

IEEE WIE SEPTEMBER 1998 NEWSLETTER

If you would like to subscribe to this newsletter, please send a message to "majordomo@ieee.org" and type in the message body, subscribe to women-newsletter.

WIE COLUMN – IEEE THE INSTITUTE; GOOD PROJECTS ARE HARD TO FIND

CALL FOR PAPERS: WOMEN AND TECHNOLOGY: HISTORICAL, SOCIETAL AND PROFESSIONAL PERSPECTIVES

NATIONAL WOMEN'S HISTORY PROJECT

WIE JOBS FILE FOR SEPTEMBER 1998

FEDIX OPPORTUNITY FLYER INFORMATION –

- \*INDIANA UNIVERSITY SELECTED AS NETWORK OPERATIONS CENTER FOR INTERNET2 ABILENE PROJECT
- \*THE GERMAN-AMERICAN ACADEMIC COUNCIL LECTURESHIP PROGRAM
- \*1998 FALL SCHEDULE: GRANT-RELATED SEMINARS
- \*WOMEN HELPING OTHERS FOUNDATION OPPORTUNITY
- \*COMMUNICATIONS WORKSHOP ON REACHING URBAN YOUTH
- \*SCHOLARSHIPS OF THE MONTH

MENTORING PROJECT –GALLAUDET UNIVERSITY

IEEE MEMBERSHIP INFORMATION: SENIOR MEMBER

WIE COMMITTEE SCOPES OF INTEREST

\*\*\*\*\*

WIE COLUMN – IEEE THE INSTITUTE:

GOOD PROJECTS ARE HARD TO FIND- by Jan Brown

What do engineers do for a living? That was the question put before the children of IEEE employees during recent "Take Your Children to Work Day" festivities at the IEEE's headquarters in Piscataway, N.J., USA. While most IEEE employees are not electrical engineers, the IEEE Women in Engineering Committee thought it would be instructive to demonstrate for the children what kind of skills an engineer uses at his/her job. For that reason, the WIE sponsored a workshop to figure out what kind of educational, interesting, engaging and fun electrical engineering projects can be completed by 70 or so children ages 9 to 15 in roughly 1 hour. To tackle that kind of project, it would be nice to have a little help in the form of a packaged project, complete with easy-to-follow instructions.

SEARCHING HIGH, LOW. But, of course, nothing in this life ever comes easy. The search for such a project was enlightening and exciting as well as dismal and frustrating -- all at the same time. The enlightening and exciting part of the quest was that there were actually some products on the market that were specifically electronic or electrical in nature and not just a small part of a larger science kit. The dismal and frustrating part was the quality of the directions and graphics and the lack of explanation about how the kits worked. There were some manufacturers who had great projects listed on their no-frills boxes. The rub came upon examination of the components and instruction sets. A one page, black-and-white electrical schematic with no explanation of the symbols appears to a child as a foreign language. Even if children wanted to build burglar alarms for their bedrooms, looking at these kits would deter all but the most persistent. Now some might say that the "most persistent" is the exact characteristic we want in the profession. However, as an introduction to the profession at age 10, or as an effort to build an appreciation for what electrical engineers do, the kits with only plain vanilla schematics miss the mark. Further, how many non-electrical engineering parents would be able to come to the rescue when the child could not get the alarm to work? How many parents would purchase another such kit? What does this say about electrical engineering?

THERE IS HOPE. On the positive side, there are a couple of manufacturers that seem to understand children and what kind of graphics engages them. These manufacturers put together kits which offered several projects in one box. The one we chose for "Take Your Children to Work Day" was from Norman and Globus, Inc., of El Sobrante, Calif., USA, called "ElectroWizard Inventions" and created by Dr. Penny Norman. Billed for ages 8 and up, it included projects to construct a spinning motor, a telegraph, a radio, a flashing generator, a fan, and more. A book and all the materials were included with

the exception of a battery. The graphics were superb. This means that in addition to the graphics being colorful, explicit, and plentiful, you didn't have to be able to read to complete any of the projects. If you could read, you could also find out how and why the projects worked. The deluxe version of the kit came with a CD-ROM that walked you through each project and had children explaining how to do things and how they work. Help is also available via the manufacturer's Web page and a teacher's manual. We chose to build the spinning motor. The instructions say this should take 2 to 3 hours in two or three work sessions. All 70 children successfully completed their spinning motors with the help of the CD-ROM, an instructor and a few volunteer helpers in 1 hour. The swifter ones went on to build the fan and the flashing generator in the time allotted. A new generation of electrical engineers is in the making!

If you have had experience with such kits or projects we would love to hear your review or comments so that we may add this to our resource list for our own Student-Teacher and Research Engineer/Scientist (STAR) program. Please e-mail the WIE at [women@ieee.org](mailto:women@ieee.org).

