

## ***CONCEPT NOTE***

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### **Proposed Panel Discussion Titled: Responding to Covid-19: Survival initiatives and Attributes of Resilient Female Engineers on 30<sup>th</sup> May 2020**

#### ***Background***

The COvid 19 Pandemic has shocked the entire world and many countries are struggling to recover from the quarantines and lockdown, apart from the massive death toll. All of humanity has suffered from this plague in different ways but women and children are likely to have been worst hit. Female engineers and females generally must develop deep resilience to withstand the shock and continue to be strong partners and in the development of the communities.

There is an important link between a country's engineering capacity and its economic development and the World Federation of Engineering Organisations is committed to playing a key role in the accomplishment of the 17 Sustainable Development Goals .

As a Policy Implementation Committee of WFEO, CWiE, one of the Themed Agenda is as follows:

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

The CWiE has therefore decided to invite panelists to discuss resilience and survival of the female engineers in pursuance of SDG #3: Ensure healthy lives and promote wellbeing for all, at all ages with emphasis on SDG#5: Gender Equality

### ***Objectives of the Panel Discussion***

All discussants are respected engineers in various fields, from different parts of the world. They will be bringing their experiences in engineers, as females and human beings in a Covid world, to what promises to be an interesting panel discussion.

### ***Proposed Speakers***

#### **Professor WAI YIE LEONG ( Malaysia)**

Wai Yie Leong received her PhD in Electrical Engineering from The University of Queensland (UQ), Brisbane, Australia in 2005. She has authored 6 book series and more than 100 papers that highlight the innovation on Electronics and Biomedical Engineering.

Wai Yie is currently the Chairperson of The Institution of Engineering and Technology (Malaysia Local Network) , the EXCOMM Member, Council Member of the Institution of Engineers Malaysia and Immediate Chairperson of Women Engineers Section, Malaysia. Board of Directors of International Network of Women Engineers and Scientists, Honorary Secretary of Women Engineers, The ASEAN Federation of Engineering Organisations (WEAFEO), and Committee Member of World Federation of Engineering Organization (Women in Engineering Committee). She is specialized in medical signal processing and telecommunications research. She has been researching on RFID, wireless sensor networks, ultra-wideband and wireless communications, and on Brain Signal Processing for signal conditioning and classification in various EEG-based mental tasks.. Her research works have contributed to cultural enrichment, quality of life, health and well-being and enhanced the biomedical research capacity, knowledge and skills of businesses and organisations. The research project has also contributed toward wealth creation growth of biomedical companies, business revenue and innovative capacity.

Wai Yie has received the IEM Women Engineer of the Year 2018, IEM Presidential of Excellence Award 2016 & 2015, INTI Outstanding Alumni Award for Academic Excellence 2016, She is

specialized in medical signal processing and telecommunications, and has received the Ten Outstanding Young Malaysian 2017, Top Research Scientists Malaysia 2017, ASEAN Meritorious Service Award 2017, IEM Best Paper Award 2015, MRRI2013 Best Paper Award 2013, Richard Jago Research Prize in 2004 and Trailblazer Innovation Award in 2005, in Australia. Wai Yie has been actively involving in Women In Technology (Brisbane) and has received the Smart-State-Smart-Women Award presented by Queensland Government, Australia, in 2005. She has over 10 years research and industry experience in Australia, Singapore, United Kingdom and Malaysia, with special interest in biomedical signal & image processing, smart control, telecommunications and wireless sensor networks. She also the 2013 Young Scientist (by Academy of Sciences Malaysia), and has been elected at the Chair of International Networking Group of Young Scientists Network-Academy of Sciences Malaysia (YSN-ASM). She has been representing women engineers at meetings and discussion at the United Nations

**DR. IBILOLA AMAO** -Moderator -Personal Profile (Nigerian)

Dr. Ibilola Amao is the Principal Consultant of Lonadek Global Services (See: <https://www.lonadek.com>). Lonadek is a multi-award-winning, women-owned, ISO: 9001: 2015 Certified Company. Established as an Engineering Technology and Innovations Solutions Company in 1991, Lonadek builds capacity, capability and competence of STEM talent to deliver value in the Energy, Power, Infrastructure, Manufacturing, Oil and Gas sectors.

Ibilola is a Fellow of the Energy Institute (EI), a member of the EI Council and sits on the IP Week Board. She is on the panel of judges for the Royal Academy of Engineering UK Africa Prize and a member of the Nigerian Society of Engineers. Ibilola is a fellow of the Institute of Directors (IoD) and a Co-Founder of the Women In Energy Network (WIEN). She sits on the Board of other STEM focused firms.

Ibilola is a committed change agent who invests her time in Continuing Professional Development (CPD) activities and Human Capital Development Initiatives (HCIDI). She works tirelessly with STEMpreneurs and TECHpreneurs to deliver innovative technology solutions globally. A Vital Voices VV GROW, VV100, GAP 2017 fellow and WeConnect International certified member she is involved in Girls in STEM and Women in Entrepreneurship activities with WimBiz. Ibilola pays it forward for national development and socio-economic transformation.

### **MOSES IYENGUNMWENA- Panelist (UK)**

Moses Iyengunmwena is Director at OAG Engineering Ltd (OAG); responsible for Leadership, Strategy, Business Development & Operations. He is the Founder & co-owner of OAG which has been delivering engineering services since 2004 to the multinational oil and gas companies and renewable energy (solar) solutions to businesses.

