## **EXPANDING WEPAN'S INTERNATIONAL HORIZONS**

Moderator: Suzanne G. Brainard, Ph.D.

President, WEPAN

Speakers: Gertrud Humily, Ph.D. Judi Wangalwa Wakhungu, Ph.D.

Barbara Rossmiller Mona Dahms, Ph.D.
Suzie Laurich-McIntyre, Ph.D.
Peggy Blumenthal Marie-Noelle Barton

The International Session opened with a warm greeting by Dr. Barbara Lazarus, Chair of the WEPAN International Action Group. She introduced her Co-Chair, Dr. Gertrud Humily. Dr. Marilyn Berman, a WEPAN Board of Directors member, expressed appreciation to the Northrup-Grumman Corporation for their prime sponsorship of this session.

Dr. Suzanne Brainard, President of WEPAN and founder of the International Action Group, moderated the session. She opened with thanks to the speakers and audience for participation and expressed a desire for WEPAN to expand its international activities.

The first speaker was Dr. Gertrud Humily, Executive Director for International Education, Department of Defense, France. The title of her presentation was *Women in Engineering and Science - A Network Between the United States and Europe*. During the last few years, many actions have been initiated to promote more women in science and engineering. Organizations, networks and working groups are now established in most every European state. Dr. Humily closed by saying it was time to discuss a formal link to American organizations such as WEPAN, and bring the existing organizations together to decide common international actions.

The next speaker was Barbara Rossmiller, Project Coordinator, Datex, Inc, USA. Her presentation title was *Women in Development: WID Fellowship Opportunities Abroad: Bring the Lessons Home.* Understanding the role of gender in social, political and economic processes is vital to the successful implementation and sustainability of any development efforts. The Worldwide Women in Development (WorldWID) Fellows Program aims to expand the limited pool of WID experts by training mid-career professionals with technical backgrounds in gender analysis and placing them in assignments with a U.S. Agency for International Development mission or indigenous cooperating development organization.

Suzie Laurich-McIntyre, Ph.D., Associate Director, Women in Engineering Initiative, University of Washington, USA, was the next speaker. She spoke on *GE3 in Action at the University of Washington*. The Women in Engineering Initiative at the University of Washington established the first international exchange program for women in engineering in the U.S. Dr.

IMPACTING CHANGE THROUGH COLLABORATION
1997 WEPAN/NAMEPA CONFERENCE

Laurich-McIntyre's presentation highlighted historical points of development and expansion of the Women in Engineering Exchange Program. A range of opportunities for international collaboration now include: undergraduate and graduate exchanges, informal research projects, visiting professors and visiting students, and formal engineering study and industry internships.

The next speaker, Peggy Blumenthal, Vice President for Education Services, Institute of International Education, USA, talked about *Increasing Women's Participation in Study Abroad:* Case Studies of Nine International Fellowship Programs. The Institute of International Education's recent study of leading international scholarship programs was summarized. The programs have attempted, with varying successes, to increase numbers of women applicants and grantees, especially from the developing world. The impact of mandates, more inclusive screening standards, and innovative recruitment strategies were assessed, and materials were shared, including a how-to booklet: Study Abroad: You Can Get There from Here.

Judi Wangalwa Wakhungu, Ph.D., Director, WISE Institute, Pennsylvania State University, USA, spoke on *Making a Difference: The Third World Organization of Women in Science*. The Third World Organization of Women in Science (TWOWS) enhances the role of women scientists and engineers in the development process in the third world. TWOWS also explores ways in which women can gain access into leadership positions in science and technology.

A presentation on *Women in Engineering Education in Denmark* was given by Mona Dahms, Ph.D., Associate Professor, Institute of Electronic Systems, Aalborg University, Denmark. Denmark's status over the last 5-10 years and trends of female enrollment in engineering education were summarized. Measures undertaken in the 1980's were briefly mentioned and possible reasons for the present sad state of the numbers of female enrollment in engineering education were discussed, and recommendations for future action were made.

The Creation of A Career-Center East at the Technical University Minks-Belarus was presented by Ingrid Doberenz, Dipl.-Ing., European Patent Attorney, Hochshule fur Technik und Wirtschaft-Mittweida, Germany. Her paper discussed the necessity of establishing a German/French/Belarus Institute Career Center East at the Technical University Minsk. The major concern of the tri-cultured Institute will be a focus on new requirements for executive working personnel and priorities that have been established for new graduates in engineering.

The last speaker, Marie-Noelle Barton, Manager, WISE Campaign, The Engineering Council, United Kingdom based her speech on *The WISE Campaign in the United Kingdom*. In her introduction, Ms. Barton referred to the need for the Engineering Council to set up the Women Into Science and Engineering (WISE) campaign in 1984 and to encourage more girls and women to consider engineering as a career. She highlighted the difficulties experienced by girls and women, particularly:

 Problem of stereotype about engineering and about what is perceived to be appropriate for men and women to be and to do.

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1997 WEPAN/NAMEPA CONFERENCE

- Lack of experience that girls have in technology as they are not given the same toys
  and do not benefit from the same technical experiences as boys at an early age. As a
  result of this they do not have the same confidence in the subject.
- The teaching of subjects such as math, science and technology is not always girlfriendly and, at times, teachers do not give girls the same time and attention as they do to boys.
- There is a lack of women engineers role models. Many girls will know women teachers or doctors but very few will have come across women engineers. They will therefore not consider the profession of engineering as one suitable for women.
- Industry needs to do more to attract and promote women within a company. Networks
  and memberships schemes should be investigated as well as crèche and career
  breaks. Colleague's attitudes, if negative, needs to be handled.
- Finally, women themselves need to grow in confidence and self-esteem in order to compete in what is still a man's world.

She then referred to the various initiatives run by the Engineering Council to improve the situation. The targeted audience is girls and women themselves; parents; teaching staff in education and careers advisers; employers; and the media.

Following the presentations, the moderator facilitated a lively discussion of the common issues facing women around the world. There was also discussion about the different problems women in developing nations faced. At the end of the session, all of the participants expressed a desire to continue with similar sessions at the next WEPAN Conference.