



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

This report is a compilation of WIE Committee member report on addressing the goals and objectives for each of the WIE Committee's four themes as submitted from the following countries.

NO.	ORGANISATION / COUNTRY	REGION	SUBMITTED BY	DATE SUBMITTED
1.	Order of Engineers of Angola	Africa	Ariana Silva	13/02/2025
2.	Chinese Institute of Engineers, Taiwan ROC	Asia/P	Hsiao-Wen Zan	February 10, 2025
3.	Institution of Civil Engineers, UK	Europe	Dawn Bonfield	February 2025
4.	Association of Professional Women Engineers of Nigeria (APWEN)/ Nigerian Society of Engineers (NSE)	Africa	Engr. Dr Atinuke Wuraola Owolabi FNSE, FNIEEE	4th February, 2025
5.	Society of Women Engineers of Liberia	Africa	Winnie Mameni Siakor Dilah	January 29, 2025
6.	Zimbabwe (ZIE WIE)	Africa	Eng Berverly Nyakutsikwa	February 13, 2025
7.	Ghana Institution of Engineering (GhIE), Ghana	Africa	Ing. Dr. Enyonam Kpekpena	February 14, 2025
8.	Rwanda	Africa	Naila Umubyeyi	March 5, 2025
9.	Institution Of Engineers Tanzania - Women Chapter	Africa	Mkufu Tindi, Alice Isibika	March 6, 2025
10.	Zambia Women in Engineering Section (ZWES)	Africa	Agness Mofya Mwansa	February 28, 2025
11.	Namibian Women In Engineering	Africa	Smita Francis	March 11, 2025



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	Ariana Silva
Organization or Country	Order of Engineers of Angola
Date Submitted	13/02/2025
Committee Member Email Address	arianacea@hotmail.com

1 Summary

The purpose of this report is to monitor the progress of the Women in Engineering Committee initiatives, ensuring that actions are aligned with the established strategic objectives, promoting sustainable development and excellence in global engineering.

2 Accomplishments

2.1 Theme 1: Engineering Workforce Capacity Building to increase diversity and inclusiveness in the future skills pipeline

Diversity and inclusion in engineering are essential for innovation, creativity and problem-solving. To ensure a strong and diverse skills pipeline, we outlined strategies to empower the female workforce in January, ensuring equal educational opportunities through the following guidelines:

- Strategies for empowerment and inclusion
- Impact of Diversity and Inclusion on the Skills Pipeline
- Challenges in Diversity and Inclusion in Engineering

2.2 Theme 2: Engineering Workforce Capacity Building to encourage female engineering retention and leadership

In order to ensure the retention and advancement of women in engineering, it is essential to implement training programs, provide support, and create a favorable environment for professional growth through inclusive policies and leadership opportunities. In January, an action plan was prepared, taking into account the following three aspects:

- A workshop on key challenges in retention and female leadership in engineering
- Training and development strategies for women in engineering
- The impact of female retention and leadership in engineering

2.3 Theme 3: Engineering Strategic Indicators

The implementation of strategic indicators within our organisation enables us to exercise greater precision in the oversight of our operations and projects. However, given the early stage of development, it is premature to provide a comprehensive report on this subject, as our strategic indicators are still in the process of being refined.

2.4 Theme 4: Working in Partnership to address the Sustainable Development Goals, with a particular emphasis on Goal 5 and its relationship with the other Goals

For 2025, we have defined partnerships with organisations such as OEP (Order of Engineers of Portugal), resulting from an existing collaboration with OEA, as well as companies and national organisations, with the aim of promoting gender equality.

2.5 Other Accomplishments

In September 2024, the Women in Engineering Committee of Angola organised the 7th Women Engineers Forum. This major event was in alliance with the WIE-FAEO committee and took place during the 10th UNESCO Africa Engineering Week and the 8th Africa Engineering Conference. The Committee was motivated to ensure the continuation of its work in Angola, inspired by the experiences shared by female engineers from other African countries.



3 Announcements

At the beginning of 2025, we will conduct lectures and seminars in secondary schools across our country on 'Gender Equality' as well as 'Mentorship Programs' to influence the choice of higher education paths.

4 Resources

www.ordemengenheiros.ao



World Federation
of Engineering Organisations
"Women in Engineering"
Standing committee

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Committee Member Name	Hsiao-Wen Zan
Organization or Country	Chinese Institute of Engineers, Taiwan ROC
Date Submitted	February 10, 2025
Committee Member Email Address	hsiaowen@nycu.edu.tw

Summary

In 2024 CIE together with the Society of Taiwan Women in Science and Technology (TWiST), Taiwan Photonics Society, IEEE Taipei Section, and altogether 52 STEM NPOs continued to organize the “Women in Science & Technology Symposium, Taiwan – *Equity, Diversity, Inclusion and Well Being*” (WiST2024) in the National Cheng Kung University in Tainan on March 9th. The President of Taiwan, ROC, Dr. Ing-Wen Tsai gave a video opening remark, and the Minister of Science & Technology attended the opening in person. 9 leaders from around the country across various industrial and academic sectors were invited as speakers, of which 3 of them were male. A round-table world café session with 5 hosts was conducted and resulted in fruitful discussions and ideas exchange. More than 300 people registered in person to attend the event. We are currently planning WiST2025 “Equity, Inclusion and Greener Future - AI Empowering Diversity” in Taichung on International Women’s Day on March 8th, 2025.

WiE Committee of CIE has made possible for CIE to make the first on-line manifest of “Diversity, Equity, and Inclusion” of all the professional engineering NPOs in the nation, and keep being present in the Gender Equality Committee of Executive Yuan, the highest government entity of the nation, and therefore opinions from women scientists and engineers can be heard and integrated into government policies of all levels more directly and quickly. Moreover, after the Chinese Institute of Engineers inducted the first female Fellow in 2022, one each was inducted in 2023 and 2024. Many of the 52 NPOs started their own WiE committees and have been following CIE’s footsteps to make SDG-5 an important issue for the development of the organizations.

Accomplishments

Theme 1: Engineering Workforce Capacity Building to increase diversity and inclusiveness in the future skills pipeline

Ensuing the theme of WiST2022 *“Toward a Work-Life Integrated Workforce,”* a survey of STEM private sectors was conducted in 2023-2024 to collect best practices and challenges in addressing SDG-5 and the diversity, equity, and inclusion issues for ESG. A report of 5 companies was published in Chinese in 2024, and circulated in the nation.

Theme 2: Engineering Workforce Capacity Building to encourage female engineering retention and leadership

A casual, relaxed but serious route was taken in 2024 to gather female presidents/vice presidents of universities in a more fashionable, fun, and friendly atmosphere. The casual exchange of experiences and knowledge was widely welcomed by participants, feeling motivated to contribute and to support others. A casual group setting is natural in demonstrating people skills and leadership, and to learn from each other.

Theme 3: Engineering Strategic Indicators

Women Engineers	Percentage of Total (%)
Professionally Registered	23.7% ¹ (thru official examinations) in 2023 8.2% at work 2025 ²
Working in Engineering Establishments	13 ³ (2019)
Undergraduates (2021-2022)	23.40 ⁴ (Engineering, Manufacturing, and Construction) 26.43 ⁴ (STEM)
References for above data:	
1. Ministry of Examination, Taiwan ROC, 2023.	
2. Public Construction Commission, Taiwan ROC, Feb 2025.	
3. Chinese Institute of Engineers, 2019 survey result.	
4. Ministry of Education, Taiwan ROC, 2023	

Theme 4: Working in Partnership to address the Sustainable Development Goals, with a particular emphasis on Goal 5 and its relationship with the other Goals

In 2024 CIE together with the Society of Taiwan Women in Science and Technology (TWiST), Taiwan Photonics Society, IEEE Taipei Section, and altogether 52 STEM NPOs continued to organize the “Women in Science & Technology Convention, Taiwan – *Equity, Diversity, Inclusion and Well Being*” (WiST2024) in the National Cheng Kung University in Tainan on March 9th. The President of Taiwan, ROC, Dr. Ing-Wen Tsai gave a video opening remark, and the Minister of Science & Technology attended the opening in person. 9 leaders from around the country across various industrial and academic sectors were invited as speakers, of which 3 of them were male. A round-table world café session with 5 hosts was conducted and resulted in fruitful discussions and idea exchange. More than 250 people registered in person to attend the event. We are currently planning WiST2025 “Equity, Inclusion and Greener Future - AI Empowering Diversity” in Taichung on International Women’s Day on March 8th, 2025.

Other Accomplishments

WiE Committee of CIE has made possible for CIE to make the first on-line manifest of “Diversity, Equity, and Inclusion” of all the professional engineering NPOs in the nation, and keep being present in the Gender Equality Committee of Executive Yuan, the highest government entity of the nation, and therefore opinions from women scientists and engineers can be heard and integrated into government policies of all levels more directly and quickly. Moreover, after the Chinese Institute of Engineers inducted the first female Fellow in 2022, two more were inducted in 2023 and 2024. Many of the 52 NPOs started their own WiE committees and have been following CIE’s footsteps to make SDG-5 an important issue for the development of the organizations.

Announcements

N/A

Resources

性別化創新 Gendered Innovation Website

<https://genderedinnovations.taiwan-gist.net>

女科技人的美麗心世界Taiwan Women e Press (in Chinese, partially English)

<http://www.twepress.net>

2024女科技人大會 – 多元共融 共榮互好

“Women in Science & Technology Convention, Taiwan - *Equity, Diversity, Inclusion and Well Being*” (WiST2024) March 9th, 2024 (in Chinese)

<http://wist2024.twist.org.tw>

2023女科技人大會 – 科技女力國際進行式-前導

“Women in Science & Technology Convention, Taiwan - *International Chapter on STEM Women Empowerment*” (WiST2023) October 27th, 2023 (in Chinese)

<http://wist2023.twist.org.tw>

2022女科技人大會 – 邁向工作與生活共榮的新職場

“Women in Science & Technology Convention, Taiwan - *Toward a Work-Life Integrated Workforce*” (WiST2022) December 9th, 2022 (in Chinese)

<http://wist2022.twist.org.tw>

2021女科技人大會 – 科技女力進行式

“Women in Science & Technology Convention, Taiwan - *Advancing Towards a Bright Future*” (WiST2021) December 11th, 2021 (in Chinese)

<http://wist2021.twist.org.tw/>



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Committee Member Name	Dawn Bonfield
Organization or Country	Institution of Civil Engineers, UK
Date Submitted	February 2025
Committee Member Email Address	dawnbonfield@btinternet.com

Summary

This document gives an overview of the state progress on increasing gender diversity in Engineering in the UK in general, as well as some specific achievements linked to Theme 4 in particular of the Committee's action plan.

In general, the headline statistics for women in engineering in the UK can be seen below:

Women in Engineering Education (2025)

- 11% of girls **aspired to engineering careers**, compared to 44% of boys
- Engineering and technology-related **vocational qualifications** (not including T-Levels) - 10.7% females 2022/23 (10.2% in 2021/22)
- Engineering and technology-related **T-Levels** in England – 9% females in 2024 (consistent in 2023)
- Engineering and technology-related **apprenticeships** in England – 16% females in 2022/23 (14% in 2020/21)
- Engineering and technology **degrees** across the UK – 19% females in 2024 (20% in 2018/19)
- Women in the **Engineering Workplace** – 15.7% in 2024 (16.5% in 2023)

The significant data point here is that **the number of women in engineering in the UK has fallen for the first time in many year, from 16.5% in 2023 to 15.7% in 2024** and the reason for this is that many women are leaving the engineering sector between the ages of 35-45, because of poor culture. This fall in women in the engineering and tech workforce is driven by a fall of 66,000 between the ages of 35 to 64, indicating that women are not staying in the industry.

There has been a **10% decline in 11-14 year old girls saying that they are interested in science compared with a 1% decline in boys between 2019 and 2023**, which is another serious indicator of declining numbers and a gender gap opening up in schools with respect to STEM subjects.

Engineering culture continues to be a problem within UK engineering, and efforts to address this are not well received by engineering companies, nor our Professional Engineering Institutions.

The Institution of Civil Engineers, for example, continues to refuse to let members for a Gender Network, which has never existed at ICE – despite members wanting and asking for this to be established.

A survey was carried out in 2024 at ICE which asked ICE members about sexual harassment and bullying at work, and the results were shocking, and showed a very level

Accomplishments

Theme 1: Engineering Workforce Capacity Building to increase diversity and inclusiveness in the future skills pipeline

Theme 2: Engineering Workforce Capacity Building to encourage female engineering retention and leadership

From the Institution of Civil Engineers (ICE) Data, we have a much better picture than for UK engineering as a whole, and the data is shown below:

- Our QUEST Scholars 51% of 312 currently sponsored (by industry and ICE) undergraduate students are women
- Currently 25% of ICE student members are women (0.2% non-binary/transgender in line with population estimates)
- Retention of women at ICE is good. 24% of graduate members <40 years are women. 23% of Chartered members <40 years are women
- As a comparator in 2017, 12.3% of members (all ages) were women and 7.3% were registrants. In 2025, 16.8% of members (all ages) are women and 12.5% are registrants
- The Women into Fellowship initiative has been very successful. Our youngest ever female Fellow at 30 years old is Georgia Thompson
- ICE Fellows: UK Fellows who are registrants = 9% female: 45-55 yrs Women Fellows at ICE = 16.5%; 40-45 yrs Women Fellows at ICE = 18.6%

Theme 3: Engineering Strategic Indicators

See Data reported in 'Resource' Section.

Theme 4: Working in Partnership to address the Sustainable Development Goals, with a particular emphasis on Goal 5 and its relationship with the other Goals

My own WFEO WIE committee work on behalf of ICE, UK is linked to the co-leadership role of this Theme 4, and ensuring that the WFEO WIE committee complete its action plan to achieve progress in this area.

For 2024 our Activity Plan can be seen below.

Activity	Timeline	Performance Indicator	Baseline (As Jan 2024)	Cum. Target (Dec 2027)	Target Year 1 (2024)
Working in partnership, identify ways that engineering and technology could contribute to addressing the targets identified under Goal 5, Gender Equality.		Produce document which map goal 5 target with potential technological solutions, and identify any missing technologies		Document which explains how engineering and technology is addressing the targets of Goal 5, and possible project identified to address one of the identified gaps	Mapping exercise of engtech as it relates to SDG5 targets and also as it relates to WFEO
Examine the gender perspective and relate it to engineering globally, looking at ways that engineering can address disproportionate disadvantage faced by women		Creation of full suite of 17 pop up banners explaining this issue, for use in outreach activities.	7 banners	Full suite of 17 banners, showing the gender perspective in engineering	2 more banners produced in 2024 (total 9)
In partnership, deliver against the WFEO Climate Change Declaration established in Melbourne in 2019 , in particular 'Use our global influence and connections to gather evidence to illuminate the effect of climate change on women and disadvantaged groups worldwide, and seek to use this information to ensure that no one is left behind.'		In addition to the pop up banner on SDG13, create a body of knowledge around women and climate change, and represent this perspective at WFEO and other meetings where	Banner for SDG13 already produced	Stories and case studies identified, looking to identify appropriate engineering and technology interventions to support women and climate change agenda.	Potential competition roll out to encourage young people to identify how climate change is affecting them, and what engineering can do to address this problem, aimed at young girls (boys also able to enter)
Map the work of the WIE membership to the relevant SDGs on which they work, and which other WFEO committees they serve on, and use this expertise as and when required to make progress against particular goals		Create growing database of female members (of WFEO and wider) and other experts and how their work relates to particular SDGs	Details held of theme leads and theme members only.	Fully completed database of WIE membership to include their biographies, photographs, and how their work relates to SDGs, and which other WFEO committees they	Addition of data to database
Work with WFEO partners, including other WFEO committees, to help them bring the gender perspective to their work.		Contact points on each of the WFEO committees and contact made with each of the WFEO committee chairs	No real engagement currently	Have made contact with the chairs of each of the working groups by the end of the term and had continuing conversations about how to bring the gender perspective to their work, with some evidence that this has been achieved.	Work toward this cumulative target through engagement with WFEO committees and WFEO partners.
Organisation of the Virtual Art Competition for the engagement of young girls in Africa to combine engineering and art.		Successful completion of Art Competition	Three of these competitions have previously been delivered successfully.	Continue with the delivery of this STEAM competition where possible and where sponsorship can be	Delivery of 2024 version of STEM Virtual Art Competition.
Organise an annual webinar					

8 DECENT WORK AND ECONOMIC GROWTH

The Gender Perspective

Promote sustained, inclusive & sustainable economic growth, full & productive employment and decent work for all

Sustainable Development Goal 8 aspires to foster inclusive and sustainable economic growth, employment, and decent work for all by targeting equal opportunities for productive opportunities for a safe, secure and inclusive working environment.

Our goal is to build a diverse and inclusive engineering sector for economic and sustainable growth in which women are well represented, have equal opportunities for decent work and career progression, accessible, flexible, and equal pay for equal work. Engineering has historically been a predominantly male profession, and this remains the case in many parts of the world, where women often make up less than 20% of the workforce. But we know that without a gender diverse engineering sector, we will not create solutions to the world's problems that are fair, inclusive and accessible to all. Moreover, we know that by denying equal opportunities to women to enter the engineering workforce, we are denying them access to a rewarding and well paid career, and to influential leadership opportunities. If women were to participate in the labour market at the same rate as men, it could add up to \$28 trillion, or 24%, to the global annual GDP by 2025.

We know too that where women are employed, children and families benefit disproportionately, as studies have shown that women reinvest about 90% of their earnings into their households, compared with the 30% reinvested by men, leading to better health and education outcomes for their families.

But many issues remain that prevent women getting full and equal access to decent work, including the persistent gender pay gap where women are consistently paid less for equal work, lack of career development and leadership opportunities, poor maternity pay and rights, lack of female only facilities and protective workwear, unchecked sexual harassment and bullying, non-inclusive workplace culture, and poor understanding of the impact of the menopause on women in the workplace.

What Can We Do in Engineering?

- Set and enforce gender diversity targets, taking positive action to recruit women
- Enable equal access to leadership positions
- Ensure inclusive workplaces, including workplace culture, facilities for women, and appropriate Personal Protective Equipment
- Enforce Inclusive Policies and Practices
- Create Mentorship and Sponsorship programs for women
- Build Networks and Communities
- Promote Gender Responsive Technology and Innovation
- Encourage more female engineers and scientists to participate in the development of Artificial Intelligence which is currently male-dominated and perpetuates bias
- Create equitable pathways to engineering careers for girls and boys

This project has been carried out by the Women in Engineering Committee of the World Federation of Engineering Organisations (WFEO).

SUSTAINABLE DEVELOPMENT GOALS

#Engineering4All

The Committee on Women in Engineering

Our main achievements during 2024 were:

- The creation of an additional SDG banner (SDG8) to add to the series, and the start of another two banners to be launched in 2025
- The mapping exercise to link SDG5 to engineering solutions
- The engagement in the STEAM competition to encourage young women in Africa to consider Engineering through Art
- The celebration of INWED 2024 (its 10th anniversary) through a webinar themed 'The Lives of Women: Enhanced by Engineering'.







WFEO WIE WEBINAR TO CELEBRATE INTERNATIONAL WOMEN IN ENGINEERING DAY (INWED)

Title:
The Lives of Women: Enhanced by Engineering

 Friday, 21st June 2024
 11:00AM - 12:15PM GMT
 7:00AM - 8:15AM EST
 Online (zoom)

Join our webinar to explore how diverse and inclusive engineering can enhance the lives of women and all people, featuring speakers dedicated to making a positive impact through technology and engineering.

MAIN HOST AND FOUNDER - INWED
Dawn Bonfield, UK
INWED Founder, Commonwealth Engineers Council President, Royal Society Entrepreneur in Residence, King's College London, WFED roles.

CO-HOST
Ing. Dr Enyonam Kpekpena, Ghana
Dist. Women in Engineering Committee (WFEC) & President, Ghanaian Engineering (GHE), Ghana's Manager/CT Royal Society, Quality Company of Ghana.

SPEAKER
Janet Zehnder, Peru
Chemical Engineer, MBA, Operations Manager, Tin Refinery, Pioneering Women's Empowerment in Engineering.

SPEAKER
Ir. Heng Lee Sun, Malaysia
Director, H&S Pro Construction Sdn. Bhd, Malaysia Engineering Women Through Engineering Leadership and Advocacy.

SPEAKER
Ken Dunn, UK
Founder & Chairperson of Africa's GEM (GEM) and Founder & Managing Director of Diverse Future Worldwide Limited.

SPEAKER
Samukhele Mwase, Zambia
Clean Energy and Sustainability Specialist & Consultant, Fertilizer Engineer LTD, Lusaka Zambia.

Don't miss out on this important discussion! Click below to join.

<https://shorturl.at/HK96C>



INWED WEBINAR - THE LIVES OF WOMEN: ENHANCED BY ENGINEERING

 Date : 21 June 2024
 Venue: ONLINE WEBINAR
 Time: 11:00 to 12:15 GMT

Time	Activity	Resource Person
11:00 - 11:07	Welcome Address	Enyonam Kpekpena
11:07 - 11:15	Purpose of Gathering	Dawn Bonfield
11:15 - 11:25	Speaker 1	Sammy Mwase
11:27 - 11:37	Speaker 2	Heng Lee Sun
11:39 - 11:49	Speaker 3	Ken Dunn
11:51 - 12:00	Speaker 4	Janet Zehnder
12:00 - 12:15	Questions and Discussion	Enyonam Kpekpena
12:15 - 12:20	Final comments and closing remarks	Agnes Mofya







Other Accomplishments

Announcements

Resources

- **EngineeringUK Diversity Data 2024** <https://www.engineeringuk.com/research-and-insights/industry-and-workforce/diversity-challenges-in-engineering-and-technology/>
- **ICE Survey of Sexual Harassment in the Workplace** <https://www.ice.org.uk/download-centre/sexual-harassment-in-the-workplace>

UK Context

Engineering and technology underpin areas of great national and global need – including improving sustainability and decarbonisation - and jobs are expected to grow faster than other occupations in all areas of the UK between now and 2030, but there is a lack of skilled people to meet this need. For instance, the Climate Change Committee (A Net Zero Workforce) identified that up to 725K new jobs will be needed by 2030 to support the transition to net zero, and we know a significant proportion of these are jobs in engineering related areas. If we are to ensure effective and innovative solutions for all, it is imperative for the workforce to be diverse and representative.

Unfortunately, we know that there is already a workforce challenge as employers are reporting skills shortages and recruitment challenges. **In addition, only 15.7% of the engineering and technology workforce is now made up of women, down from 16.5% last year** and contrasting with the 56% of women that make up the rest of the UK workforce (EngineeringUK, 2024). The overall fall of women in engineering and technology is despite a slight increase in the numbers entering and results from an increase in women leaving between the ages of 35 and 44. The overall representation of women is still an increase, albeit a modest one, from 10.5% of women in 2010. Ultimately, we need more people and more diversity in engineering and technology and part of this is a need to ensure more young people are on educational pathways into these areas. Those from UK minority ethnic groups are also underrepresented (13% vs 15% in overall workforce), as well as disabled people (11% vs 13%) (EngineeringUK, 2022) and people from a lower socio-economic background (21% vs 29% in overall workforce) (Sutton Trust, 2022). However, the under-representation is much greater for women in the workforce, as stated above, and also in routes into engineering and technology as described below. Women are therefore the focus of this work. However, we appreciate that gender is not an isolated variable. For instance, the ASPIRES research underlines how gender does not operate in isolation but interacts closely with other axes of inequality, such as social class and ethnicity with middle-class girls and girls from white or South Asian backgrounds being much more likely to aspire to STEM careers.

There is a gender imbalance in almost all of the routes typically taken into engineering and technology. It is important to note that although these routes are typical, these qualifications are not always precursors to engineering / tech qualifications or employment¹ :

- Physics A-level - 23% females in 2024 (22% in 2018) in England, Northern Ireland and Wales
- Physics Scottish Higher - 27% females in 2024 (20% in 2018)

- Maths A-level - 37% females in 2024 (39% in 2018) in England, Northern Ireland and Wales
- Maths Scottish Higher - 46% females in 2024 (39% in 2018)
- Computing A-Level – 18% females in 2024 (12% in 2018) in England, Northern Ireland and Wales
- Computer science Scottish Higher - 21% females in 2024 (14% in 2018)
- Design and technology A-Level – 32% females in 2024 (37% in 2018) in England, Northern Ireland and Wales
- Design and manufacturing Scottish Higher – 33% females in 2024 (48% in 2018)
- Physics GCSE - 49% females 2024 (remained the same since 2018) in England, Northern Ireland and Wales
- Physics National 5 - 29% females in 2024 (28% in 2018)
- Computing GCSE - 22% females in 2024 (20% in 2018) in England, Northern Ireland and Wales
- Computer Science National 5 - 23% females in 2024 (20% in 2018)
- Engineering and technology-related vocational qualifications (not including T-Levels) - 10.7% females 2022/23 (10.2% in 2021/22) Engineering and technology-related T-Levels in England – 9% females in 2024 (consistent in 2023)
- Engineering and technology-related apprenticeships in England – 16% females in 2022/23 (14% in 2020/21)
- Engineering and technology degrees across the UK – 19% females in 2024 (20% in 2018/19)

Gender has a very large effect on career aspirations evident from at least the age of 10 at which only 11% of girls aspired to engineering careers, compared to 44% of boys (Aspires, 2020).

Engineering UK's Science Education Tracker, in conjunction with The Royal Society, highlighted that girls are switching off from science, and a gender gap has opened up. There has been a 10%p decline in 11-14 year old girls saying that they are interested in science compared with a 1%p decline in boys between 2019 and 2023. This brings urgency to better understanding and addressing the gender differences in progression through STEM subjects and into engineering and technology careers.

UK statistics from Engineering UK report:

- In 2022, women represented 16.5% of those working in engineering and technology roles dropping to 15.7% in 2023
- In 2022, there were 1,034,000 women working in engineering and technology occupations compared to 996,000 in 2023
- In 2023 there were more women in engineering and technology occupations between the ages of 16 to 34 – indicating that more women are entering the workforce straight from education, but are not being retained

- Compared to 2022, there were fewer women working in engineering and technology between the ages of 35 and 64 years
- Women make up 56.1% of the workforce of all other occupations but just 7% in the engineering and technology workforce

The decline of women in engineering and tech aged 35 to 64 is not seen in non-engineering and tech sectors, where retention levels have remained largely static.

<https://www.engineeringuk.com/latest-news/press-releases/spike-in-women-aged-35-to-44-leaving-engineering/>



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<https://www.apwen.org>

Committee Member (Country Representative)	Engr.Dr Atinuke Wuraola Owolabi FNSE, FNIEEE
Organization or Country	Association of Professional Women Engineers of Nigeria (APWEN)/ Nigerian Society of Engineers (NSE)
Date Submitted	4th February, 2025
Committee Member Email Address	atinukewuraolaowolabi76@gmail.com

1. Summary

The Association of Professional Women Engineers of Nigeria (APWEN) serves as a catalyst for advancing women in engineering, driving national and global technological development. This progress translates into increased job creation, leadership opportunities, and an overall improvement in the quality of life.



Figure 1: APWEN Community

Our mission is to continuously raise awareness that engineering is a career path for girls, ultimately strengthening the representation of female engineers in the profession. For over four decades, APWEN has championed various initiatives and programs to promote engineering education and practice among female students. Additionally, the

association provides a collaborative platform for women engineers to engage with professionals across diverse fields both within Nigeria and internationally.

Through strategic outreach programs, APWEN brings this mission to life, inspiring and empowering the next generation of female engineers while fostering innovation and professional growth.

2. Accomplishments

2.1 Theme 1: Engineering Workforce Capacity Building to increase diversity and inclusiveness in the future skills pipeline

The **Association of Professional Women Engineers of Nigeria (APWEN)** continues to champion diversity and inclusion in the engineering workforce, marking significant strides in advancing female leadership in the profession. A historic achievement was recorded with the election of **Engr. Margaret Aina Oguntala, FNSE**, as the **first female President of the Nigerian Society of Engineers (NSE)** in its over 60-year history.

This landmark victory underscores APWEN's relentless efforts in empowering women engineers, breaking barriers, and fostering gender inclusivity in engineering leadership. As we celebrate this milestone, APWEN remains committed to inspiring the next generation of female engineers and driving meaningful change in the profession.

APWEN remains committed to inspiring young minds to pursue careers in engineering. Through initiatives like **"Invent It, Build It"**, **FunSTEM**, **STEM4ALL**, **STEMUP Community**, mentorship programs, and STEM outreach in schools, APWEN provides young girls with hands-on learning experiences, scholarships, and role models.

By showcasing successful female engineers and breaking gender stereotypes, APWEN encourages more young women to see engineering as a viable and rewarding career. The association continues to advocate for inclusive policies and create opportunities that empower the next generation to innovate and lead in engineering.



Figure 2: Female Leadership from APWEN

2.2 Theme 2: Engineering Workforce Capacity Building to encourage female engineering retention and Leadership

The Association of Professional Women Engineers in Nigeria (APWEN) successfully organised the Mayen Adetiba Technical Bootcamp, focusing on Emerging Technologies in Green Buildings and Efficiency for Sustainable Development. Experts shared insights on sustainable materials, renewable energy, and smart building systems. The event empowered female engineers with skills to drive eco-friendly innovations, fostered networking, and aligned with global sustainability efforts, reinforcing APWEN's commitment to engineering excellence.

On 24th August, APWEN hosted a workshop on **Strategies for Successful Grant Applications**, equipping participants with essential skills to secure funding for engineering projects. Experts provided insights on proposal writing, aligning objectives with donor priorities, and budgeting. Practical examples of winning grants were analysed, offering valuable lessons. The event empowered female engineers with tools to access funding for impactful innovations and research.

APWEN also hosted a **Town & Gown** event themed "**Empowering Young Female Engineers: Bridging the Gap between Industry and Academia.**" The event connected students with industry leaders, offering mentorship, career insights, and discussions on industry expectations. It provided a platform for knowledge exchange, equipping young female engineers with the skills needed to transition successfully from academia to the workforce.

STEM FOR ALL PROGRAMS was another set of APWEN-themed events, held at two different locations, the North Central and North East zones, Ilorin and Kaduna, to commemorate 2024 Children's Day and International Women in Engineering Day (INWED) 2024 tagged Enhanced by Engineering respectively.





Figure 3: APWEN's various Capacity Building programmes

2.3 Theme 3: Engineering Strategic Indicators

APWEN is actively working on developing a comprehensive database of women in engineering across various disciplines and areas of practice. Currently, the available data does not fully represent the true state of women's participation in the engineering profession in Nigeria. To bridge this gap, APWEN is implementing a plan to capture accurate statistics during the registration process.

The database will provide key insights, including the percentage of registered female engineers, those actively working in the field, and undergraduate students pursuing engineering degrees. This initiative will enable better policymaking, targeted mentorship programs, and strategic workforce planning to support women in engineering.

APWEN remains committed to ensuring that women are well-represented, supported, and empowered within the profession. The association encourages all female engineers and engineering students to register and contribute to shaping the future of women in engineering. Presently, the total number of Engineers in Nigeria is about 70,000. The percentage of registered female Engineers is stated below:

Women Engineers	Percentage of Total (%)
Professionally Registered	8%
Working in Engineering Establishments	6%
Undergraduates	4%

2.4 Theme 4: Other Accomplishments

The Association of Professional Women Engineers of Nigeria (APWEN) collaborates with government agencies, private organisations, and industry leaders to promote gender diversity in engineering and contribute to national development. These partnerships support the United Nations Sustainable Development Goals (SDGs), particularly SDG 4 (Quality Education) and SDG 5 (Gender Equality).

APWEN works with Federal and State Governments to influence policies that encourage female participation in STEM and create opportunities for women in engineering. Initiatives like "Invent It, Build It", launched with NNPC's support, have provided scholarships and mentorship for young girls, inspiring them to pursue engineering careers.

Industry collaborations help advocate for gender-friendly workplace policies, leadership training, and career advancement for female engineers. These efforts aim to retain women in engineering and ensure equal opportunities for leadership roles.



Figure 4: Collaborations with various industries and state governments

3. Announcements

Follow APWEN online activities.



@apwennational



@apwen_ng



apwen hq



APWEN HQ TV

4. Resources

Here are the links to some of APWEN's activities in 2024:

<https://thenationonlineng.net/apwen-drives-innovation-creativity/>

<https://newsrescent.com/apwen-restates-commitment-to-supporting-girls-in-stem/>
<https://blacktalker.com.ng/2024-wed-apwen-lagos-calls-for-collaboration-to-combat-climate-change/>
<https://guardian.ng/property/apwen-urges-engineers-to-embrace-sustainableinnovations/>
<https://championnews.com.ng/?p=317705>
<https://championnews.com.ng/?p=322614>
<https://www.vanguardngr.com/2024/05/step-out-innovate-apwen-tells-women-engineers/>
<https://admin.thisdaylive.com/index.php/2024/04/03/owolabi-why-female-engineering-students-should-be-positioned-for-global-impact-before-graduation/>
<https://blacktalker.com.ng/apwen-lagos-commemorates-2024-international-day-of-girls-in-ict/>
<https://championnews.com.ng/unveiling-idiat-amusu-mentorship-scheme-in-commemoration-of-world-creativity-innovation-day-organises-by-apwen-in-lagos/>
<https://championnews.com.ng/unveiling-idiat-amusu-mentorship-scheme-in-commemoration-of-world-creativity-innovation-day-organises-by-apwen-in-lagos/>
<https://championnews.com.ng/nse-nga-forge-strategic-partnership-for-engineering-gas-sector-development/>
<https://www.thisdaylive.com/index.php/2024/05/01/unilag-lasu-students-emerge-winners-of-apwen-lagos-innovation-challenge>
<https://championnews.com.ng/?p=315593> <https://guardian.ng/news/apwen-seeks-tax-holiday-for-innovative-engineers/>
https://youtu.be/h8rVkv4q_9U <https://blacktalker.com.ng/female-engineers-mobilize-for-environmental-advocacy-in-lagos-communities/>
<https://blacktalker.com.ng/apwenlagos-partners-wateraid-on-fight-againstcholera-in-makoko/>
<https://pmnewsnigeria.com/2024/08/18/cholera-prevention-women-engineers-wateraid-partner-to-clean-makoko-waterways-environment/>
<https://www.thisdaylive.com/index.php/2024/08/19/cholera-apwen-calls-for-sanitation-action-in-lagos-communities/>
<https://blacktalker.com.ng/apwenlagos-partners-wateraid-on-fight-againstcholera-in-makoko/>
<https://youtu.be/7iNKjyrgUaw?si=Wa2QuGvwW944rzsy>
<https://nannews.ng/2024/03/31/women-engineers-clean-up-lagos-markets-drains/>

<https://theinvestigatornews.com.ng/childrens-day-children-hold-the-key-to-a-more-advanced-and-equitable-society-hon-wuruola-owolabi/>

<https://quicknews-africa.net/women-engineers-unveil-lagos-home-gardening-initiative/>

<https://www.vanguardngr.com/2024/12/women-engineers-launch-generational-mentorship-scheme/>

<https://www.vanguardngr.com/2024/12/women-engineers-launch-generational-mentorship-scheme/>

<https://gazettengr.com/lagos-female-engineers-present-2024-scorecard/>

<https://guardian.ng/news/apwen-urges-stakeholders-to-promote-stem-education-innovation/>

<https://guardian.ng/news/apwen-urges-stakeholders-to-promote-stem-education-innovation/>



Women in Engineering Standing Technical Committee of the Federation of African 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	Winnie Mameni Siakor Dilah
Organization or Country	Society of Women Engineers of Liberia
Date Submitted	January 29, 2025
Committee Member Email Address	siakorwinnie27@gmail.com

Summary

Provide a brief summary of your report.

The initiatives undertaken by the Society of Women Engineers of Liberia (SWEL) reflect a strong commitment to empowering young women in engineering and promoting gender equity in the field of STEM. Key activities included conducting STEM awareness sessions in selected schools to inspire and educate approximately 100 young women about the significance of STEM education and entrepreneurship. Additionally, a collaborative effort with Mandala Fellowship alumni led to the implementation of a four-day STEM Justice Project in Bong and Montserrado counties, which further raised awareness and provided valuable resources for aspiring female engineers.

Moreover, SWEL has successfully engaged with national government entities to secure employment opportunities for women in engineering, resulting in the placement of two senior-level and two middle-level positions in critical ministries, including the Ministry of Public Works and the Ministry of Mines and Energy. This effort aims to create a pipeline for female leadership and retention in engineering roles.

The partnership with GIZ facilitated a Program Development Training focused on cost estimation and the preparation of Bills of Materials (BOM) for young professional female engineers. By enhancing their technical skills, this training empowers participants to contribute more effectively to project planning and implementation.

Collectively, these activities contribute to building a supportive and inclusive environment for women in engineering, fostering their growth and representation in leadership roles within the sector. Through ongoing collaboration and targeted training, SWEL is poised to cultivate a new generation of confident, skilled, and influential women in STEM.

Accomplishments

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

Theme 1: Engineering Workforce Capacity Building to increase diversity and inclusiveness in the future skills pipeline

Established a partnership with GIZ to conduct Program Development Training for young professional female engineers, focusing on cost estimation and the preparation of Bills of Quantities (BOQ). This training is designed to enhance participants' technical skills, empowering them to create accurate cost assessments and effectively contribute to project planning and implementation. By equipping these women with essential knowledge, the program aims to bolster their confidence and competence in the engineering field, fostering their career advancement and involvement in significant infrastructure projects.

Theme 2: Engineering Workforce Capacity Building to encourage female engineering retention and leadership

Team members engaged with national government representatives to secure employment opportunities for women in engineering, successfully obtaining two senior-level and two middle-level positions aimed at promoting female retention and leadership in the field. This advocacy included securing roles such as the Deputy Minister of Rural Development at the Ministry of Rural Development, the Assistant Minister of Operations at the Ministry of Public Works, the Director of Research and Planning at the Ministry of Public Works, and the Director of Precious Minerals at the Ministry of Mines and Energy in Liberia. This collaboration represents a significant step toward increasing female representation in leadership roles within governmental ministries.

Theme 3: Engineering Strategic Indicators

Membership Increased By 25%

Theme 4: Working in Partnership to address the Sustainable Development Goals, with a particular emphasis on Goal 5 and its relationship with the other Goals

Collaborated with a Mandala Fellowship alumnus to implement a four-day STEM Justice Project in Bong and Montserrado counties, Liberia. This initiative successfully benefited approximately 100 young women by raising awareness about the importance of STEM education and entrepreneurship. The project included workshops, hands-on activities, and discussions aimed at empowering participants to pursue careers in STEM and develop their entrepreneurial skills.

Other Accomplishments

- Conduct STEM Awareness Sessions: Organize engaging STEM awareness sessions in two selected schools to inspire and educate students about the importance of STEM fields.
- Joint Celebration of World Engineering Day: Collaborate with the Engineering Society of Liberia (ESOL) to celebrate World Engineering Day by conducting career awareness sessions for selected high school students, highlighting various engineering career paths and opportunities.

Announcements

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

2025 Activities Plan

1. Antecedents of the Engineering Society of Liberia Conference
2. Book Launch Event : A member of the Engineering Society of Liberia is set to launch an insightful book that contributes to the discourse on engineering practices in the country.
3. STEM Club Activities: Engaged in various initiatives at two local high schools to cultivate interest in STEM subjects among students.
4. World Engineering Day Celebration: Hosted activities to commemorate World Engineering Day, highlighting the importance of engineering in society.
5. International Women's Day Celebration: Organized events to celebrate the achievements of women and promote gender equality in engineering.
6. Women in Engineering Day Celebration: Recognized the contributions of female engineers and advocated for increased representation in the field.
7. Professional Development Activities: Host hands-on workshops, training focusing on essential technical and basic skills, project management practices, and innovative engineering methodologies.
8. Additional Collaborations: Collaborated with other organizations and stakeholders to enhance the impact of the conference and related activities.

Resources

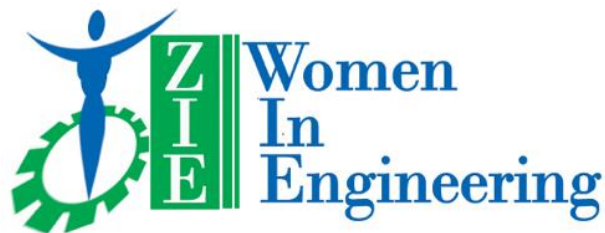
Please provide links to any publications, statistics, videos or other resources to be shared with the FAEO WiE Committee.

Website: <https://www.swelib.org/about-us/>

Facebook: Society of Women Engineers of Liberia - SWEL



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



Committee Member Name	Eng Berverly Nyakutsikwa
Organization or Country	Zimbabwe (ZIE WIE)
Date Submitted	13 February 2025
Committee Member Email Address	bevlyfn@gmail.com

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SUMMARY

Our Women in Engineering Division under the Zimbabwe Institution of Engineers has slowly been gaining momentum in re-activating activities which had stopped due to the travel and physical meeting restrictions from the Covid era. A new WIE committee was constituted in 2024 and the committee member profiles were published in the Zimbabwe Institution of Engineers monthly newsletter Vol1 Issue 3 (May-Jun 2024). The organogram is as shown below.



Though activities have been recorded, the numbers of women actively engaging in these activities is still low, especially when compared against the number of participants registered on the membership WhatsApp group. This number is also lower than the numbers of women registered in their various capacities with the ZIE. It is usually a small number of the same participants who are most active and the challenge is on us to get more of our members to be active.

It is our hope that we can keep the activities going as well as garner up more support in terms of resources and funding to make the activities more wholesome, and to cover more regions in the country.

We have noted through the year's activities that

- a. Career guidance is a very necessary activity that makes impact and creates visibility of different careers and career paths for students. It also serves as a platform to engage students and offer advice as "older" brothers and sisters, especially in a day and age where the youth in Zimbabwe are increasingly indulging in drugs and substance abuse. It has also

been seen as crucial in enlightening students on possible subject combinations and their possible implications on career choices.

- b. Social media is a powerful advertising tool that brings together stakeholders from within and beyond the country's borders.
- c. Networking is a powerful tool, especially for the women in engineering as she looks for support, strength and structures to keep her going in her journey.
- d. There is still a long way to go regards the registration of women in engineering professionals with the professional engineering institution.

ACCOMPLISHMENTS

Theme 1: Engineering Workforce Capacity Building to increase diversity and inclusiveness in the future skills pipeline

To address theme 1, we hosted a mix of activities to increase inclusivity and diversity in the future skills pipelines. These are outlined as follows:

1. Webinars

- a. **9 June.** Our members also joined in on the FAEO Theme 1 WIE *Webinar on Engineering Excellence: Insights from male champions*. Our ZIE WIE Whatsapp group was a hive of activity after the webinar as member discussed their key takeaways from the webinar. Some of the points of note was the need for mentoring, visible celebration of achievements and to work in an excellent manner. It was also noted that career guidance should be started early in schools and that the roles of technicians, technologists and artisans should not be overlooked in the engineering conversation.
- b. **19 July.** We held a webinar titled “*ZIE, WIE and the role of partners (WIBTE)*” with the aim of enlightening members on what the role of ZIE is for engineering professionals in the country as well as how it relates to WIE. Additionally, it was also providing exposure to our work with partners and introducing women in the built environment to the engineering community of women in Zimbabwe.

2. Social Media and Communication

- a. Our primary source of communication and connectivity remain the ZIE WIE **WhatsApp** group with a membership of 500 ladies
- b. We have an active WIE **email** address which we use for communication (to send and receive (wie.zimbabwe@gmail.com))
- c. We revived our **Facebook** page ([ZIE – Women In Engineering](#)) in celebrating International Women's Day in March and our engagements are slowly increasing. We are primarily using the platform as a reporting and feedback channel from activities carried out by members around the country.
- d. We created an **Instagram** page ([@wiezimbabwe](#)) in July 2024 in a bid to have presence on various social media platforms that appeal to the diverse membership of our organization.

3. Career guidance and schools outreach

- a. **4 March.** In Celebrating World Engineering Day, ZIE WIE was invited to participate in the career guidance fair hosted at Kotwa High School in Kotwa, Mudzi District, Mashonaland East Province (approximately 218 km from Harare). 7 schools attended the fair including Kotwa High School (the hosts), Mutoko Central High School, Chingwena Secondary School, Shinga Secondary School, Muzezuru Secondary School, Hiltop Private School and Greatminds Group of Schools totaling 479 students. ZIE WIE members created career videos detailing what they do, what they studied and a word of advice to the young students and these videos were flown during the sessions.
- b. **On 13 July** ZIE Women in Engineering (WIE) Zimbabwe teamed up with Catholic Friends for Charity (CF4C) for a schools outreach at St Boniface High School. The school is located in Hurungwe District in Mashonaland West Province, about 261 km from Harare. Other organisations also present for the day included NMCZ, YALI, and Opportunities For Zimbabweans. St Boniface is a small school with about 250 Students, 11 of whom were A level students and 90 were domiciled in the boarding facilities. The school has 12 staff members, including the headmaster.



Banners of participating organisations in the schools outreach

In brief the program of the day started at 930 am and included a talk on spirituality after high school by CF4C and personal leadership by YALI and Young leaders. A third talk entitled Girl Child Boy Child was presented by Usawa and lastly an introduction to engineering by ZIE WIE. A question-and-answer session was also held and prizes given out to students who answered questions based on the presentations that had been made. At 1130 career guidance sessions commenced with the visiting guests splitting into discipline oriented teams and meeting with the different student classes to share more information about career prospects and career guidance.



St Boniface learners following proceedings of the day

The professionals present were divided into groups comprising humanities, legal, finance and accounting, entrepreneurship, engineering, ICT and applied sciences, medical, education and vocational studies, opportunities for Zimbabweans and lastly leadership. The different groups addressed the different student groups about their disciplines and possible career pathways.



The engineering professionals group during the career guidance sessions

ZIE WIE Chairperson, Eng B Nyakutsikwa and Chipso Mataka represented ZIE WIE. WIE chairperson on behalf of WIE donated 20 Scientific calculators, 55 Math sets and these donations were made possible by the generous contributions of WIE members as well as support from colleagues in ***Sistahs in Construction*** and ***Women in the Built Environment***. A donation of personal planners and pens was made by ***Nurturing Water*** for the staff members at the school. Furthermore, a personal donation towards their library was made by the chairperson of 3 copies of the book *Personal Finance Gameplan* by Shalom Govero.



ZIE WIE Chairperson hands over donations to St Boniface Headmaster

- c. **On 21 September**, ZIE WIE teamed up again with CF4C, YALI, Young Leaders, Alcoholic Anonymous and Opportunities for Zimbabweans to take career guidance to students of Gokomere High School in Masvingo, Masvingo Province and (approximately 281km from Harare). The high school is a boarding school and enrolls up to 1 300 students and has over 60 teachers.



Gokomere students following proceedings of the career guidance day

A similar program from the previous outreach was followed starting with a talk on *whats next after high school* then *personal leadership and entrepreneurship* followed by substance and alcohol abuse. After the talks, the students were grouped according to levels and the visiting team split into the categories according to the professions, and these groups addressed the different student separately.



Part of the engineering delegation addressing students in classroom

4. **On 27 September** Engineer Shelta Majowa attended the career day at Stapplehood primary school, Stapleford. The school comprises students from ECD up to grade 7 and enrolls about 180 students. The young learners got to interact and ask questions about engineering, as well as appreciated that young girls can aspire to become engineers as well.



Eng Majowa with some of the primary school children at the career day

The children made hats typically worn by different professionals including engineering helmets.



Figure 2 different professionals' tools hats made by the children

Theme 2: Engineering Workforce Capacity Building to encourage female engineering retention and leadership

1. A celebration of women in leadership luncheon was held in Harare on 16 March in which the WIE members celebrated the appointment of the first black female president for the ZIE, Dr Eng Farai Mavhiya.



Our guest speaker on the occasion was Dr Eng Gloria Magombo. Some of the take home points from the discussions over lunch were that hard work gets you to the next stage. Additionally, one requires some kind of a work life balance and its might be unique to you. We were urged to keep reading, keep learning and upskilling and upgrading ourselves. Our guest speaker emphasized the importance of networking while our guest of honor highlighted the fact that everyone has their own strengths, importance of soft skills and the need to document achievements.



2. INWED 2024 was celebrated in style in by two chapters of WIE in Zimbabwe, through a high tea by Mash Area WIE in Harare while Matebeleland Area hosted a CSR event in Bulawayo. INWED is an international awareness campaign that raises the profile of women in engineering and celebrates their achievements in the field. It inspires women to pursue careers in engineering, showcase the accomplishments of WIE and promote diversity and inclusion within the engineering profession.



- a. About 50 engineering professionals i.e. engineers, technicians and technologists met up for a high tea in Harare on 21 June to celebrate INWED, an annual event that takes place annually on June 23rd. The event was also listed on the INWED website of events. The Permanent Secretary in the Ministry of Transport and Infrastructural Development Eng. Joy Makumbe was the guest of honor while Eng. Mary Chikuruwo, Dr. Loice Gudukeya, Lindiwe Mtamzeli, Eng. Shelta Majowa and Chiedza Nkomazana were panelists who inspired through their journey stories. We also had in attendance the Zimbabwe Institution of Engineers President Dr. Eng. Farai Mavhiya, inspiring young ladies as the First female Black President of ZIE. Special mention to **Netone** and **Fossil Contracting** for sponsoring their female engineering professionals and **Arup Zimbabwe**, **Chisipo Consultants**, **Techold** and **ProFin** for event sponsorship.



- b. WIE Matebeleland celebrated INWED 2024 by dedicating their day to corporate social responsibility (CSR) having adopted Ingutsheni Hospital in 2023. Their INWED aspirations are to improve water supply to the farm; carry out tree planting for the orchard; sewer rehabilitation, execute Khumalo Ward Renovations and renovate staff ablutions.



In 2024, WIE Matebeleland partnered with **Saltaway** to carry out work to relieve the sewer system as part of their CSR. In addition to the sewer rehabilitation, from their INWED wish list they have also managed to plant fruit trees, to enable hospital patients can have a continuous supply of healthy foods. Furthermore, they donated some basics goods to the hospital. The rest of the items on the scope are still on the agenda and are on going one step at a time in due time.



3. **Increased** collaboration with other women centric organizations both within Zimbabwe and beyond the borders with organizations such as
 - c. FAEO WIE
 - d. SAFEOWIE
 - e. WFEO WIE
 - f. PROWEB
 - g. ELEVATE TRUST
 - h. OWSD Zimbabwe
 - i. WiBT (women in block chain talks)
 - j. WITBE (women in the built environment)

Theme 3: Engineering Strategic Indicators

1. Through the office of the ZIE and its Secretariat, we are tracking the registration of female members at ZIE in their various grades. As of June 2024, the membership statistics were as follows:

Grade	Number
Technician	75
Technologist	11
Corporate Member	165
Graduate Technologist	1
Graduate technician	37
Graduate member	66
Total	355

2. In a bid to increase visibility of the women in engineering as well as to get to know the members better, we have started a dedicated WIE database. It is work in progress getting the ladies to register and work is yet to be done to compare with that from the institution.

One thing that's been seen so far though is some of the women in engineering in industry are not registered with ZIE hence we must find ways to encourage the women to register with the institution.

Theme 4: Working in Partnership to address the Sustainable Development Goals, with a particular emphasis on Goal 5 and its relationship with the other Goals

Our women in engineering are making progress in their various spheres of influence as evidenced by the recognition they are getting be it through awards, or appointments into positions of influence.

3. Women in committee, boards and leading positions

- a. Eng Beauty Kanjunda was appointed as acting Provincial Public Works Deputy Director.
- b. Eng Jennifer Chigerwe, a lecturer in Fuels and Eneergy at Midlands State University (MSU) was appointed board member on the Association of Energy Engineer Zimbabwe chapter.
- c. Dr Eng Loice Gudukeya was appointed as the new Deputy Dean in the Faculty of Engineering and the Built Environment at the University of Zimbabwe.
- d. Eng Berverly Nyakutsikwa in her role as Chair for ZIE WIE represents Zimbabwe on the WFEO WIE committee, FAEO WIE committee as theme 1 deputy Chair and SAFEO WIE Theme as chair on Engineering workforce diversity theme.
- e. Eng Muchaneta Mavambe was selected as the country representative for Women in the Built Environment in Zimbabwe.
- f. Dr Eng Tammy Stevenson is the Global Chapter chair for Zimbabwe in Women in Block Chain Talks.

4. Financial inclusion

WIE members came together to raise funds to assist three Kwekwe Polytech Students with funds to allow them to continue their studies and write exams. It is on our wishlist for us to establish a scholarship fund that can allow us to sponsor at least 5 primary school children, 5 high school children and 2 university or polytechnic scholars as they embark in their education journeys.

Other Accomplishments

1. Awards

Some of our members were recognized by various organizations and received accolades as follows:

- a. Dr Eng Farai Mavhiya
 - i. 1st Runner Up Chairpersons of State Owned Enterprises (HIT)
 - ii. Outstanding Engineering Professional Super Platinum Winner (Zimbabwe CEO's Network)
 - iii. 50 Most Influential Women in Zimbabwe 2024 by Women Corporate Directors Network
- b. Dr Eng Tammy Stevenson Outstanding Engineering Professional Platinum Winner (Zimbabwe CEO's Network)
- c. Eng Berverly Nyakutsikwa Presidium Recognition Award 2024 (PROWEB)

- d. Eng Prudence Kadebu Recognition for Outstanding Contribution in ScienceTechnology and Innovation (Women in Science Conference)
- e. Eng Loice Gudukeya Recognition for Outstanding Contribution in ScienceTechnology and Innovation (Women in Science Conference)

2. PhD graduates

- a. Dr Eng Farai Mavhiya attained her Professional Doctrate in Engineering from the European International University.
- b. Dr Plaxcedes Sigauke attained a PhD in Chemical Engineering from

3. Features and articles

- a. ZIE president Dr Eng Farai Mavhiya was featured in a special edition by the Daily News newspaper in January 2024.
- b. WIE Chair Eng Berverly Nyakutsikwa was featured in the 2024 October edition of the ZiMining Magazine. [Read more here](#)
- c. Mining Engineer Nyaradzo Mutake was featured in the September issue of ZiMining. [Read it here](#)
- d. Mining engineer Rejoice Moyo was featuredin the December issue of ZiMining. [Read it here](#)
- e. Eng Lodrina MAsiyazi Was a guest speaker at the launch workshop of the book Soft Skills Training and Book launch , a book by graduate engineer Nyasha Manyika
- f. Dr Phylis Makurenje serves as a role model for our young profesisonals. She is currently involved in nuclear energy for space trips in Wales , UK. She started her engineeirng journey with the National University of Science and Technology in Zimbabwe.

4. Conference proceedings

W extend our congratulations to our members who participated in conferences as speakers, presenters, moderators or panelists.

ANNOUNCEMENTS

End of April – ZIE WIE quarterly newsletter

April – Girls in ICT celebration

Mar – IWD celebrations

June – INWED celebrations

RESOURCES

Zimbabwe Institution of Engineers monthly newsletter Vol1 Issue 3 (May-Jun 2024)

Ziming magazine (sept, oct, dec)

<https://www.inwed.org.uk/events/#> INWED High Tea

https://www.linkedin.com/posts/joy-makumbe-pr-eng-a6919132_womensmonth-motivation-inspiration-activity-7180241213021691904-07uY



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

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Committee Member Name	Ing Dr. Enyonam Kpekpena
Organization or Country	Ghana Institution of Engineering (GhIE), Ghana
Date Submitted	14 th February 2025
Committee Member Email Address	efkpekpena@yahoo.com

Summary

2025 marked WinE-Gh's 25th Anniversary which was launched on 18th March 2024, at the 14th WinE-Gh Forum during the 54th AGM and Conference of Ghana Institution of Engineering (GhIE). The celebrations with a pre-launch event to mark, International day of Women and Girls in Science 2024. On the 30th April 2024, which was our 25th Anniversary Day, we celebrated it with members donning WinE-Gh branded attire and using #WinE-Gh@25 to create awareness of the day. The "Wednesday Woman Crush" was initiative to highlighted key members, including Ing. Dr. Enyonam Kpekpena, who was appointed Chair of the Women in Engineering Committee of WFEO and FAEO in May 2024.

