

World Federation of Engineering Organizations Committee Member Progress Report

This report is submitted by each WiE Committee Member to report on progress in addressing the goals and objectives for each of the WiE Committee's three themes

Committee Member Name	Reine Essobmadje
Organization or Country	Cameroon / France – ICT4MDG
Date Submitted	4 December 2014
Committee Member Email Address	ree@evolvingconsulting.com

1 Summary

Provide a brief summary of your report.

This report aims to describe the activities run by ICT4MDG with the support of Evolving Consulting in Cameroon and France.

The activities cover:

- The use of ICT to fulfil MDGs
- Youth and Women empowerment
- Entrepreneurship
- Innovation
- Training and Master Class

2 Accomplishments

Please list accomplishments in addressing the goals and objectives of each theme. Please see the WFEO WiE Themes document or the WiE website for the list of goals and objectives for each theme.

2.1 Engineering Workforce Diversity Theme



«Elargir les horizons, changer les attitudes»

Hack4Girl 3.0 I.D.E.E: Imaginer - Développer - Exposer - Exécuter



Comme Ana, Awa, Julie et Karen, entrez dans le monde des geeks 19 Nov.2014 dès 13H au Lycée Fustel de Coulanges

Hack Me I'm a Famous Geek







Hack4Girl 3.0

Organized with the support of 5 High schools in Cameroon, the Hack4Girl is a training session dedicated to female teenagers

It took place on November 19 and reunited 36 girls, 8 Jury members.

- Participants: 36 girls in 6 teams
- Jury: 8 people
- Topics: Culture and tourism

They have learned to do a blog using wordpress in order to promote Cameroonian culture and tourism

They have also brainstorm on the role of young girl using these topics:

- What role for the young women in the 21st century society
- Innovate to influence your environment: the contribution of female youth?

More pictures on

https://plus.google.com/u/0/photos/103019854320441478301/albums/6088641973351043681

Videos is available here: https://www.youtube.com/watch?v=oZr0szjGSoE









2.2 Leadership and Empowerment Theme



www.ict4mdg.org/info@ict4mdg.org Training sur les plateformes Microsoft inclus dans le cadre

Microsoft (

CONSULTING LT4MDG

Hack4Afrik 3.0 & Drink&Talk (13 & 15 Nov. 2014)

Hack4Afrik is a development competition aka Hackathon. A hackathon is an event where developers meet to do collaborative computer programming. The term consists of hack and marathon. It is a gathering of developer's teams with the goal of producing a prototype in a few hours. At the end of the timed competition, the winning team will be selected by a jury.

The Drink&Talk promotes youth entrepreneurship. Selected start-ups will have 5 minutes to present their project. Let's heard about the Y generation!!!!

→ Participants: 200 youths in 26 teams

→ Jury : 9 people

→ Topics: e-gamification, e-Green, e-health

More pictures on

Videos is available here:

https://www.youtube.com/watch?v=oZr0szjGSoE

More pictures on:

https://plus.google.com/u/0/photos/103019854320441478301/albums/6088654005019177281



2.3 Engineering Strategic Indicators Theme



ICT days Africa 3.0 – Workshop, Innovation, Big Data's Master class

2 days, 150 participants, in Douala 12-13 Nov 2014, more on www.ict4mdg.org





2.4 Other Accomplishments

3 Announcements

Please list any announcements of upcoming programs, news from your organization, or other information valuable to the WFEO WiE Committee.

We will organized the 5th edition of ICT days in 2015.

We are preparing also an event with High school in France

4 Resources

Please provide links to any publications, statistics, videos or other resources to be shared with the WFEO WiE Committee.

https://plus.google.com/u/0/photos/103019854320441478301/albums/6088641973351043681

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https://plus.google.com/u/0/photos/103019854320441478301/albums/6089014895825604273

https://www.youtube.com/watch?v=oZr0szjGSoE

http://www.ict4mdg.org/index.php/videos



World Federation of Engineering Organizations Committee Member Progress Report

Committee Member Name	Rita OHENE SARFOH
Organization or Country	GHANA INSTITUTION OF ENGINEERS
Date Submitted	27 November 2014
Committee Member Email Address	awosarfoh@yahoo.com

Summary of accomplishments - 2014

March 2014, Accra; GHANA

WIE Ghana organized the fourth WIE Forum on the 25th March 2014 at Accra, Ghana. The forum had the theme "Providing Sustainable Solutions for Improved Quality of Life"

Ing. (Mrs.) Harriet Amissah-Arthur was the Key Note Speaker Ing. (Mrs.) Safaratu Andani chaired the meeting.

Engr. (Mrs.) Yetunde Olanlyan, who represented the APWEN President graced the occasion and spoke about the World Engineers Summit on Sustainable Infrastructure (WESCI) scheduled to be held in Nigeria in November 2014. She encouraged WINE members to submit papers and make presentations to promote African Female Engineers. She congratulated WINE on a successful forum.

The forum, which was well attended started at 10.00am with the welcome address by the President of WINE. The Key note speaker then spoke on "The Engineer and sustainable way of Thinking".

She indicated that whiles Engineers are trained to provide sustainable infrastructure, we must place ourselves as the end-user and or consumer to achieve this objective. She indicated that

Engineers have for a while seen ourselves as producers and designers instead of also being part of the beneficiaries of the services and infrastructure.

She advised that Engineers "think, conceptualize and design with appropriate technology which will facilitate the sustainable operation and maintenance of our designs and services.

She charged the WINE members to

- i. Take ownership and lead the process;
- ii. Learn entrepreneurial skills to understand the problems of unsustainable engineering designs and services to find sustainable solutions;
- iii. Be Marketers and not only designers, producers and service providers and
- iv. Take initiative to make a change for the benefit of society.

She proposed that WINE should consider the waste management issue currently facing the country and initiate a process with the Ministry of Local Government and Rural Development to make a change in society.

She concluded by challenging WINE to reposition itself as a business and advocacy network of the GhIE.

Dr. Boakye, a Vice President of the GhIE also charge WINE to ensure that members take up positions in society to ensure that we represent and participate in decision making. He reiterated that until Engineers contribute to decisions at all levels of society, our aim to ensure sustainable solutions will remain as a mirage.

Ing (Mrs.) Enyonam Kpekpena who designed the WINE website, introduced and took members through the website. The website was duly launched by Ing (Mrs.) Victoria Berkoh.