Dr Iyengunmwena holds Doctor of Philosophy (PhD) degree from Leeds University, United Kingdom. He has over 25 years of experience in the oil and gas, marine, nuclear, defence, telecommunication infrastructure, and renewable energy industries. He is an internationally recognized subject matter expert (SME) on the Structural Integrity Management (SIM) of existing offshore structures, including the design of strengthening, modification, and repair schemes (SMR), to several international Offshore Design Codes, Standards, and Recommended Practices.

He was the lead Research and Development engineer on the Joint Industry Project between 1995-1997 while at MSL Engineering Limited (UK), which led to the recent Tubular Joint capacity prediction formulations for ISO 19902 Code and adapted in modified forms in other offshore structural design Standards and Recommendation Practices. He is adept in the application of the several structural and geotechnical engineering software and delivers training on several Bentley's infrastructure supporting software.

He has undertaken certificate courses in Executive Management Development Program at Alliance Manchester Business School (AMBS), United Kingdom and Business Strategy Insight for Entrepreneurship at CASS Business School, City, University of London (designed in partnership with Oxford University, UK and Bocconi University, Italy). He is a Chartered Member of the Institution of Mechanical Engineers (UK) and registered with the Engineering Council.

Dr Iyengunmwena is passionate about technology transfer in the oil/gas and renewable energy industries and has keen interest in the development and mentoring of young engineers.

ENGR. OLUFUNMILAYO OLUBUNMI KADRI, FNSE- Panelist (Nigeria)

Engr Olufunmilayo Kadri, FNSE, is Executive Director of Nerdify Ltd, an energy company.

Funmi is an advocate for STEM education, especially for the girl child, and has mentored many young people to choose engineering as a profession (both boys and girls). A founding member of APWEN and serial entrepreneur, she serves as chairman of its Business and Entrepreneurship committee where she organizes business training for engineers and champions technology innovation for social entrepreneurship.

She is an Electrical engineering graduate of Queen Mary College, University of London (now Queen Mary University, London),

After her National Youth Corp Service, she was employed in LM Ericsson (Nig) Ltd. Thereafter, she worked in LECCOM Associates as an Electrical/telecoms design engineer. She obtained experience in the design and installation supervision of electrical lighting, wiring and power systems. She subsequently set up on her own firms –

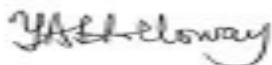
Coneptech Consultants and Effays Ltd - working on electrical consulting and contracting projects.

She has had experience working in Electrical and communications design and installation, (including infrastructure) through working on various projects across Nigeria. She is an Electricity sector observer and low carbon energy proponent.

She chairs the Business and Entrepreneurship Committee of APWEN (Assoc. of Professional Women Engineers of Nigeria) to promote awareness of domestic energy efficiency practices across the nation and was one of the 6 brave women who formed the Association of Professional Women Engineers 38 years ago.

### **Proposed Outcomes of the Event**

- Raise awareness of women on the Covid pandemic and how they can remain strong
- Disseminate our knowledge through a virtual platform that our partners can also benefit from.
- **Submitted by:**



**Yetunde Holloway**  
**Chair, Women in Engineering Committee**

## ANNEXURE 1

### Theme 4

<p>Theme 4: Working in Partnership to address the Sustainable Development Goals, with a particular emphasis on Goal 5, Gender Equality, and its relationship to the other Goals.</p>	<ul style="list-style-type: none"> <li>● Identify ways that engineering and technology could contribute to addressing the targets identified under Goal 5, Gender Equality.</li> <li>● Specify the ways in which gender equality relates specifically to engineering globally, and develop some actions that are possible to address this, both for our committee, for WFEO, and for the engineering sector globally.</li> <li>● Consider the gender perspective in relation to all of the Sustainable Development Goals (with particular emphasis on the ones that are most closely linked to engineering and technology), and demonstrate how engineering and technology can respond where disadvantage occurs, to ensure that no-one is left behind.</li> <li>● Contribute to the WFEO Climate Change Declaration established in</li> </ul>	<p>Use of our voice to represent women who are disproportionately disadvantaged globally by climate change events, lack of agency, or other unrecognised inequalities to find ways of ensuring that engineering and technology is aware of these perspectives and how to address them.</p> <p>Ensure that future engineering and technological solutions avoid the embedding of gender bias and discrimination.</p> <p>Formation of partnerships with others to deliver progress of the SDG agenda.</p>	<p>Illustrate the role that women play in addressing the Sustainable Development Goals both as engineers and as advocates for the gender perspective, using engineering and technology to address these challenges.</p>	<p>Communicate to our member countries and encourage them to identify and promote programmes that relate engineering and women and SDGs</p> <p>Initiate a competition among the countries to submit projects about how SGD's impact women and engineering and Judges from WFEO and UN</p>
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	<p>Melbourne in 2019</p> <ul style="list-style-type: none"><li>● Use the work of our female role model engineers in areas which link to the SDGs to show how women are influencing this important development, and encourage more girls to consider careers in engineering</li><li>● Foster partnerships with others to find ways of delivering our objectives through joint action. Use pre-existing opportunities such as WFEO, UNESCO, COP and ICWES conferences to further our impact.</li></ul>			
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## **ANNEXURE 2**

SDG#3

Targets 3b-d

Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all.

3.c Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States.

3.d Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks.