune in next month for credits and the answer.)



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



## Welcome to Nerd Girls Reality Television!

They're "Beauty and the Geek" all in one package! Meet the NERD GIRLS - an impressive team of female engineering students, just one year away from landing top jobs with \$70,000 salaries. They turn heads when they enter a room - they're stylish, self-possessed, ambitious and confident. Whether building a solar car or harnessing wind power on a remote island, these girls fully intend to change the planet with their own ingenuity and hard work. NERD GIRLS is coming to reality television and will be multi-platform broadcast in the United States and abroad. Visit Nerd Girls at <http://www.nerdgirls.org/>

## Welcome to the Gallery of Women Engineers!



These engineers work every day to solve problems and make the world a better, cleaner, safer place. These women are also actively involved in their communities, raising families, and enjoying all kinds of sports and hobbies.

## Key ENGINEER GIRL, Check Out These PROFILES!



Maeling Tapp  
Materials Engineer



Monique Frize  
Bioengineering/Biomedical Engineer

To view more information visit Engineer Girl at <http://www.engineergirl.org/CMS/WomenEngineers.aspx>

## Engineer Girl!

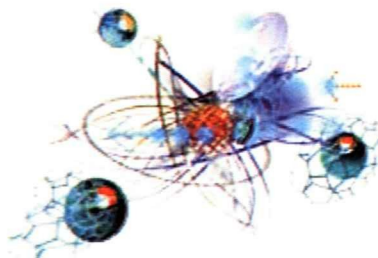
Turn imagination into reality with a future in



**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/>

## IEEE WIE ASSISTANCE.



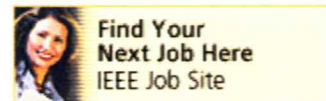
### Powering the Electrical Revolution: Women and Technology.

Meet the exceptional women who overcame social barriers to make achievements in the fields of math and science and the ordinary women who made contributions to the telegraph, telephone, industrial manufacturing, and computing industries.



### 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 [IEEEXtreme](#) 24 hour Programming Challenge.



### 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, 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 [2007 IEEE-USA Salary Survey](#).



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

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

**IEEE WIE NEWSLETTER**