A special thanks to the staff, volunteers and children for making it a great day!

////////////////////////////////////

CALL FOR PAPERS:

WOMEN AND TECHNOLOGY: HISTORICAL, SOCIETAL AND PROFESSIONAL PERSPECTIVES – RUTGERS UNIVERSITY, NEW BRUNSWICK, NJ

The roles of women in technology are more diverse, controversial, and important today than ever before. Historically, women's involvement in the creation, manufacture, and use of new technologies has been seriously neglected. Even today, the public has an understanding of society that usually treats women as "technological illiterates" with little stake in any aspect of new technologies. Yet since the 1950s women have tried to technologically empower themselves, particularly by entering the engineering profession. They have done so in great numbers, although today it is glaringly obvious that women are still underrepresented in engineering. Women in the field still face gender-based obstacles, expectations and biases despite decades of efforts to eradicate these problems.

Call For Papers:

We encourage contributions for topics related to this general theme:

- Impact of Information technology on women and women's work
- Women workers in industry and manufacturing
- Women in the Engineering Workforce
- Women Faculty and Students in Science and Engineering Education
- Motherhood and technology
- Historical and current perspectives on women and technological development
- Technology and Gender Inequality

We also welcome papers in areas of interest to the members of SSIT:

- Environmental, health, safety, and peace-related implications of technology
- Social, Economic, and ethical issues involving energy, information, and telecommunications technologies.
- History of Technology
- Systems analysis in public policy decisions. Research Methods for
- Technology-policy analysis

Submit a one page abstract for a paper or poster, or a proposal for a paper session or panel discussion to the Co-Chairs at e-mail: David Morton, Research Historian, IEEE History Center [d.morton@ieee.org](mailto:d.morton@ieee.org)

Or April Brown, Associate Professor, Dept. of Electrical Engineering, Georgia Institute of Technology [april.brown@ee.gatech.edu](mailto:april.brown@ee.gatech.edu)

Mail: David Morton, IEEE History Center, Rutgers University, 39 Union St., New Brunswick, NJ 08904 or April Brown, Associate Professor, Dept. of Electrical Engineering, Georgia Institute of Technology, Atlanta, Georgia 30332

Deadlines: Proposals for Sessions: January 1999, Abstracts of Individual Papers: March 1, 1999, Your Notification of Acceptance: April 15, 1999

////////////////////////////////////

NATIONAL WOMEN'S HISTORY PROJECT by Mary Ruthsdotter

The U.S. Postal Service asks the Public to choose highlights of the 1970s as part of their "Celebrate the Century" stamp program.

The Women's Rights Movement, Monday Night Football, Sesame Street, and Disco are among the 30 subjects that will compete by popular vote to appear on 15 new postage stamps honoring the 1970s.

Voting starts September 1 and goes throughout the month. Ballots are at all post offices and on the web at <http://stampvote.msn.com>. Please cast your vote for the Women's Rights Movement. Remember: the recently retired postmaster refused to issue a stamp commemorating the Movement's 150<sup>th</sup> anniversary!

Not coincidentally, the theme for National Women's History Month, 1999, is "Women Putting Our Stamp on America." We are defining the word "stamp" broadly, as a metaphor for women having made lasting marks, impressions, or impacts on United States culture and society.

The commemorative poster for 1999 features 37 women who have been or who merit being honored on U.S. postage stamps. Twelve of these women are featured in the ready-made speech we have published; all of the women are included in the companion booklet of pictures, biographies, and resources. (Poster, \$6.95; speech, \$7.50; booklet, \$4.00. All plus s/h). The companion booklet also includes detailed information about nominating women for future commemoration by the U.S. Postal Service to help make their offerings more inclusive of women's Accomplishments, and more multicultural. Such an activity could be the basis for an interesting and informative program involving an organization, school, workplace, or entire community. We hope you will consider making this happen where you live and work!

Also, you might be interested to know that we will provide, FREE, a 14-minute video about women on U.S. stamps for people placing \$100 orders on or before November 1st. A copy of our free Women's History Catalog is yours for the asking.

Mary Ruthsdotter  
National Women's History Project  
7738 Bell Road, Windsor, CA 95492  
[nwhp@aol.com](mailto:nwhp@aol.com)  
(707)838-6000

////////////////////////////////////

WIE has initiated a WIE Job Posting File with job postings that have been forwarded to us, unsolicited. If you would like to subscribe to this monthly posting file, send a message to [majordomo@ieee.org](mailto:majordomo@ieee.org) and type: subscribe women-jobs. This file will be maintained on a monthly basis. If you have any comments on the file, or would like to submit posting information, please submit to WIE at: [women@ieee.org](mailto:women@ieee.org).