Mentoring efforts targeted schools in Ghana, while community projects included renovations at Abume DA Primary School, toilet construction at Kokote Kpordzi (a flood-affected community), and donations to students. A health trip to Dodi Island took place in July, with our celebrations culminating in a Gala dinner and thanksgiving service.

Additional highlights included participating in the 7th Africa Women Engineers Forum in Angola, hosting the WIE-WFEO Conference in October, and celebrating male allies at the "Engineering Excellence" event in June.

Accomplishments

Theme 1: Engineering Workforce Capacity Building to increase diversity and inclusiveness in the future skills pipeline

The 14th WinE Forum was organized during the Annual conference of GhIE 2024 under the theme: ***“Mentorship: the catalyst to engineering a resilient and sustainable future”*** on 18th March 2024 at the Engineering Centre. This year’s focus was on WinE members where our Resource Person spoke on Mentoring. Ing. Carlien Bou-Chedid was the Chairperson for the program.

Two WinE members, nominated by GhIE, received awards at the 9th Ghana Women in Excellence Award held on 8th March 2024 at the Coconut Grove Regency Hotel.

We held our first Engineering Excellence program ‘Engineering Excellence: Insight from our Male Champions’ was held on the 9th of June 2024 to tap into the expertise and insight from our male allies.

Theme 2: Engineering Workforce Capacity Building to encourage female engineering retention and leadership

WinE-Gh formed a Strategy Development group for the development of our strategy and action plan. This was achieved by attending workshops to equip participants in developing the Strategy and Action Plan. We focused on what we needed WinE-Gh to do for us, as well as what we could do for the society as a whole.

This involved restructuring the whole organogram of WinE-Gh to have effective participation of all members.

WinE-Gh introduced an approach where the various executives had to mentor the younger ones by assigning mentees to every position in the executive body to build capacity for members to seamlessly transition into executive roles.

Theme 3: Engineering Strategic Indicators

In celebrations of our 25th Anniversary, various mentoring programs were organised with a pre-launch activity at Twedee Junior High School for Tema Metro Schools. This was followed by the Obuasi Chapter organizing their mentoring program to support girls in STEM in Obuasi and its environs. The initiative was extended to Abume DA Primary School, Akosombo, Eastern Region, Christ The King Senior High School, Obuasi in the Ashanti Region, Mawuli EP Junior High School, Ho, Volta Region and Twene Amanfo Senior Technical School, Sunyani, Bono Region. These programs aim at demystifying Engineering to our female students.

WinE Ghana, in collaboration with WinE All Students Chapters, hosted the 3rd edition of WinE Affair from the 18th to 19th October 2024. The event was organized in partnership with the WinE Students, patrons, Engineering faculties and university councils from the ten (10) universities namely: University of Energy

and Natural Resources (UNER), University of Mines and Technology (UMaT), Kwame Nkrumah University of Science and Technology (KNUST), Kumasi Technical University (KsTU), University of Ghana, Legon (UG), University of Development Studies (UDS), Ashesi University, Central University, Takoradi Technical University and Ho Technical University. The students devised ten innovative solutions, each representing their respective institutions. Kumasi Technical University secured first place, followed by the University of Mines and Technology in second place, and the University of Ghana, Legon in third place. The remaining universities were ranked accordingly.

In addition, WinE-Gh honored its members aged 60 years and above who have demonstrated excellence in their respective fields of expertise.

Theme 4: Working in Partnership to address the Sustainable Development Goals, with a particular emphasis on Goal 5 and its relationship with the other Goals

The Mentoring and Education Committee, a working committee of WinE-Gh, in collaboration with the WinE Students Chapter, organized the 2024 WinE Affair at the University of Ghana from 18th to 19th October 2024. WinE-Gh served as the primary sponsor for this event.

Other Accomplishments

WinE-Gh continues to sponsor a female student in need of assistance, covering both tuition and hostel accommodation.

WinE-Gh presented an award to the best graduating female Engineering student from one of our technical universities.

Facelift of Abume D/A School's computer lab with computers and desk.

Five members attended the World Engineering Day for Sustainable Development in Lisbon, Portugal.

There was substantial representation from WinE-Gh at the 10th UNESCO African Engineering Week and the 8th Africa Engineering Conference held in Luanda, Angola.

Six members participated in the Global Engineering Conference on Sustainable Development and the World Federation of Engineering Organizations Executive Committee meetings (GECO 2025) held in Kigali, Rwanda.

WinE-Gh has constructed toilet facilities for the residents of Kokote Kpordzi, a community affected by flooding in the Eastern Region of Ghana, within Akosombo.

Announcements

Ghana Institution of Engineering, the mother body of Women in Engineering Ghana (WinE-Gh) is hosting the Women in Engineering (WiE) Standing Technical Committee of FAEO and WFEO from 2024 to 2027.

Election of new WinE-Gh President as current President takes on international role.

Resources

WinE- Gh's 25th Anniversary celebrations got featured in WFEO-WIE STC Newsletter for December 2024.

Events in Pictures



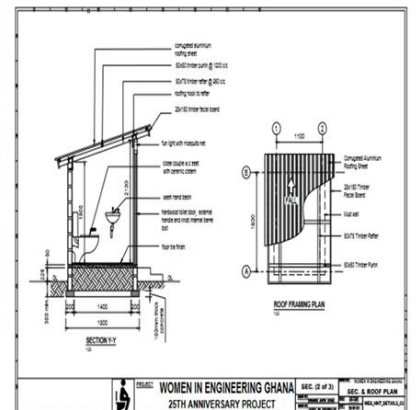
Furnishing the Computer lab with tables and chairs as well as Computers

Sod Cutting for toilet Project

The collage consists of six photographs and a technical drawing. The photographs show community members, including women, participating in a 'Sod Cutting' activity for a toilet project. They are seen digging, observing, and standing in groups in a rural setting. The technical drawing on the right is a 'ROOF FRAMING PLAN' for a latrine, showing dimensions and labels for various components like the roof, walls, and floor.

ROOF FRAMING PLAN

Labels in the drawing include: 1. CHANGING ROOM, 2. TOILET, 3. TOILET, 4. TOILET, 5. TOILET, 6. TOILET, 7. TOILET, 8. TOILET, 9. TOILET, 10. TOILET, 11. TOILET, 12. TOILET, 13. TOILET, 14. TOILET, 15. TOILET, 16. TOILET, 17. TOILET, 18. TOILET, 19. TOILET, 20. TOILET, 21. TOILET, 22. TOILET, 23. TOILET, 24. TOILET, 25. TOILET, 26. TOILET, 27. TOILET, 28. TOILET, 29. TOILET, 30. TOILET, 31. TOILET, 32. TOILET, 33. TOILET, 34. TOILET, 35. TOILET, 36. TOILET, 37. TOILET, 38. TOILET, 39. TOILET, 40. TOILET, 41. TOILET, 42. TOILET, 43. TOILET, 44. TOILET, 45. TOILET, 46. TOILET, 47. TOILET, 48. TOILET, 49. TOILET, 50. TOILET, 51. TOILET, 52. TOILET, 53. TOILET, 54. TOILET, 55. TOILET, 56. TOILET, 57. TOILET, 58. TOILET, 59. TOILET, 60. TOILET, 61. TOILET, 62. TOILET, 63. TOILET, 64. TOILET, 65. TOILET, 66. TOILET, 67. TOILET, 68. TOILET, 69. TOILET, 70. TOILET, 71. TOILET, 72. TOILET, 73. TOILET, 74. TOILET, 75. TOILET, 76. TOILET, 77. TOILET, 78. TOILET, 79. TOILET, 80. TOILET, 81. 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WinE celebrates

International day of
**Women and Girls
in Science 2024**

Theme: Women and Girls in Science Leadership,
A New Era for Sustainability

Date: 16th February, 2024
Time: 9:00am
Venue: Twedaase JHS, Tema

Speakers:
Ing Jane Naki
Tetteh-Anowie
Ing Miriam
Amponsah

GhE
GHANA INSTITUTE OF ENGINEERING

WinE
WOMEN IN ENGINEERING
GHANA







25th Anniversary Edition

14TH WinE Forum and 25TH Anniversary Launch

Theme: Mentorship; the catalyst to engineering a resilient and sustainable future.

Date: 18th March, 2024
Time: 9:00am
Venue: Engineering Centre, Roman Ridge, Accra


Chairperson
 Ing. Mrs. Carlien Bon-Chedid


Resource Person
 Mrs. Margaret Jackson


Keynote Speaker
 Ms. Brigitte Dzoghbenuku

Sponsors:    



President of Women in Engineering Ghana gets international role

News Desk Report

25th Women in Engineering (WinE) is a group under the Ghana Institution of Engineering (GhIE) that has been instrumental in the growth and development of the engineering profession in Ghana. The group has been instrumental in the growth and development of the engineering profession in Ghana. The group has been instrumental in the growth and development of the engineering profession in Ghana.

The group also pledged their continued support for the WinE group and its members, who are the backbone of the engineering profession in Ghana. The group also pledged their continued support for the WinE group and its members, who are the backbone of the engineering profession in Ghana.

The group also pledged their continued support for the WinE group and its members, who are the backbone of the engineering profession in Ghana. The group also pledged their continued support for the WinE group and its members, who are the backbone of the engineering profession in Ghana.







1st Edition

Engineering Excellence:

Insights from Male Champions


 Ing. Kwabena Bempah, FRIE
 President, Ghana Institution of Engineering


 Ing. Dr. Selorm Sarfo (PE-GhIE)
 Sen. Lecturer, University of Ghana


 Mr. Anthony Anyimadu
 Global Vice President (Plant), Processing & Oil Africa, Abaco Group


 Ing. Frederick Kwabena Badako
 General Manager (E&C), Ashanti Goldfields


 Lester Kwame Jantah
 CEO, African Energy Consortium Ltd.

