



INWES Member Newsletter #9 – July 2011

Contents

| | | | |
|---|---|--|---|
| <i>Message from the President</i> | 2 | <i>Women in Science & Engineering in Canada</i> | 6 |
| <i>INWES Plans for Projects and Programmes</i> .. | 3 | <i>Celebrating the 25th anniversary of dib:</i> | |
| <i>Gender Bias in Science and Engineering</i> | 3 | <i>Germany's 25 Most Influential Women Engineers</i> | |
| <i>10 years in the heart of the struggle for girls'</i> | | | 6 |
| <i>access to science in Senegal</i> | 4 | <i>Conferences, Workshops & Events</i> | 8 |
| | | <i>About INWES</i> | 8 |

Goodbye, and thank you for all your support the Members of the INWES Board 2008-2011



Members of the current INWES Board (MIB) and friends at ICWES14 2008 in Lille, France (from left): Ikuko Imoto, Yvette Ramos (MIB), Pascale Dubé, Unesu Ushewokunze-Obatolu (MIB), Pamela Wain (MIB), Márta Ecsedi, Claire Deschênes, Monique Moutaud (MIB), Nadia Ghazzali (MIB), Marlene Kanga (Co-chair Organising Committee of ICWES15), Gail Mattson (MIB), Monique Frize (INWES Past President), Sue Bird (INWES President), Anna Szemik-Hojniak (MIB), Angelika Reinhard, Myung Hee Jung, Kong-Joo Lee (INWES President-Elect), Petra Mayerhofer (MIB), Issié Yvonne Gueye (MIB), not shown MIBs are Yolanda George, Durdana Habib, Maki Iwakuma, Francisca Nneka Okéké



Message from the President

It is three years since I took over as President of INWES from Monique Frize. In one way it seems a long time ago, but in another time has flown. The last 3 years have been challenging because of the general economic situation throughout the world, and INWES has not been able to do all it had hoped as funding has been very hard to come by. However, we have achieved a lot during this time in spite of the difficult conditions, and some of our members have worked very hard to get projects and contacts working well. I have been looking at our activities and achievements over the last 3 years, and have summarized them below.

ICWES14 took place in 2008 in Lille, France, and was a great success with 500 participants from 60 countries. In 2009 a Regional Conference was held in Busan, Korea and hosted by KWSE. At this conference there was also a meeting on the formation of the Asia Pacific Network of INWES, something which we hope will come to fruition at ICWES15. In 2010 the Regional Conference was hosted by the American Association for the Advancement of Science (AAAS, an INWES member) in Washington DC, USA. This conference was very useful for us as it concentrated on fundraising. We now look forward to ICWES15 in Adelaide. INWES and its members should be very proud of these conferences which bring together women scientists and engineers from all over the world – it is one of the most important things we do, and we have been able to carry on with it even when funding was difficult. Much hard work was put into the Conferences by the organisers, and we thank them for it.

INWES had been trying for some time to get charity status in Canada, and this was achieved in 2009 for our sister organization the Education and Research Institute (ERI). Working alongside INWES, ERI can do some of the educational work which INWES had hoped to cover, raising money where the donors could recoup the tax. This charity status was extended to USA fundraising in 2010.

In 2009 we introduced the new membership category of University/Institute members, so that



Sue Bird, INWES President

academic establishments can join in their own category and we now have four members in this category. Although it has been difficult to persuade corporations to join INWES during the financial squeeze, we do have a new corporation member in L'Oreal, who is a welcome member as we know it already does a lot for women in science and engineering, and we look forward to working with it in the future.

We have the start of some projects in France and Poland which I hope will come to fruition in the near future. A new organization, WISE-India, has been set up with the help of INWES, and they are now members. It is always a great pleasure to us to be able to help to start an organization, as it brings together people who are local to each other and who can help each other on a regional basis.

At ICWES14 a resolution was made to introduce Regional Networks into INWES. It was felt that it could be an advantage to put nearby organisations and individuals in touch who could have close contact and who may want to address the same problems. Since then a format for Regional Networks has been drawn up, and discussions held in the Asia Pacific region and in Africa. An Arab Network is also anticipated. It is hoped to launch at least the Asia Pacific Network at ICWES15.

INWES has operation relations with UNESCO, and our connections with them have been good.



Monique Moutaud has kept the relationship going with our contacts in Paris, and Pam Wain and I have been to meetings of the NGO Partners. UNESCO has also kindly sponsored some delegates from developing countries at our various conferences and we are very grateful for that. Through the NGO Partners meetings we have been able to see what other organizations with relations with UNESCO are doing in different parts of the world.

INWES also has contacts with WFEO, and INWES Members, especially Yvette Ramos, Monique Moutaud, Issie Guyue and Pam Wain have attended and helped at WFEO Conferences in Argentina and Tunis.

INWES' organizational members have also been busy in their home countries. Notable events are that SWE (USA) runs a huge conference each year for its members, and I have attended the ones in 2009 and 2010 in Long Beach and Orlando, along with other INWES Board members and others. WES (UK) celebrated its 90th anniversary in 2009.

The Board, and especially the Executive have helped to run INWES over the last three years, and much hard work has been done. I would like to thank them sincerely for all their work, and wish the new Board and the new President every success.

Sue Bird, INWES President

INWES Plans for Projects and Programmes – we need your ideas!

by Pamela Wain

INWES is not rich in money, but it is rich in valuable people. We have useful experience to share, and energy to make things happen. We want to help each other, and to help girls and women interested in engineering and science.

INWES has already carried out various projects like the APEGESTE Essay Competition in Nigeria, and the Leadership Training for young engineers delivered in Tunisia at the end of 2010. But we want to do more!

Can you see things that INWES could be doing where you live? What projects could benefit from the international aspect of INWES? What should we do together, to utilize more expertise or just to utilize more woman-power?

If you are coming to Adelaide for ICWES15, please bring your ideas to the workshop "INWES Projects – Achievements and Plans". If you can't get there, email your ideas to me so that I can put them to the Projects and Programmes committee.

Email me as pam@daphnet.org.uk .

Gender Bias in Science and Engineering

In February 2011 Stephen J. Ceci and Wendy M. Williams from Cornell University, USA, published an article titled "Understanding current causes of women's underrepresentation in science" in the Proceedings of the National Academy of Sciences of the United States of America (PNAS) (see <http://www.pnas.org/content/early/2011/02/02/1014871108> for full abstract) which initiated a debate on measures to promote women in science. Ceci and Williams write in the article abstract: "Based on a review of the past 20 y of data, we suggest that some of these claims [that women scientists in math-intensive fields of science suffer discrimination in grant and manuscript reviewing, interviewing, and

hiring] are no longer valid and, if uncritically accepted as current causes of women's lack of progress, can delay or prevent understanding of contemporary determinants of women's underrepresentation. [...] the ongoing focus on sex discrimination in reviewing, interviewing, and hiring represents costly, misplaced effort: Society is engaged in the present in solving problems of the past, rather than in addressing meaningful limitations deterring women's participation in science, technology, engineering, and mathematics careers today."

In reaction to this article Monique Frize, Distinguished Professor, Carleton University and Pro-



fessor Emerita, University of Ottawa, Canada, and Past President of INWES, wrote the following letter to the editor of PNAS:

"It never ceases to amaze me how this question goes around in circles, with detractors on one side and strategies and solutions offered on the other. Ceci and Williams, in *Understanding current causes of women's underrepresentation in science* published in PNAS in February 2011, spend a large part of the article denigrating Wenneras and Wold's Commentary: *Nepotism and sexism in peer-review*, published in Nature 387, 341-343; 1997. The latter study used six meaningful criteria to assess productivity; I do not see any better suggestions from Ceci and Williams. They cite several studies that contradict each other and do not add much to the discussion. I personally remember the flurry of defensive letters following Wenneras and Wold's article, specifically the one from Canada (Friesen) and two from the UK (Dickson; Grant). These responses were not based on a serious study; just a few statistics. Ceci and Williams quote very selectively to provide evidence to their assertions. Several letters appeared in Nature which contradict the ones they chose to mention, but they were ignored. My own book: *The Bold and the Brave: A history of women in science and engineering*, (University of Ottawa Press, 2009) and my experience in scholarship committees in Canada, confirm that there is still gender bias in scholarship and fellowship awards and in hiring in academia. For example, in Canada, 19 new Canada research Chairs

were awarded to 19 men in 2010. Grant and fellowship committees are still dominated by men, and the few women on them sometimes wish to appear not to be helping women. Gender bias and discrimination is not a historical fact but continues to happen right now. Things are better than decades ago, but more needs to be done. Ceci and Williams mention good practices to help women manage family and career, but none of this is new information. But I do not agree with Ceci and Williams when they say that gender sensitivity training is passé! I would add that women academics or in research laboratories also need to be aware of unwritten rules and must develop confidence; they need to be BOLD and BRAVE! "

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10 years in the heart of the struggle for girls' access to science in Senegal: An exciting adventure

by Rufina Sarr Dabo

The AFSTech / Senegal, established July 9, 2000, celebrated its 10th anniversary, June 23, 2010, at Thies in the presence of the academic authorities, including the governor of administrative area, the national and international press. To give solemnity to this significant event, a panel was organized as a prelude to the Day of Scientific Renaissance of Africa (June 30) on the theme "Science and Sustainable Development

in Senegal : the role of women scientists and engineers."