We are pleased to offer other IEEE sites that contains job listings:

The IEEE USA Jobs Listing Service on the www at:  
<http://www.ieee.org/usab/DOCUMENTS/EMPLOYMENT/employment.menu.html>

The IEEE Careers & Education Web Site: "Careers & Education, Enabling Careers through Life-long Learning" can be accessed at <http://www.ieee.org/eab/>.

////////////////////////////////////

FEDIX OPPORTUNITY FLYER INFORMATION –  
INDIANA UNIVERSITY SELECTED AS NETWORK OPERATIONS CENTER FOR INTERNET2 ABILENE PROJECT

Indiana University has been chosen to house the Abilene Network, which will serve as the backbone for Internet2. The Internet2's Abilene project was started by the University Corporation for Advanced Internet Development (UCAID). The Abilene Network will be the fastest and most advanced research and education network in the world when it begins in January 1999. Abilene will provide connections with other high performance networks like the Backbone Network Service (vBNS), which is the National Science Foundation's state-of-the-art system supported by

MCI. Abilene will also support the Next Generation Internet (NGI), an initiative among federal research agencies (mentioned in an article in last August's Newsletter). Any institution that is participating in the Internet2 project, through membership inUCAID, can use the Abilene network. Abilene is funded by corporate and university sponsors, not by the government. For more information on Abilene and Internet2, visit <http://www.ucaid.edu/abilene> or <http://www.internet2.edu>.

////////////////////////////////////

#### THE GERMAN-AMERICAN ACADEMIC COUNCIL LECTURESHIP PROGRAM

The German-American Academic Council (GAAC) Foundation will fund 10 applications from U.S. and German universities to support lectureship visits under the Distinguished Lectureship Program. All academic disciplines are eligible. The program aims at strengthening and developing scientific and scholarly contacts and cooperation between the two countries. The program enables universities to invite a distinguished scientist or scholar to spend up to one week on a lectureship visit. Each funded project will receive \$10,000. The deadline is October 15, 1998. More information is available at <http://www.gaac.org/grants.html>.

////////////////////////////////////

#### 1998 FALL SCHEDULE: GRANT-RELATED SEMINARS

FEDIX Opportunity Alert announces the new Fall schedule for its grant-related seminars--to be held in cities throughout the United States. The next seminars will be held in Boston (Sept 24-26), Chicago (Oct 14-18), New York (Oct 28-30), Atlanta (Nov 11-14) and Los Angeles (Dec 2-4). Since the seminars began in fall '97, more than 2,000 registrants have participated in 18 cities across the United States. Content for the seminars is continually being updated based on new developments in the grants world. This year's seminar topics include:

- (1) Identifying and Applying for Federal, Foundation and Corporate Grants
- (2) Proposal Writing
- (3) Proposal Writing for Faculty and Researchers
- (4) Federal Grant and Contract Administration
- (5) ERA Toolkit: PDF, EDI, WWW and Internet Security
- (6) Patenting, Licensing and Technology Transfer for Inventors and Administrators

In addition, two new seminars have been added:

- (7) NIH Proposal Writing Colloquium -- a limited enrollment seminar focused on developing NIH applications
- (8) Financial Aid 101 -- designed to unravel the maze for financing a college education

To register, or for more information, go to <http://www.rams-fie.com/seminars> or call (800) 875-2562.

////////////////////////////////////

#### WOMEN HELPING OTHERS FOUNDATION OPPORTUNITY

The W.H.O. (Women Helping Others) Foundation is committed to: encouraging women to help others through their own local community service; supporting organizations dedicated to the concerns of women and children; and educating individuals about health and education issues. Since its inception the WHO Foundation has awarded more than \$817,000 to universities, research centers and women's and children's organizations. Grants have ranged from \$4,000 - \$60,000. The deadline is October 1, 1998. More information is available at <http://www.beauticontrol.com/whof.htm> or call 800-946-4663.

////////////////////////////////////

#### COMMUNICATIONS WORKSHOP ON REACHING URBAN YOUTH

This Fall MEE (Motivational Educational Entertainment) Inc. will be offering its one day Regional Workshop on "Communications Strategies for Reaching and Influencing Urban Youth" in Philadelphia (Oct 22 or 23), Los Angeles (Nov 12 or 13), and Washington, D.C. (Dec 3 or 4). Based on seven years of primary research on urban youth living in at-risk environments, the Workshop is specifically designed for organizations and individuals interested in effectively communicating with and positively impacting urban youth--including minority group members and low-income populations.