Date: Sunday, 9th June, 2024
Time: 4:30pm
Venue: Online

Organizer: FAEO - WIE
 Powered by WinE Ghana

Link: www.bit.ly/3Kon5ZG
Meeting ID: 886 8205 9111
Passcode: 424934

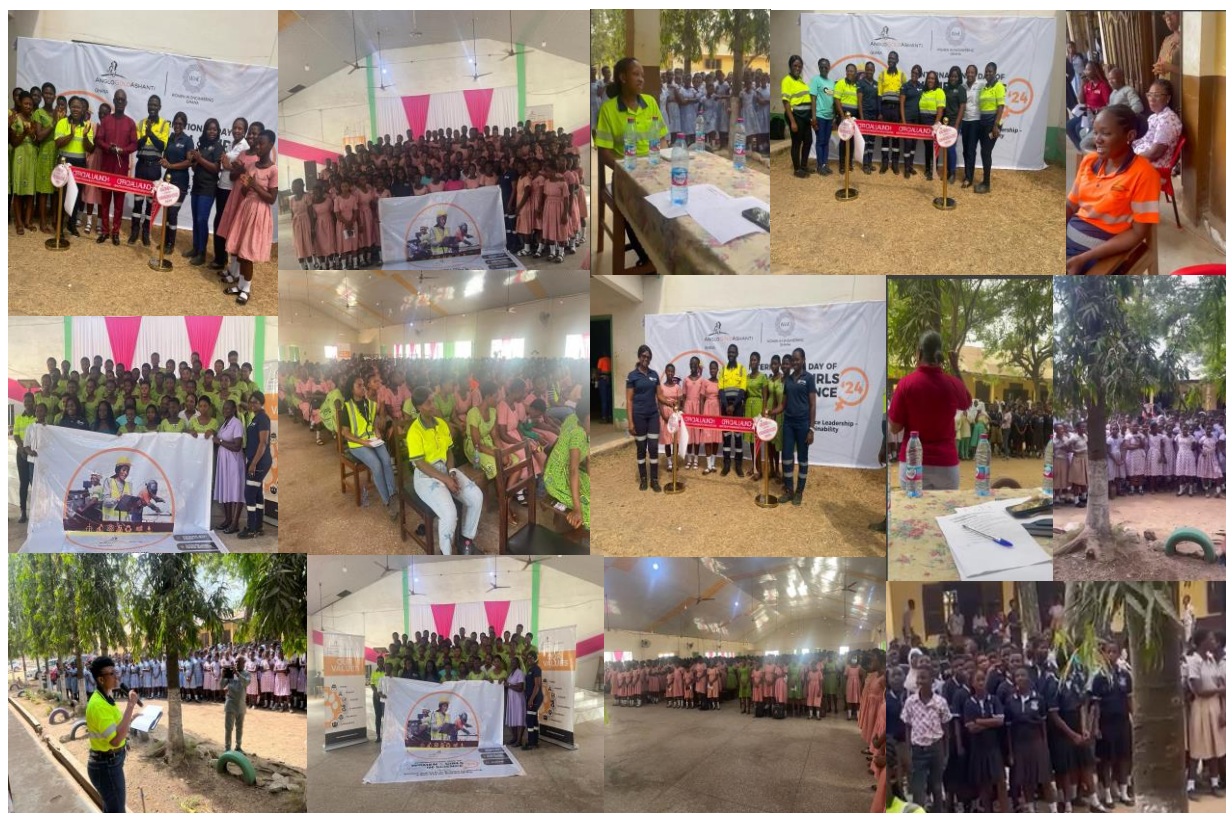
Chair of WIE- WFEO and FAEO and the 1st Edition of the Engineering Excellence program organised by FAEO theme 1 Vice Chair



International conferences attended by the Chair of WIE-WFEO and FAEO and some WinE – Gh representatives



3rd Edition of WinE Affairs held at the University of Ghana, Legon



Obuasi – WinE – Gh Chapter Mentoring sessions to mark International Day of Women and Girls in Science 2024



Women in Engineering Standing Technical Committee of the Federation of African 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	Naila Umubyeyi
Organization or Country	Rwanda
Date Submitted	05 th March 2025
Committee Member Email Address	naila.umubyeyi7@gmail.com

Summary

Provide a brief summary of your report.

This report contains activities, achievements, events where the chapter members participated during the year 2024 and plans of the Women in Engineering Chapter of the Institution of Engineers Rwanda for the year 2025.

Accomplishments

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

Theme 1: Engineering Workforce Capacity Building to increase diversity and inclusiveness in the future skills pipeline

On October 08th 2024, 18 female engineers from the Women in Engineering (WiE) Chapter of the Institution of Engineers Rwanda (IER) visited Nyabarongo II Hydropower Project, a significant ongoing megaproject in Rwanda, set to play a crucial role in meeting Rwanda's growing energy needs through sustainable development. The field visit, supported by IER and Rwanda Energy Group (REG) allowed the women engineers (Civil, Structural, Mechanical and Electrical Engineers) to gain first-hand insights into large-scale infrastructure development.

Theme 2: Engineering Workforce Capacity Building to encourage female engineering retention and leadership

Through the Africa Catalyst Program of the Royal Academy of Engineering which aims to build the capacity of Engineering Institutions in Africa, 42 female engineers participated in a five-days training program on "Empowering Engineering Professionals with essential soft skills for career success" that was organized in three sessions (May, August and December 2024).

The training program aimed at empowering engineering professionals for career success benchmarked on competency profiles of responsibilities, management and leadership with communication and interpersonal skills. It enabled participants for job interviews, equipping them with essential soft skills and providing the knowledge needed to navigate and navigate in their chosen disciplines.

They covered the following topics:

- Introduction to professionalism in Engineering
- Professional branding for engineering graduates
- Effective oral and written communication and negotiation skill

Theme 3: Engineering Strategic Indicators

The WiE Chapter is planning to develop a proposal to raise funds for collecting data on Women in Engineering (from higher learning institutions, the Ministry of Public Service and Labor, private companies employing engineers, women engineers' owned companies).

Among IER registered engineers, only 10% are females. There is a need to quantify their presence in different sectors. This will enable the educators, policy makers and industry leaders to better understand the distribution of impact of women engineers in Rwanda, fostering more informed decision-making and targeted initiatives to support gender diversity in the engineering sector.

Theme 4: Working in Partnership to address the Sustainable Development Goals, with a particular emphasis on Goal 5 and its relationship with the other Goals

On 28th August 2024, the chapter visited Isomo Academy (an initiative of Bridge2Rwanda, aiming at providing an intense English training and college preparatory program designed to equip Rwanda's top high school students with the skills they need to compete and win university scholarships inside and outside Rwanda).

The objective of the visit was to introduce young girls to engineering concepts and choose engineering at the university level. Senior women engineers shared their experience and journey of education and career.

After the session with students, a meeting was held with the management of Bridge2Rwanda and an opportunity for partnering with the WiE Chapter latter was discussed.

Other Accomplishments

Members of the WiE Chapter/Rwanda actively participated in the following events:

- The “2024 Women in Engineering Conference” organized by the Zambia Women in Engineering Section (ZWES) held on 19th April 2024.
- The “First East Africa Community (EAC) Multi-Stakeholders Forum for Effective Mutual Recognition Agreements” held on 20th -22nd November 2024 in Entebbe, Uganda; and presented on “Cross Border Mobility-Experience Sharing”.
- The “14th International Conference & Exhibition and AGM” organized by the Institution of Engineers Tanzania in collaboration with the Engineers Registration Board; from 05th to 07th December 2024, Arusha, Tanzania.
- Breakfast Meeting with the EAC Secretary General on 09th December 2024, Nairobi, Kenya.

Announcements

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

- WiE Chapter / Rwanda General Assembly in May 2025
- Visit to “ Rugando School ” for awareness raising on engineering in May 2025
- Webinars on different topics during the second quarter of 2025
- Site visits to different Mega projects (Bugesera International Airport) during the third quarter of 2025

Resources

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



Women in Engineering Standing Technical Committee of the Federation of African 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	Mkufu Tindi, Alice Isibika
Organization or Country	INSTITUTION OF ENGINEERS TANZANIA WOMEN CHAPTER
Date Submitted	06/03/2025
Committee Member Email Address	mkufus.tindi@yahoo.com ; aisibika@yahoo.com

Summary

This report outlines key accomplishments, events, and initiatives undertaken by the Institution of Engineers Tanzania Women Chapter (IET-WC) in alignment with the FAEO WiE themes, drawn from the 2024-chapter activities which includes School visits, Capacity Building, IET-WC annual conference (TAWECE), Mama Mhandisi Awards, and the participation of schools and universities in the annual conference/STEM fair.

Accomplishments

Theme 1: Engineering Workforce Capacity Building to increase diversity and inclusiveness in the future skills pipeline

- i. The Institution of Engineers Women Chapter (IET-WC) in collaboration with the Engineers Registration Body conducted capacity-building programs for women who are mid-career and graduate engineers, trained through the SEAP program.
- ii. The Tanzania Women Engineers Convection and Exhibition (TAWECE) which is the annual conference also gathered more than 1000 participants which includes women engineers, secondary school students and university and colleges which major in engineering educations. Women engineers were from various sectors — government, private organizations, Higher Learning Institutions and entrepreneurs discussed diverse topics, exchanged ideas and experiences, and strengthened their professional capacities. Additionally, female engineering students actively participated, fostering mentorship and knowledge-sharing.
- iii. Further, the annual conference, promote STEM education through participation of young girls. The 2024 event brought together over 24 secondary schools, 3 primary schools, and 11 universities, directly engaged in the projects or innovation exhibitions.

Theme 2: Engineering Workforce Capacity Building to encourage female engineering retention and leadership

- i. IET-WC, in collaboration with the Engineers Registration Body (ERB), has actively supported women engineers to be trained in the Female Future Programme conducted by Association of Employers Tanzania (ATE). This program aims to strengthen gender equality in the workplace, improve women's representation in management decision-making processes, and draw women into top positions in both private and public sectors. Participants strategically enhance their performance, achieve personal and organizational growth, and build leadership and decisionmaking skills.
- ii. Additionally, IET-WC collaborates with organizations like TANESCO to encourage and train women graduate engineers to register as Professional Engineers and to further enroll with other engineering organizations like Institution of Engineers. This effort aims to boost their career progression and ensure they are well-prepared for leadership roles within their organizations.
- iii. The Mama Mhandisi Awards 2024 recognized outstanding women engineers across five categories, celebrating their leadership, innovation, and mentorship roles. Award categories included "Woman Engineer Achiever of the Year," "Woman Engineer Leader of the Year", "Woman Engineer Innovator of the Year" and "Young Engineer of the Year,". The awards recognize and reinforcing the importance of career growth and leadership development in the

engineering field. Further the awards recognize and acknowledge Organizations which support the advancement of women engineers to grow in their career and attain leadership positions.

Theme 3: Engineering Strategic Indicators

- i. TAWECE 2024 highlighted measurable impacts, such as the participation of over 1000 women engineers, engineering students and secondary schools' students, along with tangible outputs like project/innovations showcases and awards.
- ii. The Mama Mhandisi Awards followed a rigorous selection process, ensuring transparency and credibility in recognizing women engineers' contributions in aspects such as Leadership, Innovation and Entrepreneurship.

Theme 4: Working in Partnership to address the Sustainable Development Goals, with a particular emphasis on Goal 5 and its relationship with the other Goals

- i. The collaboration between the Institution of Engineers Tanzania Women Chapter (IET-WC), ERB and various universities fostered partnerships to advance gender equality (SDG 5). In programmes such as school visit and youth expo.

Other Accomplishments

- i. Active media engagement during TAWECE 2024 amplified the visibility of women engineers through coverage by National Media and various online platforms.
- ii. Media Tours that are normally planned before and during the events also adds to the visibility of the chapter and provide awareness to engineering and STEM education.
- iii. The Mama Mhandisi Awards dinner gala gathered influential leaders and engineers, showcasing collective efforts to bridge gender gaps in the engineering sector.
- iv. Participation of the International engineering conferences and events also add to the visibility of the chapter within the EAC region and other countries

Announcements

Plans are underway for the next TAWECE event (2025), with a stronger focus on expanding student participation and strengthening partnerships with educational institutions and other stakeholders.

IET-WC in collaboration with ERB and Higher Learning Institutions preparing to launch a second phase of school visit, youth expo and innovation challenges young girls in STEM, aligning with FAEO WiE's goals.

Resources

TAWECE 2024 Event Report

https://www.instagram.com/iet_women_chapter/?hl=en

<https://www.facebook.com/womeniet/>

<https://tukiio.com/event/tawece9th> <https://www.ietwomenchapter.or.tz/>

This report captures the collective efforts and outcomes from recent events, reinforcing the IET-WC commitment to empowering women engineers and driving gender inclusivity in the engineering sector.



Women in Engineering Standing Technical Committee *of the* Federation of African 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	Agness Mofya Mwansa
Organization or Country	Zambia Women in Engineering Section (ZWES)
Date Submitted	28 th February, 2025
Committee Member Email Address	amofya@gmail.com

Summary

Provide a brief summary of your report.

The Zambia Women in Engineering Section (ZWES) of the Engineering Institution of Zambia (EIZ) continues to actively promote diversity, leadership, and capacity building among female engineers. This report outlines key ZWES initiatives from 2024 to 2025, including outreach programs, professional development, technical tours, and strategic collaborations. The activities align with the FAEO WiE themes, particularly increasing the participation and retention of women in engineering and supporting Sustainable Development Goals (SDG 5).

Accomplishments

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

Theme 1: Engineering Workforce Capacity Building to increase diversity and inclusiveness in the future skills pipeline

1. CBU ZWES Student Chapter Conference (February 24, 2024) – Motivational careers talk to inspire young female engineering students.
2. International Women's Day Education Empowerment Initiative (March 8, 2024) – Outreach at Chimusanya Girls Secondary School (Rufunsa) and Lumanto Boarding Secondary School, encouraging girls to pursue STEM careers.
3. INWED Siavonga Secondary School Careers Talk (June 20, 2024) – Engaged students to create awareness of opportunities for women in engineering.
4. Kasisi Girls Secondary School Careers Talk (June 23, 2024) – Included sanitation improvement assessment and STEM motivation.
5. INWED Children's Workshop at Nchanga Trust School (June 25, 2024) – Career exposure for young students, reinforcing the importance of engineering education.
6. ZWES CBU-Student Chapter Orientation (February 7, 2025) – Theme: Campus to Career: Empowering Girls in Engineering, aimed at bridging the gap between academic training and professional careers.

Theme 2: Engineering Workforce Capacity Building to encourage female engineering retention and leadership

1. Mulungushi University in collaboration with LaunchHer Hub Interactive Brunch (April 6, 2024) – Career talk and mentorship for female engineering students.
2. 6th Zambia Women in Engineering Conference (April 19, 2024) – Theme: Resilience and Innovation – Women Engineering the Future. Keynote presentations focused on leadership, innovation, and gender equality in engineering.
3. ZWES High Tea Event (September 7, 2024) – Theme: Promoting Leadership among Female Engineering Professionals. The event emphasized personal growth, career advancement, and financial management for women in engineering.

Theme 3: Engineering Strategic Indicators

1. ZWES Technical Tour to Trade Kings Plant (September 6, 2024) – Provided female engineers with exposure to manufacturing processes and technical advancements in industry.
2. Webinar on Energy Solutions and Breast Cancer Awareness (October 25, 2024) – Theme: Thrive 365: Strong Women, Strong Communities – Enhancing Well-being and Energy Solutions. Featured Mr. Ken Dunn and Dr. Christabel Mbiiza discussing sustainable energy innovations and women's health.

Theme 4: Working in Partnership to address the Sustainable Development Goals, with a particular emphasis on Goal 5 and its relationship with the other Goals

1. ZWES Engagement in National Events – Actively participated in workshops, training sessions, and collaborations with industry partners to promote gender equity in engineering and sustainability.
2. Capacity Building Workshops – Reached an estimated 2,000 students and 400+ female engineering professionals through skill development programs in engineering, entrepreneurship, and leadership.
3. 16 Days of Activism Against Gender-Based Violence (November 25 – December 10, 2024) – Awareness campaign on the ZWES WhatsApp group, reinforcing commitment to SDG 5 (Gender Equality).
4. Webinar on 16 Days of Activism Against Gender-Based Violence (December 10, 2024) – Theme: Unite to End Violence Against Women. Featured speakers Sharon Chisanga (YWCA) and Insp. Michael Monde (Zambia Police Service Victim Support Unit).
5. ZWES 9th Anniversary Celebration (January 30, 2025) – Theme: Forging Partnerships for Shared Success. Focused on strengthening collaborations to advance gender inclusivity and women's leadership in engineering.

Other Accomplishments

1. Increased ZWES visibility and outreach – Expanded engagement with schools, universities, and industry partners to enhance participation of women in STEM.
2. Strategic collaborations with APWEN and LaunchHer Hub – Strengthened regional and international partnerships to support female engineers' career growth.
3. Continued mentorship and career guidance – Through webinars, career talks, and networking events, ZWES has provided opportunities for young women to connect with professionals in engineering.
4. Increased number of women in engineering being appointed in strategic leadership positions, committees and Boards within EIZ and Government
5. Increased number of women participating in EIZ elections- Two women contested for the position of President of the Engineering Institution of Zambia in the 2024 elections.

Announcements

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

1. **On 8th March 2025, ZWES will be commemorating International Women's Day themed "Accelerate Action" by hosting two fitness training activities and career talks in Lusaka and Kitwe.**
2. **ZWES will soon be hosting the 7th Zambia Women in Engineering Conference – April 8, 2025, in Livingstone, Zambia.**

Resources

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

1. <https://iodzambia.org.zm/newsroom/empowering-women-in-engineering-mirriam-chiyabas-inspiring-address-at-the-zwes-high-tea>
2. <https://eiz.org.zm/zambia-women-in-engineering-section-zwes/>
3. <https://womenvai.org/wp-content/uploads/2024/05/ZWES-WOMENVAI-WORKSHOP-20-June-2024.pdf>
4. https://web.facebook.com/groups/382382558531117/?_rdc=1&_rdr#
5. <https://www.zambiamonitor.com/female-engineers-lament-male-dominance-of-tech-sector-call-for-gender-balance/>
6. <https://www.zanaco.co.zm/2024/09/08/zambia-women-in-engineering-section-high-tea/>
7. <https://x.com/CECinvestor/status/1805938705141526905>
8. https://www.instagram.com/engineering_institution_of_zam/p/C_nCyhSulOP/



Women in Engineering Standing Technical Committee of the Federation of African 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	Smita Francis
Organization or Country	Namibian Women In Engineering
Date Submitted	11 th March, 2025
Committee Member Email Address	sfrancis@gmail.com

1 Summary

Provide a brief summary of your report.

In 2024, NAMWIE actively contributed to the advancement of women in engineering by organizing career guidance events, mentorship programs, academic award ceremonies, and industry collaborations. These initiatives focused on increasing diversity in engineering, supporting female engineers' retention and leadership, and strengthening partnerships to promote gender equality in STEM. Through these efforts, NAMWIE engaged students, professionals, and stakeholders to foster an inclusive engineering community.

2 Accomplishments

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

2.1 Theme 1: Engineering Workforce Capacity Building to increase diversity and inclusiveness in the future skills pipeline

NUST Career Fair (April 17-18, 2024)

- NAMWIE participated in the **NUST Career Fair**, engaging with students interested in engineering.
- Provided **career guidance and mentorship**, highlighting opportunities in STEM fields.



Delta Secondary School Career Fair (August 5, 2024)

- NAMWIE attended the **Delta Secondary School Career Fair**, focusing on guiding and inspiring young learners, particularly girls, to pursue careers in Science, Technology, Engineering, Arts, and Mathematics (STEAM).
- Provided insights into engineering career paths and academic requirements.
- Hosted a **quiz competition with awards** to encourage student participation.

Namibian Engineering Week (September 17-18, 2024)

- Hosted in the margins of the **10th UNESCO Africa Engineering Week (AEW)** and supported by **UNESCO**.
- Brought together national stakeholders, including **NUST, UNAM, NCRST, FAWENA, and NCAA**, to provide career guidance to approximately **40 female learners** from various Windhoek schools.
- Organized an interactive **quiz competition**, where winning students received prizes.

- Arranged a **site visit to Eros Airport with NCAA**, allowing learners to gain hands-on exposure to engineering work environments.





2.2 Theme 2: Engineering Workforce Capacity Building to encourage female engineering retention and leadership

NAMWIE Academic Award Ceremony (October 18, 2024)

- Recognized and celebrated the **academic achievements of NAMWIE members**, with sponsorship from **NAMDIA**.
- Awardees, who maintained a **70%+ academic average**, shared their experiences and study strategies to inspire other students.
- Strengthened **motivation and leadership** among female engineering students by showcasing role models.



2.3 Theme 3: Engineering Strategic Indicators

Conducted **informal data collection** through mentorship programs, career fairs, and industry events to better understand the challenges and opportunities for women in engineering.

Strengthened **collaborations with national institutions** and industry stakeholders to align initiatives with strategic workforce development goals.

2.4 Theme 4: Working in Partnership to address the Sustainable Development Goals, with a particular emphasis on Goal 5 and its relationship with the other Goals

SDG 5 (Gender Equality) Advocacy

- NAMWIE worked to **bridge gender gaps in STEM** through initiatives that provided networking, mentorship, and industry exposure to female engineering students.
- Engaged with **UNESCO, NUST, UNAM, NCRST, FAWENA, NCAA, and NAMDIA** to create opportunities and resources for women in engineering.
- Encouraged inclusive policies and highlighted the importance of gender representation in engineering.

2.5 Other Accomplishments

NAMWIE member selected for the Loreal UNESCO Award

NAMWIE Student Branch member Ms Rosalia Haufiku bagged Second place in the Africa Innovation Tourism award

Founder and CEO of NAMWIE Dr Smita Francis was awarded the MasterCard Lifetime Achievement Award.

3 Announcements

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

NAMWIE Conference

The event will feature **keynote speakers**, discussions on engineering innovations, and an **award ceremony** recognizing outstanding female engineering students.

- Provides networking opportunities for students, professionals, and industry leaders.

Essay Competition for High School Girls

- NAMWIE will launch an **essay competition** to encourage high school girls to explore careers in engineering.

Mentorship Programs

- NAMWIE is developing **mentorship programs** to support university students in navigating their academic and professional journeys.

4 Resources

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

1. NAMDIA academic awards ceremony

https://www.linkedin.com/posts/namwie_friday-18th-october-we-gathered-to-celebrate-activity-7255156048221585409-9-EZ?utm_source=share&utm_medium=member_ios&rcm=ACoAADAf4bYBqG7_AbEVGE1B8bq0MpL2JW WxP64

2. Namibian Engineering week celebration

https://www.linkedin.com/posts/namwie_engineeringforsustainability-womeninengineering-activity-7245110646831210496-ugz?utm_source=share&utm_medium=member_ios&rcm=ACoAADAf4bYBqG7_AbEVGE1B8bq0MpL2JWWxP64

3. Delta High School Career fair

https://www.linkedin.com/posts/namwie_namwie-stem-steam-activity-7227036303106666497-Fz_u?utm_source=share&utm_medium=member_ios&rcm=ACoAADAf4bYBqG7_AbEVGE1B8bq0MpL2JWWxP64

4. NUST career fair

https://www.linkedin.com/posts/namwie_namwie-nust-nustcarereerfair-activity-7189062472291516416-LwzU?utm_source=share&utm_medium=member_ios&rcm=ACoAADAf4bYBqG7_AbEVGE1B8bq0MpL2JWWxP64