Five sub-themes were addressed by eminent personalities (Rector of University, agronomists, teachers, Inspector of Schools, ...) of the educational community have enriched the exchanges.

Sub-theme 1: "How to get girls into science courses, maths and Technologies? "

Sub-theme 2: "Parasitic plants and agricultural productivity"



Ms. Rufina Dabo Sarr, Founding President AFSTech / Senegal (right)

Sub-theme 3: "The responsibility of scientists in the implementation of agricultural policy in Senegal "

Sub-theme 4: "In a kind of approach, what place and role for women in agriculture and livestock in Senegal ? "

Presentation of AFSTech / Senegal

The presentation of AFSTech / Senegal was provided by Ms. Rufina Dabo Sarr, Technical Advisor in charge of educational issues at the Ministry of Education, Founding President of AFSTech / Senegal and Seune Diop Sall, Nurse and Secretary General of AFSTech / Senegal.

Testimony

The Godmother of this year, Ms. Aminata Kole Faye Ndiaye, professor of biology in high school Seydou Nourou Tall, Vice President of Founder AFSTech / Senegal, gave a poignant testimony of her life as a woman scientist.

The Godfather, Mr. Amadou Tidiane Professor Ba, Minister of Scientific Research was represented by Ms. Prof. Arame Boye Faye, Director of Scientific Research which has not failed to share with the large audience, its feelings and concerns and projects of the Minister.

Homage to Rose Dieng Kuntz

We also took this opportunity to honor the memory of Rose Dieng Kuntz (2nd edition). Thus Ms. Mariam Diop Seck has paid glowing tribute. Indeed, the late Rose Dieng Kuntz, was a scientist at INRIA / Nice Antipolis (France). She was crowned Scientist of the Year 2005 (Irène Joliot

Curie and L'Oreal). Then a former professor at Lamine Gueye high school (Ex Van Vo) did a testimony to the excellent curriculum of Ms. Kuntz, Senegalese, several times winner of the "Concours général" in science as well as in literature. She died June 30, 2008.

Rose Dieng Kuntz Award has been launched. The case is being prepared.

Ceremony decorations

It was a moment of intense emotion and joy for the many public and the organizing committee of the Dakar and Thies. Ms. Yacine Diongue Fall, Focal Point, in charge of Gender at the Schools Inspectorate has spared no effort to make this day a resounding success.

Six Ministers "Friends of Science and Technology" were decorated. Fifteen "Women-science models" have also received their scarves of recognition. The eldest of us, retired Ms Gnagna Seye, Ms. Rufina Dabo Sarr, affectionately called "Amazon of Science" were also decorated. Ms Huguette Hao Senghor "African woman-science model" (from Benin) was awarded on behalf of INWES/Africa.

A few years from 2015, we felt it necessary to send a memorandum to the educational community to call on all actors and all stakeholders on the implementation of recommendations and resolutions adopted by the international community through the MDGs and other conventions.



Aminata Kole Faye Ndiaye, Vice President and Founder of AFSTech / Senegal



Installation of the 1st Regional antenna

To allow a mesh of country, we started the program of creation of regional offices by installing one of Thies by delivering a pennant at the focal point Ms Yacine Fall Diongue. In turn, she passed it to Mrs. Diallo, Schools Inspector. Thies has committed to meet the challenges in "Woman, science and technology".

Some Perspectives

- Finalization of the Repertory of Women Scientists
- Extension of solar cookers
- Coaching girls in science
- Strengthening capacities of women in ICT
- Raising awareness through radio and television science programs

Women in Science and Engineering in Canada

By Márta Ecsedi

The National Sciences and Research Council of Canada (NSERC) is concerned about the underrepresentation of women in various fields of science and engineering. The report titled: "Women in Science and Engineering in Canada", issued November 2010 can be found at this link: http://www.nserc-crsng.gc.ca/_doc/Reports-Rapports/Women_Science_Engineering_e.pdf

In Section 1, the Report reviews the available statistics from pre-university to post graduation, the gender difference in education and career selection are highlighted. Section 2 of this report

looks at the supply side of women in science and engineering through the education stream and immigration. Section 3 examines the career outcomes for women educated in science or engineering, with particular emphasis on academic and research careers. Section 4 presents an overview of NSERC funding to women and special programs or initiatives to help increase the number of women in science and engineering. Finally, Section 5 briefly reviews some current literature on the topic and presents a summary of the issues and possible solutions. This information is taken from the introduction in the report.

Celebrating the 25th anniversary of dib: Germany's 25 Most Influential Women Engineers

by Petra Mayerhofer

The "deutscher ingenieurinnenbund" (dib – German Association of Women Engineers) celebrates its 25th anniversary this year. dib was founded in **1986** by a group of women engineers and women engineering students who felt that existing associations and groups were not meeting their needs. Their objectives in founding dib were to achieve equal opportunities for women in education, employment, and family life by promoting change inside and outside the workplace.