World Federation of Engineering Organizations Committee Member Progress Report

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Committee Member Name	Ania Lopez
Organization or Country	Consiglio Nazionale degli Ingegneri_CNI
Date Submitted	2/12/2014
Committee Member Email Address	ania.lopez@cni-online.it

Summary and Accomplishments 2013-2014

After the success in 2013, the National Council of Engineers, is a presentation this year, the second edition of "Ingenio al Femminile"_ FEMALE ENGINEERING GENIUS, Stories of women who leave their mark. The purpose with which this initiative is born is to fully exploit some special abilities of their female figure, such as greater relational capacity, creativity, sensitivity, in a job, like that of the engineer, historically declined to male.

Ingenio al Femminile, the CNI, wants to create a network of positive relationships where, thanks to the story of ordinary and extraordinary stories of women engineers, it can be shown that the female is able to really go beyond the discomfort and guilt which still exist in combining work and family.

Create an opportunity fixed to meet, exchange, sharing becomes important to know and meet and participate together to change, also showing the data processed by the Centre for Studies on female component engineering Italian.

The event is open to all college women engineers and beyond, even to male colleagues, the academic world, the world of industry, representatives of the different categories, and especially to the political world.

Announcements

- a) Presentation of the second edition of the "Ingenio al femminile"_Female Engineering Genius to be held in Rome at the Chamber of Deputies Italian, the next 11th February, 2015, this year the project portrays 3 women engineers and will be presented within the event the new survey by the Research Center of the National Council on motherhood and fatherhood, addressed to all the women who work in the fields of engineering, and we would do an evaluation with concrete proposals on the various cases of studies according to the type of work (public or private).
- b) To share a proposal for participation of WFEO (STC WIE) at Expo 2015, the CNI presented inside the Italian Stand project "Ingenio al Femminile" (Female Engineering Genius). http://www.expo2015.org/en/progetti/we-women-for-expo

Resources

- a) Attached 1_ Short Video "Ingenio al Femminile"_ 1th edition (only Italian)
- b) Attached 2 _ Research on Components Female population in Italian engineering (only Italian)
- c) Attached 3_ Research Survey _ Maternity and Paternity research conducted by CNI Study
 Centre on the role of women engineers
 http://www.centrostudicni.it/pubblicazioni/ricerche/1051-maternita-paternita-una-condizione-possibile-per-gli-ingegneri

by Ania Lopez. Eng
Counselor
National Council of Engineers of Italy
Via IV November, 114
00187 Rome (Italy)
www.tuttoingegnere.it/PortaleCNI/it/consiglio.page





World Federation of Engineering Organizations Committee Member Progress Report

This report is submitted by each WiE Committee Member to report on progress in addressing the goals and objectives for each of the WiE Committee's three themes

Committee Member Name	Ir Rosaline Ganendra
Organization or Country	Women Engineers Section, The Institution of Engineers, Malaysia
Date Submitted	3/12/14
Committee Member Email Address	roseg2@minconsult.com

1 Summary

Provide a brief summary of your report.

Official Name: Women Engineers Section, The Institution of Engineers, Malaysia

Address: Bangunan Ingenieur, Lot 60 & 62, Jalan 52/4, 46200 Petaling Jaya

Members: 5387 as November 2014

Main Activities

The VISION of the IEM WE Section to ensure the Engineering Profession values, supports and celebrates the contributions & achievements of Women in Engineering

The MISSION of the IEM WE Section is to build a network connecting Women Engineers, and drawing strategic alliances amongst engineering professional bodies to inspire, support and celebrate Women Engineers in their professional development.

Goals/other information

The objectives of the IEM WE Section are:

- To connect women engineers locally & internationally; establishing strong networking
- To encourage women engineers to participate in Engineering activities
- To enable a platform for self- development, continuous learning and contribution to the society

The IEM WE Section have the following activities in their calendar:

- Workshops / Talks at Universities/Schools
- Evening Talks amongst industry players
- Annual Gatherings
- Corporate Connection with Women Engineers in the industry
- Fellowship with other Engineering Bodies
- Circle Leader Training
- Branches Visits
- Charity Drives

The IEM WE Section is planning to hold a National Summit in 2015 enroute to an International Conference on Women in Science, Engineering and Technology in 2016.

2 Accomplishments

Please list accomplishments in addressing the goals and objectives of each theme.

Please see the WFEO WiE Themes document or the WiE website for the list of
goals and objectives for each theme.

2.1 Engineering Workforce Diversity Theme

I have attended the following Forums & Events to address the goals and objectives under the Engineering Workforce Diversity Theme;

- 1. **Tribute to Women**, Panelist Speaker at the Business Forum, SME Corporation Malaysia, April 2014
- 2. **Policies & Activities on Gender, Science & Technology**, Asia and Pacific Nation Network (APNN), Taipei, September 2013

2.2 Leadership and Empowerment Theme

I have attended the following Forums & Events to address the goals and objectives under the Leadership and Empowerment Theme;

- Leadership, Harmony & Beyond, Seoul August 2014 Asia & Pacific Nation Network & Meeting in Asia & Pacific Women in Science & Technology (Presentation attached)
- Delivered the Graduation Address at the Monash University Graduation Ceremony, Malaysia
 November 2013
- Entrepreneurship & Leadership, The 2013 International Conference on Women in Science & Technology (IconWiST), Taipei, September 2013

2.3 Engineering Strategic Indicators Theme

I have attended the following Forums & Events to address the goals and objectives under the Engineering Strategic Indicators Theme;

- Member of the Organizing Committee for 'Konvensyen Usahanita Binaan 2014' (KUBINA), Jointly Organizing for the first time by Ministry of Works and Construction Industry Development Board (CIDB) 2014
- 2. **Policies & Activities on Gender, Science & Technology**, Asia and Pacific Nation Network (APNN), Taipei, September 2013

2.4 Other Accomplishments

- 1. I received the BELLA Business Award, 2013
- 2. I received the Ernst & Young Woman Entrepreneur of the Year Award, 2013

3 Announcements

Please list any announcements of upcoming programs, news from your organization, or other information valuable to the WFEO WiE Committee.

The IEM WE is planning to hold a National Summit in 2015 enroute to an International Conference on Women in Science, Engineering and Technology in 2016.

4 Resources

Please provide links to any publications, statistics, videos or other resources to be shared with the WFEO WiE Committee.

IEM WE Section homepage www.myiem.org.my

Presentation on Country Report 2014 Asia & Pacific Nation Network & Meeting in Asia & Pacific Women in Science & Technology attached



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Committee Member Name	Tracey Ayre
Organization or Country	Institution of Professional Engineers New Zealand
Date Submitted	28 November 2014
Committee Member Email Address	Policyadvisor@ipenz.org.nz

1 Summary

Provide a brief summary of your report.

This report summarises the key initiatives IPENZ has undertaken in 2014 to support women to enter, remain and advance in the engineering profession. Highlights include:

- Completion of the second annual survey of engineering organisations to investigate the involvement of women in those organisations and the policies and practices in place to support them.
- Introduction of Engineering Diversity, an electronic newsletter for engineering leaders that presents topical issues and encourages leaders to take action to support diversity
- Provision of a submission to central government in relation to parental leave legislation

2 Accomplishments

Please list accomplishments in addressing the goals and objectives of each theme.

Please see the WFEO WiE Themes document or the WiE website for the list of goals and objectives for each theme.

2.1 Engineering Workforce Diversity Theme

Snapshot 2014 – survey of engineering organisations

In September 2014 IPENZ published findings from its second survey of engineering employers. The survey is undertaken to investigate the gender diversity of New Zealand's engineering organisations and the policies and practices those organisations have in place to support their employees.

Nineteen engineering organisations participated in the 2014 survey and those organisations employ 13,157 employees, 30 per cent of whom are women. Of the 3,296 engineers those organisations employ, 14 per cent are women.

The key findings from *Snapshot 2014* are that:

- Employers are preferentially employing female graduates (35% of new hires were female, well above the proportion of female engineers leaving universities and polytechnics)
- Employers are generally supportive of their employees:
 - over 80% of participating organisations offer the opportunity to work part-time or flexible hours or to work remotely
 - all 19 participating organisations remain in contact with employees who take career breaks, while they are away from the workplace
 - 14 of the participating organisations have undertaken a pay equity audit to ensure male and female engineers receive the same remuneration for the same work.
- There is still room for improvement:
 - None of the organisations offer onsite childcare which is a potential means of increasing employee attendance and productivity in the workplace.
 - Women remain under-represented in the profession at all levels, particularly at more senior levels. For example, just 13% of those on the organisation's boards are women.
 At senior management and management, the levels are also low 13% of engineers on senior management teams are women and just 7% of engineers with direct reports are women.

 Only 4 organisations have a programme to specifically support or develop female engineers.

Continued Delivery of Futureintech

IPENZ delivers Futureintech – an IPENZ initiative that is funded by Callaghan Innovation, a central government agency. The goals of Futureintech are to:

- Increase the proportion of technology, engineering and science enrolments amongst total enrolments in tertiary study.
- Raise the profile of careers in technology, engineering and science as highly desirable.
- Offer school students realistic learning experiences in technology, engineering and science.
- Establish co-operative relationships between industry and education communities.

Futureintech takes young people who already work in technology, engineering and science-related industries into schools. By sharing their experiences and pathways, those young people can inspire young schoolchildren to explore careers in areas where there is strong demand for people with the right skills.

While Futureintech doesn't directly aim to increase the number of young women entering engineering, it does assist in this aim. Approximately 40 per cent of "Ambassadors" (young people working in industry that are taken into schools) are women, helping provide role models for young women considering a career in science, engineering or technology.

Introduction of Engineering Diversity - an electronic newsletter for engineering leaders

In 2014 IPENZ introduced a new bi-monthly electronic newsletter for engineering leaders. The newsletter provides updates about IPENZ's women in engineering programme, information on topical diversity/workplace issues and links to articles and events of interest to female engineers and male/female managers and chief executives.

Four issues were produced in 2014 with topics including gender pay gap, unconscious bias and a discussion of whether women in engineering awards are needed.

2.2 Leadership and Empowerment Theme

Submission to central government in relation to parental leave legislation

In August 2014 IPENZ submitted to the Ministry of Business, Innovation and Employment regarding moves to modernize New Zealand's parental leave provisions. In general we supported the proposed changes which will see parental leave available to a wider group of parents, including shift and seasonal workers. The proposals would also enable those on parental leave to work a certain number of days – a positive move which we believe will enable employers to utilise an employee's specialist skills or knowledge and enable projects to continue, rather than stalling them until the employee returned to the workforce following their parental leave. For female engineers we believe the scheme would result in engaged, enthusiastic employee who feels connected to their workplace and valued. We believe this would mean employee would be more likely to return to the workplace after their parental leave ends.

In the submission we also called on the Ministry to take actions to showcase part-time and flexible work as a positive outcome for both employees and employers so that female engineers (and male engineers) are more likely to remain enthused about their employment and not become disillusioned and dissatisfied former engineers.

We also noted the importance of flexibility and parental leave being seen as something for all employees, not just women.

Continued delivery of Connect networking events

In 2014 IPENZ, with its partners the National Association of Women in Construction (NAWIC) and the Institution of Civil Engineers (ICE), continued hosting Connect networking events for female engineers. These events bring together women in engineering and construction by offering networking opportunities and low-cost continued professional development, and celebrating the success of women in the industry. Connect started in Wellington and is now active in Auckland, Taranaki, Waikato and Wellington. While Connect events are targeted at female engineers, both male and female engineers are welcome to attend.

In addition to Connect events, IPENZ has also partnered with the lawyers' and accountants' professional bodies to deliver cross-profession events. This year Peta Matthias, a writer, chef, television presenter and company co-owner shared her experiences and reflected on the following:

- what it means to be a woman or man in the 21st century
- the extent to which an individual's self-worth is connected to their job
- what risks are involved in being self-employed or successful
- how you can raise your profile and be successful.

Promotion of IPENZ Fellowship

IPENZ Fellowship is the most prestigious level of IPENZ Membership. It recognizes outstanding individual engineering achievements or contributions to Members who have made a substantial contribution to the development of the engineering profession, its practices or IPENZ itself.

Few Fellows are female – in part due to the historical domination of engineering by men. In 2014 just 24 of IPENZ's 843 Fellows are female.

In 2014 IPENZ increased its promotion of Fellowship to its IPENZ Members, encouraging female Members to put themselves forward for Fellowship or to contact IPENZ if they needed support in doing so. We intend to increase promotion and support further next year.