In the workshop participants will review practices, theories, and techniques for developing effective communications strategies to reach young people; examine the core dynamics of today's urban youth culture; identify and develop appropriate messages and strategies for communicating with urban youth; and then apply this learning to specific public health problems facing urban youth (i.e., either Dating Violence/Gun Violence or Marijuana/Youth Sexuality--depending on date of session.) To register and/or for more information, call (215) 748-2595 or call toll free at (877) 633-7763.

////////////////////////////////////

SCHOLARSHIPS OF THE MONTH- AMELIA EARHART FELLOWSHIP AWARD

The Zonta International Foundation is presenting the Amelia Earhart Fellowship Award in amounts up to \$6,000 to 35-40 women for graduate study in aerospace-related science and engineering. The application deadline is November 1, 1998. To qualify, you must have a bachelors degree in this area, have superior credentials, and have completed 1 year of graduate school or have completed a well-defined research and development program evidenced by a publication or senior research project. To apply, call (312)930-5848, fax them at (312)930-0951, or write them at:

Zonta International Foundation  
Foundation Assistant  
557 West Randolph Street  
Chicago, IL 60661-2206

The Special Libraries Association is offering an Affirmative Action Scholarship for \$6,000 to a minority group member who exhibits an aptitude for interest in special library work. This scholarship will be granted only for graduate study in librarianship leading to a master's degree at a recognized school of library or information science. The application deadline is October 31, 1998.

Call (202)234-4700  
fax 202) 265-9317  
E-mails [sla@sla.org](mailto:sla@sla.org) visit their website at <http://www.sla.org>.

Write to: Special Libraries Association  
Scholarship Committee  
1700 Eighteenth Street, N.W.  
Washington DC, 20009

This scholarship information was supplied by the Scholarship Resource Network. For more information regarding the Scholarship Resource Network check: <http://www.srnexpress.com>

////////////////////////////////////

-----  
FEDIX Opportunity Alert (FOA) is a free-to-the-user e-mail service that automatically delivers targeted research & education funding opportunities and other information to its subscribers. It is the fastest, most comprehensive, and cost efficient way to communicate opportunities information to the research and education community.

////////////////////////////////////

MENTORING PROJECT - GALLUDET UNIVERSITY

FORWARD in SEM is a project which focuses on encouraging women and other under-represented populations to pursue advanced degrees in science, engineering, and mathematics (SEM). Although most of the participating students live in the D.C. area, the project is open to mentors from all over the country. They are seeking professionals in the three areas to become mentors for undergraduate students who are thinking about entering into a science, engineering, or math field. Mentors will communicate mainly in-person or through either e-mail, phone, or correspondence. Mentors will set up a schedule that matches their needs.

For more information, contact the following:  
Professor Charlene Sorensen  
FORWARD in SEM  
C/o Chemistry and Physics Department  
Gallaudet University

800 Florida Ave., N.E.  
Washington, D.C. 20002  
Phone: 202-651-5206 or  
E-mail: [4orward@gallux.gallaudet.edu](mailto:4orward@gallux.gallaudet.edu) or [ccsorensen@gallua.gallaudet.edu](mailto:ccsorensen@gallua.gallaudet.edu)

////////////////////////////////////  
IEEE MEMBERSHIP INFORMATION: SENIOR MEMBER

Senior Member is the highest IEEE membership grade that may be obtained by application.

Why Apply?

- for recognition of accomplishment by peers
- for professional advancement
- for personal satisfaction

Who should apply?

Engineers, scientists, educators, technical executives or those in IEEE designated fields who have

- at least ten years active professional practice, with five or more years of significant performance,
- accomplishments in engineering, publications, management, education or professional contributions.

We highly recommend all qualified IEEE members to apply for Senior Membership. Another reason to apply for Senior Member grade is that Senior Member grade is required before one is eligible for IEEE Fellow nomination.

To obtain Senior Member Application forms, please contact:

IEEE Operations Center  
Admission and Advancement Committee  
445 Hoes Lane  
PO Box 1331  
Piscataway, NJ 08855-1331  
Tel: (732)562-5502 / Fax: (732)981-0225  
E-mail: [rab.aa@ieee.org](mailto:rab.aa@ieee.org)

////////////////////////////////////  
WIE COMMITTEE SCOPES OF INTEREST:

Scope 1: Gather and disseminate information regarding the status of women and initiatives for, by and on behalf of women in engineering and science.

Scope 2: Enable mentoring and education programs within IEEE. Make available information regarding gender-related educational issues which may improve the entry and retention of women in engineering programs.

Scope 3: Increase the participation and membership of women within IEEE.

Scope 4: Address ways to improve the climate for women in IEEE and the workplace.

IEEE Women in Engineering Committee  
445 Hoes Lane, PO Box 1331, Piscataway, NJ 08855-1331  
URL: [www.ieee.org/women](http://www.ieee.org/women)  
E-mail: [women@ieee.org](mailto:women@ieee.org)