Soon, a quarterly magazine, an annual conference and a seminar program were established. In the middle of the 1990s a homepage followed.



25 jahre impulse

A first milestone was reached when, in **1988**, dib together with the organisations DAB, VDI, and VDE participated with a **stand on "Women and Technology"** at **Hanover Fair**, one of the leading trade fair centers world-wide. The aim was to focus the public attention on women engineers – what is by now commonplace was big news in



1988. Many politicians visited the stand and there was extensive media coverage.

Another milestone was dib becoming a member of the **National Council of Women's Associations and Organizations** ("Deutscher Frauenrat") in **1990**. Years later, dib initiated the „High-Tech“ task force of the council that developed a **Resolution on Women and Technology**, which was adopted by the council's General Assembly in November **2008**. The group that drafted the resolution was led by dib board member Dr. Kira Stein.

From its beginning, a large part of dib's activities has aimed at encouraging girls and young women to pursue degrees and careers in engineering. dib members visit schools or present the "**LISA Box**" at fairs, workshops, etc. for girls. The "**LISA Box**" is a collection of activities that allows girls (up to age 12) to experience their technical and scientific capabilities.

In **2009** dib joined the "**National Pact for more Women in Mathematics, Informatics, Natural Sciences, and Technology (MINT)**" (www.komm-mach-mint.de). As part of a project for the pact dib has developed five so-called "**MINT-Parcours**" which are courses of several experiments and tasks related to MINT professions. The target group of the "Parcours" are girls aged 12 to 19 years who are close to choosing their majors in high school and/or university. The "Parcours" have been successfully presented and used in several conferences and fairs.

dib has been internationally active since the end of the 1990s. Since then, the association has cooperated on several projects with women's organisations and networks in other countries and has participated in such international conferences and workshops as the 14th International Conference of Women Engineers and Scientists (**ICWES14**), July **2008** in Lille, France.

Nearly 600 participants from around the world attended the conference, which was jointly organized by the French, British and German organisations FI, Femmes & Sciences, femmes & mathématiques, WES and dib.

Furthermore, dib is part of several Federal State Councils of Women's Associations and Organisations, Federal State Chambers of Engineers, the Competence Center Technology-Diversity-Equal Chances, the German Network of Women Engineer Networks, the European Platform of Women Scientists (EPWS), the European Federation of Mentoring for Girls and Women (WoMentor), and, of course, INWES.

TOP25: dib elects Germany's 25 most influential women engineers

On the occasion of its 25th anniversary, dib intends to elect Germany's 25 most influential women engineers. The aim of establishing the project TOP25 is to highlight role models as well as the diversity in the field of activity of women engineers. This is important for girls and young women who often still experience at home, at school and in the media gender roles in which women are far removed from technical professions, particularly in leadership positions. The election will also draw the attention of companies, universities, and organisations to these competent women in a field still dominated by men.

The project TOP25 underlines the successes of the last 25 years. 25 years ago the Top 25 list would have looked much different. Women engineers faced much more resistance and more prejudices during university and at work as they do nowadays. dib has significantly contributed to changing this.

TOP25 shows the benefit of an international network like INWES. The inspiration for it was



Students sample the activities of the "LISA Box"



the list of Australia's most influential female engineers which the National Committee for Women in Engineering of Engineers Australia compiled in 2007 as part of their Year of Women in Engineering.

TOP25 started with a call for nominations in February. There was a tremendous response by companies, universities, associations, and individuals. Until the nomination deadline at the end of May 200 women have been nominated. The nominations are currently being processed and evaluated by the project group.

The 25 most influential women engineers will be selected by an independent jury which consists of several high-profile women and men:

Prof. Sonja Bischoff, professor for business management at the University Hamburg,
Wolfgang Gollub, project lead of the Initiative THINK ING of the association of the regional employers' associations in the German metal and electrical industry,
Sylvia Kegel, Board member of dib,
Prof. Rita Süßmuth, former President of the German Federal Parliament,
Prof. Johann-Dietrich Wörner, Chairman of the Executive Board of the German Aerospace Center (DLR).

dib looks forward to the announcement of Germany's 25 most influential women engineers in fall 2011.

Further information: www.dibev.de/top25.html

Conferences, Workshops & Events

4-9 September | Geneva, Switzerland
World Engineer's Convention 2011 (WEC 2011)
www.wec2011.ch

13-15 October | Chicago, Illinois, USA
SWE11: The Annual Conference for Women Engineers
we11.swe.org

8-9 November | Brussels, Belgium
European Gender Summit:
Scientific Quality through Equality
www.gender-summit.eu

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