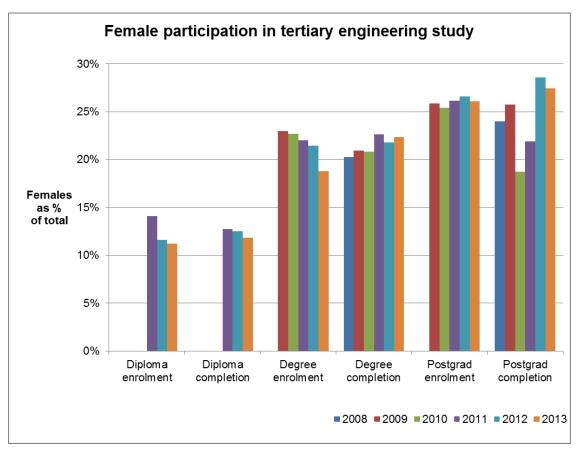
Continued profiling of female engineers

IPENZ sees profiling of female engineers as an important means of providing role models for other female engineers and to help ensure female engineers begin to be seen as "mainstream". In 2014 IPENZ profiled 19 women in its publications – ranging from school students who have been selected as recipients of scholarships to profiles of senior women in the profession.

2.3 Engineering Strategic Indicators Theme

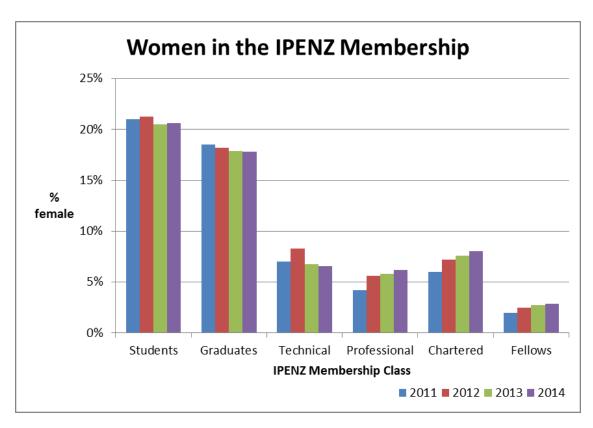
Continued monitoring of education data

IPENZ regularly reviews education data to track trends in the number of women undertaking and completing tertiary level engineering study at universities and polytechnics. Figures for the last six years are presented below.



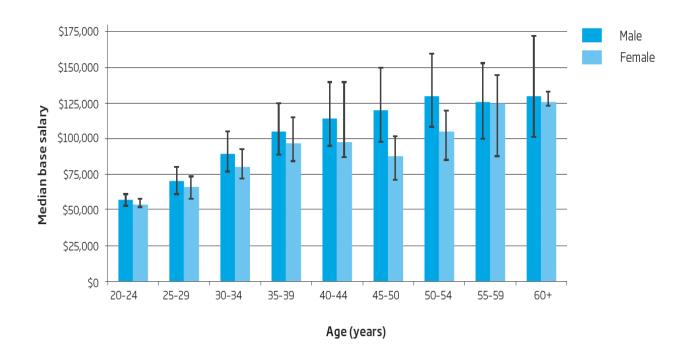
Continued monitoring of IPENZ Membership data

As with education data, IPENZ regularly reviews its Membership data to track trends in the number of women in the IPENZ Membership. The latest data is presented below.



Continued monitoring of the gender pay gap

IPENZ undertakes an annual survey of its Members to investigate remuneration of engineers. The data is analysed on a number of bases, including gender. The 2014 Remuneration Survey shows male and female entry level engineers start on around the same remuneration. However, a gender pay gap occurs soon after entry to the profession. The largest pay gap (of \$32,000) occurs when engineers are aged 45-49 years of age. The overall gender pay gap is around 5 per cent.



2.4 Other Accomplishments

IPENZ has no other accomplishments to share.

3 Announcements

Please list any announcements of upcoming programs, news from your organization, or other information valuable to the WFEO WiE Committee.

IPENZ has no announcements to share.

4 Resources

Please provide links to any publications, statistics, videos or other resources to be shared with the WFEO WiE Committee.

IPENZ submission to the Ministry of Business, Innovation and Employment in relation to parental leave - http://www.ipenz.org.nz/ipenz/forms/pdfs/Modernising%20Parental%20Leave%20final%20submission.pdf?73498

Women in Engineering: Snapshot 2014 - https://www.ipenz.org.nz/ipenz/forms/pdfs/10238- WIE%20Snapshot%202014%20WEB.pdf?9433

Futureintech website - http://futureintech.org.nz/

Engineering Diversity Issue 1 April/May 2014 -

http://ipenz.cmail1.com/t/ViewEmail/t/D05ED23E951E480F/7AF722807633EB6A0F8C96E86323F7F9

Engineering Diversity Issue 2 June/July 2014 -

http://ipenz.cmail2.com/t/ViewEmail/t/B876C6C596FD24BF

Engineering Diversity Issue 3 August/September 2014 -

https://ipenzpd.createsend.com/reports/viewCampaign.aspx?d=t&c=D59CC2361A46CB00&ID=0BFCAEBDB040AC58&temp=False

Engineering Diversity Issue 4 October/November 2014 -

 $\frac{\text{https://ipenzpd.createsend.com/reports/viewCampaign.aspx?d=t\&c=D59CC2361A46CB00\&ID=4C4B1DEDA9AA3BDD\&temp=False}{\text{DA9AA3BDD\&temp=False}}$

Education data -

http://www.educationcounts.govt.nz/statistics/tertiary_education/retention_and_achievement_and http://www.educationcounts.govt.nz/statistics/tertiary_education/participation



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Committee Members Name	Valerie Agberagba, Ini Usoro & Nnoli Akpedeye
Organization or Country	NIGERIA
Date Submitted	4 th DECEMBER
Committee Member Email Address	doosh_ivy@yahoo.com

1 Summary

Provide a brief summary of your report.

Women in Engineering Committee of the Nigerian Society of Engineers worked closely with the Association of Professional Women Engineers to carry out a few projects for the year 2014. These programmes were in line with the first two themes of the WIE standing technical committee themes. The Committee also also involved in the monitoring and evaluation of the primary school teachers trained on ICT last year.

2 Accomplishments

Please list accomplishments in addressing the goals and objectives of each theme.

Please see the WFEO WiE Themes document or the WiE website for the list of goals and objectives for each theme.

2.1 Engineering Workforce Diversity Theme

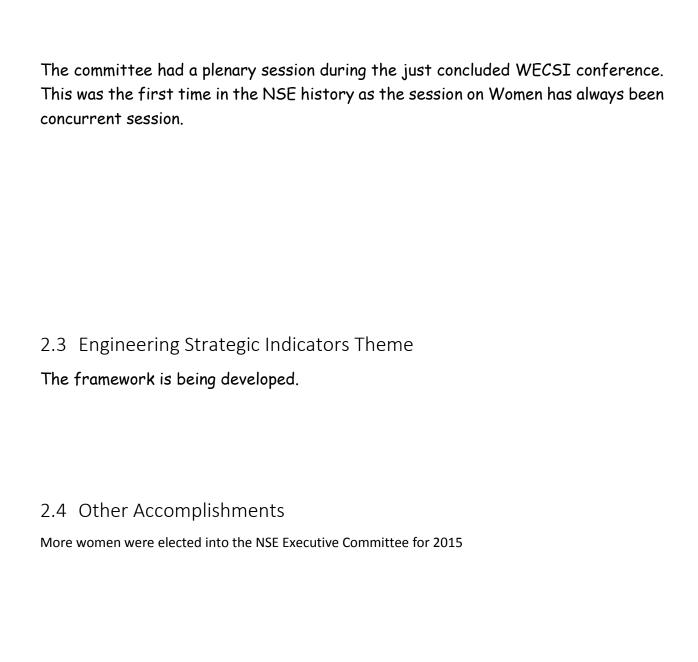
- To improve the attraction, retention and promotion of women engineers within the work place;
- o To provide employers with information improving the workplace and workforce diversity for competence, innovation and engagement;
- To provide women engineers with information helping them to succeed in the work place and attain high level positions.

As part of programme towards achieving the above goals, The Chairman of the Women in Engineering Committee, who also is the President of APWEN, led a delegation of Past Presidents/Chairs of the committee and some senior members on visit to the Nigerian National Petroleum Cooperation, NNPC. A few of the women in the cooperation were also present. Deliberation was quite encouraging and the corporation willing to collaborate in the execution of some programmes.

2.2 Leadership and Empowerment Theme

The need to empower women in engineering to be self-sufficient and employers of labour was the focus of 2014 International Women's Day. A workshop on "Inspiring Change through Entrepreneurship was held on March 6^{th} 2014. The programme was well attended and feedbacks encouraging.

The Chair also led a delegation of Past Presidents and Senior Members on a visit to the Executive Governor of the host state, Osun. The need to place Women in SET in leadership position for effective management of resources was emphasized and one of our own who was recently confirmed as Dean of Enginnering was recognized.



3 Announcements

Please list any announcements of upcoming programs, news from your organization, or other information valuable to the WFEO WiE Committee.

4 Resources

Please provide links to any publications, statistics, videos or other resources to be shared with the WFEO WiE Committee.



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Committee Member Name	Yvette RAMOS
Organization or Country	SWISS ENGINEERING
Date Submitted	26 nov. 2014
Committee Member Email Address	Yvette.ramos@swissengineering-ge.ch

Summary of accomplishments - 2014

March 2014, New York; USA

Invited to represent Switzerland, together with nearly 700 CEO worldwide, signatories of the WEPs statement that is a partnership initiative of UN Women and the UN Global Compact. Honored to be invited to the 6th Annual Women's Empowerment Principles Event (WEPs) held on 5-6 March 2014 at the UN headquarters in New York, with a specific highlight on Gender Equality and the Global Jobs Challenge. This event brought spotlight on business strategies, experience and challenges on increasing and enhancing job opportunities for women and expanding access to decent jobs. It provided also a roadmap for companies to advance and empower women in the workplace, marketplace and community. More information on http://weprinciples.org

November 2014, Argentina:

Invited to the Womens Event prior to the Engineers Convention held 4-6 november 2014 in the Convention center, Buenos-Aires, Argentina and participated to the Panel "Companies, innovation, diversity and inclusion", moderated by Olga cavalla, of the National Center of

Engineers of Argentina, on November 3rd, 2014. This panel addressed experiences related with women engineers focusing on the value of diversity in working groups and innovation in the industry brought by women engineers. Also, during the congress I was invited to speak on the "Integration of new technologies in the everyday life of Engineering community" and showcasing my own company (an Intellectual Property law Firm based in Geneva) as a concrete case. More information on www.ingenieria2014.com.ar

November 2014, Marrakech, Morocco:

Invited by the American Association for the Advancement of Science (AAAS) to participate as a mentor and trainer in the 2014 Global Innovation through Science and Technology (GIST) initiative's Technology-Idea (Tech-I) Competition Finals at the Global Entrepreneurship Summit (GES) in Marrakech, Morocco. Tech-I is the annual competition of the GIST initiative which is led by the U.S. Department of State. This year Tech-I received over 500 applications and following expert panel review, for which i participated, and global public voting we have selected 30 finalists from 23 countries. More information on www.aaas.org/tech-i/finalists #GES2014

By Yvette Ramos, MSci.Eng. - MBA, Présidente Swiss Engineering Geneva

Switzerland <u>www.swissengineering.ch</u> twitter: @se-romandie





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Committee Member Name	Stacey M. DelVecchio
Organization or Country	American Association of Engineering Societies (AAES)
Date Submitted	1 December 2014
Committee Member Email Address	Delvecchio_stacey_m@cat.com

1 Summary

Provide a brief summary of your report.

The member organizations of the American Association of Engineering Societies have had an incredibly productive year. Programs and services by the Minerals, Metals and Materials Society (TMS), the International Society for Optics and Photonics (SPIE), ASME, IEEE Women's Group, and the Society of Women Engineers (SWE), including ICWES16, are included in this report.

2 Accomplishments

Please list accomplishments in addressing the goals and objectives of each theme.

Please see the WFEO WiE Themes document or the WiE website for the list of goals and objectives for each theme.

2.1 Engineering Workforce Diversity Theme

The Society of Women Engineers hosted their annual conference, WE14, in Los Angeles, California with a record 8,200 attendees from over 44 countries. WE14 was held in conjunction with ICWES16. The conference had over 280 professional development sessions and a career fair with 514 booths.

The Society of Women Engineers is proud to announce the release of what will eventually be six self-paced Diversity & Inclusion modules. These modules will be bundled with group facilitation materials that will be marketed as the society's Diversity & Inclusion Toolkit for organizational partners. The topics of the modules, and their expected go-live date, are listed below:

- Importance of Diversity in the Workplace (Module 1 Status: Complete)
- Confronting Gender Bias (Module 2 Status: Complete)
- Managing Diverse Teams (Module 3 Status: Complete)
- Mentoring, Coaching, and Sponsorship (Module 4 Status: release date November 2014)
- Cross Cultural Competence (Module 5 Status: release date December 2014)
- Organizational Interventions (Module 6 Status: release date January 2015)

The Society of Women Engineers has established partnerships with: WFEO, JWIN, WiTeck (the Women in Science, Engineering, and Technology in Korea), APWEN, and the Global STEM Alliance. The Alliance is an initiative of the New York Academy of Sciences in partnership with governments, industry, philanthropists, schools, NGOs, and leading academic institutions around the world. A solution to the growing STEM education crisis, the Alliance will leverage a virtual learning platform to enhance on-the-ground STEM education initiatives through customized STEM programs that boost desired impacts for key populations, facilitate global mentoring and networking among top scientists and engineers with STEM students, connect STEM leaders worldwide to local STEM programs for global scientific advancement and be a global resource for STEM teaching and learning materials. To date more than 40 organizations have joined the Alliance.

ASME was a participant on the National Academy of Engineering Report on the Technical Workforce (diversity).

2.2 Leadership and Empowerment Theme

At the Society of Women Engineers annual conference, WE14, 51 women were recognized with society awards.

In the 2014 fiscal year, the Society of Women Engineers awarded \$721,300 in scholarships to 232 recipients, 28% increase over the previous year.

The Society of Women Engineers is growing its programs and services outside the United States. To support this effort, the following four components have been launched.

- 1. International Affiliate A SWE International Affiliate group is a community of individual SWE members that reside outside the United States that wish to function as a recognized SWE entity. An International Affiliate group allows the SWE members to utilize the name of the Society for group functions and permits the members to apply for, or compete for, individual awards given out annually by the Society.
- 2. International Ambassadors Program The International Ambassador program is an opportunity for a member that resides outside the United States to serve in a SWE leadership position for their city, country, region and the Society. The position, titled SWE International Ambassador, will promote the SWE brand, recruit SWE members and be fluent on SWE products/services available to members and partners living in their area. In addition to their role of SWE representative in-country, a SWE International Ambassador will create a Personal Leadership Development Plan and have the opportunity to participate in peer-to-peer group training sessions in order to strengthen individual leadership skill sets.
- 3. International Online Community During WE14, SWE announced to international attendees the launch of the newest international initiative: an online networking and resource portal for SWE members and non-members living outside the United States. The portal allows women engineers outside the United States to create a searchable profile, upload personal blogs, discuss engineering & women's topics in a forum, upload pictures, advertise engineering and SWE events, find members/leaders in their area, and join a regional/local groups and Affiliates. This site will be open to the public through an invitation format in order to collect email addresses. The goal is to create the platform for the engineers, but for the individuals to really contribute to the content.
- 4. International on SWE.ORG http://societyofwomenengineers.swe.org/international-member#activePanels) SWE now has a page on the website that is dedicated to international activities of SWE. This site is open to the public and has feature articles, information on members, affiliates, ambassadors and sisters, as well as a section that highlights voices from the field.

The International Society for Optics and Photonics Women in Optics events in 2014 featured:

- A panel discussion entitled Transitions: Graduating from Academia to Industry that featured 5 women s who were recent graduates starting careers in industry.
- Speakers at two other WiO events including Prof. Ana María Cetto, co-recipient of two Nobel prizes.

ASME held their Sixth Annual Women in Engineering Reception in November 2014 during the International Mechanical Engineering Congress and Exposition. The reception provided a focal point at the conference for a gathering of women from the wide range of ASME activity.

ASME gave their annual award that recognizes the outstanding contribution by an individual, company, government entity, school, or other organization toward developing and implementing practices, processes and programs that value and strategically manages diversity and inclusiveness.

The Minerals, Metals and Materials Society held the First TMS Summit on Creating and Sustaining Diversity in the Minerals, Metals, and Materials Professions in July 2014 in Washington, D.C. The summit

featured keynotes from leaders in the field, professional development training, and facilitated discussions to develop practical solutions for diversity challenges.

TMS debuted the Ellen Swallow Richards Diversity Award in 2014. The award recognizes an individual who reflects the remarkable pioneering spirit of Ellen Swallow Richards in overcoming personal, professional, educational, cultural, or institutional adversity to pursue a career in minerals, metals, and/or materials, or in helping others to overcome these challenges to pursue such a career.

IEEE Women In Engineering held their International Leadership Conference in May 2014 in San Francisco, CA.

For the fifth year in a row, the Society of Women Engineers organized the 2014 "Diversity and Inclusion Fuels Innovation in Science, Technology, Engineering, and Mathematics (STEM)" Capitol Hill Day in Washington DC. The purpose of the event was for leaders of STEM and diversity organizations to advocate to their Congressmen/women about the importance of diversity in STEM. The following 37 organizations co-sponsored the event: American Association of University Women; ABET; American Institute of Chemical Engineers; American Institute of Medical and Biological Engineering; American Institute of Mining, Metallurgical, and Petroleum Engineers; American Indian Science and Engineering Society; Association for Iron and Steel Technology; American Nuclear Society; American Society of Agricultural and Biological Engineers; American Society of Civil Engineers; American Society for Engineering Education; American Society of Heating, Refrigerating, and Air-Conditioning Engineers; The Anita Borg Institute; ASME; Association for Women in Science; Automation Federation; IEEE-USA; IEEE Women in Engineering; Institute of Industrial Engineers; International Society of Automation; Mentornet; NAMEPA, Inc.; National Action Council of Minorities in Engineering; National Center for Women and Information Technology; National GEM Consortium; National Organization of Gay and Lesbian Scientists and Technical Professionals, Inc.; National Society of Black Engineers; National Society of Professional Engineers; SAE International; Society of Hispanic Professional Engineers Foundation; Society of Mining, Metallurgy, and Exploration, Inc.; SME; SME Foundation; SPIE- The International Society for Optics and Photonics; The Optical Society; TMS; and Women in Engineering Pro-Active Network (WEPAN).

2.3 Engineering Strategic Indicators Theme

Nothing to report.

2.4 Other Accomplishments

The Society of Women Engineer ended their fiscal year 2014 with a record 29,000 plus members.

The Society of Women Engineers has a multifaceted program for outreach to students ages 5 to 18. A signature program that is specifically targeted to girls that are 11-14 years old, is Invent It. Build It. The open-to-the-public workshop was held as part of SWE's annual conference, WE14, and offered girls the opportunity to experience the world of engineering hands-on. All activities were led by women engineers from around the world. Design Squad Nation host, Deysi Melgar was emcee of the event. The Honorable Ladoris G. Harris –director, Office of Economic Impact and Diversity for the U.S. Department of Energy provided the Keynote. The workshop has a corresponding session for the parents

of the girls. This year's workshop was attended by 619 girls and 301 parents. The intent is to keep these girls involved beyond the day of the event through a new program called SWENext.

The International Society for Optics and Photonics outreach efforts to girls and women included the printing and global distribution of 5,000 Women in Optics planners that feature profiles of over 25 women from around the world who have successful careers in optics and other STEM areas.

3 Announcements

Please list any announcements of upcoming programs, news from your organization, or other information valuable to the WFEO WiE Committee.

Mark your calendars! The Society of Women Engineers will be taking the Annual Conference to Europe on May 7th and 8th 2015! WE14: A Global Exchange for Change, which was held in October 2014 in Los Angeles will be reinvented in Europe and hosted at the Movenpick Amsterdam City. The society will be adding a "European twist" to the conference by attracting speakers and presenters from various cities in Europe! Education tracks will include: Career Management for Students & Early-Career, Inclusion & Cultural Awareness, Innovation & Disruptions, and Career Transitions for Professionals. Call for presentations will begin December 2014 and registration will open in January 2015.

The Society of Women Engineers will host their 2nd Annual Online Career Development Conference on February 12-13, 2015. The conference will feature an array of accomplished speakers, bringing together distinguished presenters to share their thoughts on how women can take control of their careers. The theme for the 2015 conference is: *Cross Cultural Competence - Key Learnings on How to Work With and Appreciate Other Cultures in the Workplace*.

4 Resources

Please provide links to any publications, statistics, videos or other resources to be shared with the WFEO WiE Committee.

The Society of Women Engineers launched their portal on their web site specifically for members and events outside the United States: http://societyofwomenengineers.swe.org/international-member#activePanels http://societyofwomenengineers.swe.org/international-member#activePanels http://societyofwomenengineers.swe.org/international-member#activePanels http://societyofwomenengineers.swe.org/international-member#activePanels http://societyofwomenengineers.swe.org/international-member#activePanels http://societyofwomenengineers.swe.org/international-member#activePanels http://societyofwomenengineers.swe.org/international-members http://societyofwomenengineers.swe.org/international-members http://societyofwomenengineers.swe.org/international-members http://societyofwomenengineers.swe.org/international-members <a href="http://societyofwomenengineers.swe.org/international-members.swe.org/international-members.swe.org/international-members.swe.org/international-members.swe.org/international-members.swe.org/international-members.swe.org/international-members.swe.org/international-members.swe.org/international-members.swe.org/international-members.swe.org/international-members.swe.org/international-members.swe.org/

The Society of Women Engineers published two e-books in 2014. Both are available for download at http://societyofwomenengineers.swe.org/e-book-download:







World Federation of Engineering Organizations Committee Member Progress Report

This report is submitted by each WiE Committee Member to report on progress in addressing the goals and objectives for each of the WiE Committee's three themes

Committee Member Name	Farai Mavhiya
Organization or Country	ZIMBABWE
Date Submitted	3 December 2014
Committee Member Email Address	Farai.mavhiya@arup.com

1 Summary

May 2014, Johannesburg, South Africa

I was invited to the Totally Concrete Expo and the African Construction Expo held in Johannesburg South Africa in May 2014 following nomination for the Women in construction Excellence Awards. The Expo facilitated networking and meetings with other women in Construction from across the continent and exclusive technical site visits.

September 2014, Mexico

One of the Women in Engineering, Dr Eng Manyuchi presented a paper at a General Assembly for Organisation of Women in Science & Engineering for the Developing Countries (OWSD) entitled Biogas production form co-digestion of cow dung & food waste.

September 2014, San Francisco

Two of the Zimbabwean Women in Engineering participated in the 2014 Techwomen program which took place in America. The Techwomen is a mentorship program for emerging leaders in STEM. The participants benefited greatly from the exchange program, which we believe will enhance their skills and performance.

September 2014, Harare, Zimbabwe

An increased number of Women in Engineering participated as judges at the fourth edition of the Research and Intellectual Expo (RIE 2014) which was held at the University of Zimbabwe. The expo's theme was Engagement, Innovation and Diversity for National Transformation and Development. The continued participation of Women in Engineering in national activities increases visibility of Women Engineers and Technicians thus encouraging students to stay focused in the profession after completion of studies.

2 Accomplishments

Participation of women in engineering has been constantly increasing and now there are up to 30 active women members within the Zimbabwe Institution of Engineers. We are looking forward to increased participation of Women in the Institution activities nationally following the appointment of 10 (ten) women in the 2014 to 2016 board (29%) compared to the 1(one) representative that was in the previous board (2%).

I was appointed to represent Zimbabwe in the WFEO Committee of Engineering and Environment during the year 2014.

ZIE WIE Statistics as at 24 November 2014

Grade	No.	Paid up No.	ECZ Registered	Board Members
H/Fellow	2	1	0	0
Fellow	5	5	3	2
Member	34	24	19	5
Technician	14	10	7	1
Graduate	79	35	0	1
Grad Tech	25	3	0	0
Student	173	70	0	1
Temp	4	4	6	0
Companion	2	0	0	0
Total	338	152	35	10

By Farai Mavhiya, B Tech Eng, C.Dip.A.F, Chairperson Zimbabwe Institution of Engineers WIE Division



World Federation of Engineering Organizations Committee Member Progress Report

This report is submitted by each WiE Committee Member to report on progress in addressing the goals and objectives for each of the WiE Committee's three themes

Committee Member Name	Lidia Zakowska
Organization or Country	SITK RP and NOT Poland
Date Submitted	20.11.2014
Committee Member Email Address	lzakowsk@pk.edu.pl

1 Summary

Provide a brief summary of your report.

In 2014 Poland was celebrating the 25th anniversary of independence from the communist regime and the 10th anniversary of becoming a Member of European Community. Engineering organizations gathered in the Polish Federation of Engineering Organizations NOT, and the SITK RP (Polish Association of Transport Engineers) were actively participating in numerous actions and events, with a special activity on women issues. The VI Polish Congress (May 2014) was attended by thousands, and many other regional meetings spread out the message on equity, gender and the woman achievements.

2 Accomplishments

Please list accomplishments in addressing the goals and objectives of each theme. Please see the WFEO WiE Themes document or the WiE website for the list of goals and objectives for each theme.

2.1 Engineering Workforce Diversity Theme

Engineering Workforce diversity and Engineering Education were an important topics of several regional and national level meetings in Poland in 2014. The main themes of this year activities on scientific and educational level occurred to be a success in nominations of woman as organizational chairs and competition winners. For the first time women became a president of the Engineering Association SITK RP Krakow, and on national level the first woman were designated as Prime Minister of the Country.

2.2 Leadership and Empowerment Theme

- The 6th Polish Woman Congress has shown that empowering women in engineering and technology and in leadership positions can facilitate relationships between governments, business and woman organizations by enhancing the contribution of engineering profession into discussions on policies and equity.
- Participation of WIE representatives in national and international engineering bodies has a longtime effect of fostering peace, socioeconomic security and sustainable development among all countries of the world, through the promotion of women in engineering and technology.
- Attendance of WIE national members in the European research programs (TEA COST Action TU1209) on equity should result in empowering Women in Engineering and Technology and encouraging equal opportunities for professional development.

2.3 Engineering Strategic Indicators Theme

- Regarding statistics on women engineers at university and within the profession, for Poland, some progress is observed, namely:
 - It is slight evolution of the percentage and number of women engineers in all engineering branches at university level (3,8%),
 - Still only 40% of woman, compared to 60% of man, represents science in Poland,
 - In engineering fields, only 23% of scientific careers belong to woman with doctor title,
 - Still Less than 5% of university professors are women, while among students at engineering over 55% are woman.
- The future goal for us, Polish women, is to reach a women membership percentage of at least
 30%, to get an important impact.

3 Announcements

Please list any announcements of upcoming programs, news from your organization, or other information valuable to the WFEO WiE Committee.

The next KONGRES KOBIET in Warszawa Poland will be held in May/June 2015, where all organizations and experts will meet already for the 7th time.

4 Resources

Please provide links to any publications, statistics, videos or other resources to be shared with the WFEO WiE Committee.

http://www.nature.com/news/women-in-science-women-s-work-1.12547

http://www.chopin.edu.pl/pl

http://www.feminoteka.pl/news.php?readmore=9069



Women in Engineering Standing Technical Committee of the
World Federation of Engineering Organizations
Committee Member Progress Report

This report is submitted by each WiE Committee Member to report on progress in addressing the goals and objectives for each of the WiE Committee's three themes

Committee Member Name	Kuwait Women Engineers
Organization or Country	Kuwait
Date Submitted	8 / 12 / 2014
Committee Member Email Address	bodour 75@hotmail.com

1 **Summary**

In this report a brief description of committee objectives and goals are listed. In addition to the activities conducted during the end of year 2013 and year 2014.

A plan of the future activities are mentioned at the end of the report.

2 Accomplishments

2.1 Engineering Workforce Diversity Theme

2.1.1 Objectives

- To provide convenient workplace climate in public and private sectors and provide fair opportunities for professional development
- To provide women engineers of latest advancement in order to help them succeed in workplace and attain high professional level
- To attract more women engineers to involve in site visiting to improve professional experience
- To provide employers with the importance of equal opportunities for both genders in the workforce responsibilities

2.1.2 Goals

- To organize professional workshops for women engineers to enhance technology information level
- To influence companies in Kuwait to increase the percentage of recruitment of women engineers
- To show the importance of scientific research and encourage documenting case studies from their experiences to use in future research

2.1.3 Activities

- Participating in World Engineers Conference, Singapore (September 2013)
- Participating in IEEE GCC 7th conference, Qatar (November 2013)
- Participating in Women Engineers Conference, Qatar (November 2013)
- Sponsoring two senior engineering projects for Kuwait University students, Kuwait (May 2014)
- Providing "Stress Relief" seminar for Kuwait Society of Engineers ladies only members, Kuwait (January 2014)
- Providing "Work Climate Intelligence" for KWE members, Kuwait (June 2014)

2.2 Leadership and Empowerment Theme

2.2.1 Objectives

- To provide employers of the importance of investing in women engineers and empowering them by serious training and preparing them for leadership
- To encourage employers to provide equal opportunities for both genders in leadership
- To support women engineers in leadership positions
- To investigate reasons behind the lack of women engineers in leadership positions
- To educate women in engineers their civil, legal and professional rights and encourage them to practice such rights.

2.2.2 Goals

- To improve women engineers professional and social skills by providing them with training workshops
- To cooperate with similar societies involved in empowering women in the region
- To attract more women engineers to contribute in Kuwait engineering society and participate in their activities
- To foster women professional groups with potential and cooperate with them
- To focus on examples of women engineers in leadership and get them involved in committee's sessions and seminars to encourage younger women engineers.

2.2.3 Activities

- Providing Seminar "Regulations to register as consulting engineer", Kuwait (August 2013)
- Providing workshop "Civil rights for Kuwaiti women", Kuwait (September 2013)
- Organize Open exhibition for small businesses for Kuwaiti women engineers, Kuwait (October 2013)

- Participating in the most famous social event in Kuwait "Proud to be Kuwaiti", Kuwait (February 2014)
- Sponsoring the event "Empowering women" with team TEMAYAZ –full day workshops for the public- Kuwait (April 2014)
- Celebrating the honor prize presented by UN Chief to HH Amir of Kuwait Shaikh Sabah AlAhmad AlSabah, Kuwait (September 2014)

2.3 Engineering Strategic Indicators Theme

2.3.1 Objectives

- To provide statistics for the number in women engineers working in the profession in public and private sectors
- To provide statistics for the percentage of women engineers in leadership positions within the profession
- To get forecast studies of women engineers needed in engineering fields in the country

2.3.2 Goals

- To create common methods for collecting needed statistics
- To gather statistics and provide it to the public to raise awareness of needed engineering fields for women engineer candidates
- To cooperate with policy makers and develop clear plans for recruiting women engineers in all engineering fields in public and private sectors

2.3.3 Activities

• Attending 1st Kuwait Engineering Forum organized by Kuwait University, Kuwait (March 2014)

2.4 Other Activities

- Organizing Second Kuwait Women Engineers Forum, Kuwait (July 2013)
- Providing Seminar "How to be a better mom", Kuwait (Sept 2013)
- Organizing Seminar "Etiquette for engineers", Kuwait (October 2013)
- Providing half day workshop for the public entitled "How to engineer your new year", Kuwait (January 2014)

- Celebrating Women International Day with society VIP guests and KWE members at AL Othman Museum, Kuwait (March 2014)
- Celebrating Mother's Day for KWE members with their mothers, Kuwait (March 2014)
- Providing seminar for healthy nutrition and life style for the public, Kuwait (April 2014)
- Celebrating Breast Cancer Awareness month by organizing seminar for the public (October 2014)

3 Announcements

- Participate in IEEE GCC conference, Oman (Feb 2015)
- Third Kuwait women engineers forum, Kuwait (April 2015)
- Participate in Women in Engineering session WECC, Japan (Dec 2015)

4 Resources