



# ACTIVITIES OF THE COMMITTEE ON YOUNG ENGINEERS / FUTURE LEADERS

**Firas Bou Diab, Chair YE/FL**

*October 30, 2020 – WFEO Executive Council Meeting*

# THE FIRST WORLD ENGINEERING DAY, MARCH 4 2020

## 2020 YOUNG ENGINEERS COMPETITION ON SDGS

### Young Engineers Competition on SDGs

World Federation of Engineering Organisations' Young Engineers/Future leaders Committee collaborated with IChemE (UK), FIDIC, Young Engineers Europe and students from Nankai University, to run a competition for early-career engineers from around the world. The goal of the competition was to highlight the work of young engineers and their engineering achievements in advancing the UN Sustainable Development Goals.

More than **400 young engineers** from more than **70 countries**, including some from the leading engineering universities of the world, showcased their projects to advance sustainable development through engineering.



Aida Rafat

Winner of Young Engineers Competition:  
 Ms. Aida Rafata, Imperial College London UK  
**SDG 12:** Reducing textile waste and reducing pollution from textile dyeing technologies.

There are 16 Highly Commended Entries focused on different SDGs from around the world.



<https://www.wfeo.org/awards/>

## WED 2020 MINI- SERIES AND YE/FL INVOLVEMENT

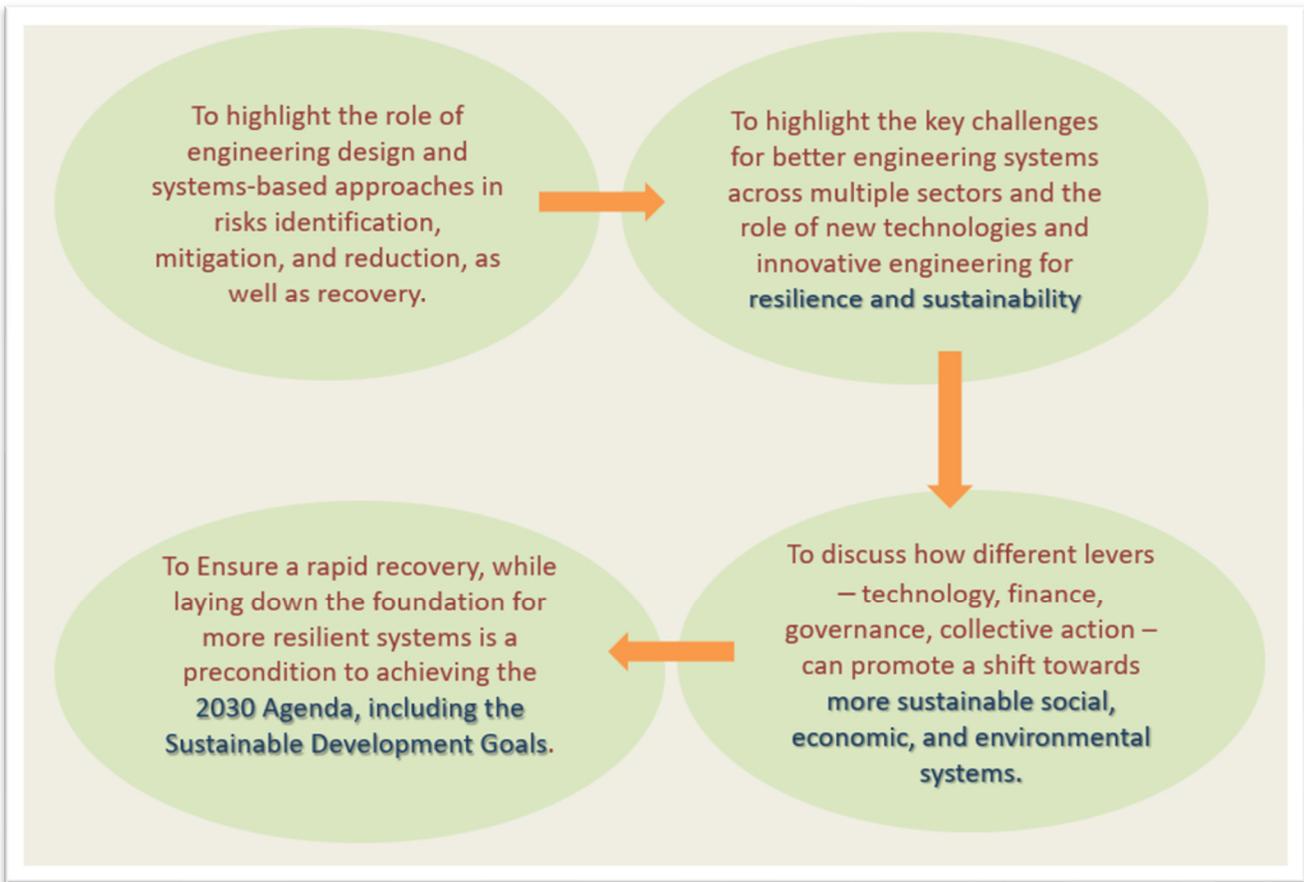
### WED 2020 Mini-Series

Engineering Heroes, with the support of the World Federation of Engineering Organisations, launched 17 mini-episodes of Podcasts. Each episode was aimed at helping the audience understand how engineers are perfectly placed, and already working, within each of the United Nations Sustainable Development Goals. More than **4,000 audiences** from more than **70 countries** listened to Podcast Episodes, each rated in the top 20% to top 50% of podcasts worldwide. The report "WFE0 Podcast for WED 2020" is available [in this page](#).



<https://www.wfeo.org/podcast-engineering-leaders-sdg-8-firas-bou-diab>

# YE/FL WEBINAR SERIES “ENGINEERING THE FUTURE”



World Federation of Engineering Organizations  
Fédération Mondiale des Organisations d'Ingénieurs

WFEO-YEFL

WEDNESDAY  
22 JULY  
8:00PM - 5:00PM  
CET VIA ZOOM

## ENGINEERING THE FUTURE

RESILIENCE AND SUSTAINABILITY FOR YOUNG ENGINEERS

**MODERATOR:**

**SPEAKERS:**

**Firas Bou Diab**  
Chair, Young Engineers / Future Leaders Committee - WFEO

**Prof. GONG Ke**  
President of WFEO

**Matthew Baldwin**  
Deputy Director-General for Mobility and Transport, European Commission

Register <https://bit.ly/38ZJklg>

2 CLEAN ENERGY, 3 GOOD HEALTH AND WELL-BEING, 4 QUALITY EDUCATION, 7 AFFORDABLE AND CLEAN ENERGY, 8 DECENT WORK AND ECONOMIC GROWTH, 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE, 11 SUSTAINABLE CITIES AND COMMUNITIES, 12 RESPONSIBLE CONSUMPTION AND PRODUCTION, 13 CLIMATE ACTION, 17 PARTNERSHIPS FOR THE GOALS

MONDAY  
12th OCTOBER  
14:00-16:00  
(CET)

## Webinar Series "Engineering the Future"

-CLIMATE ACTION

**Moderator:**

**Speakers:**

**Milda Plakaitis**  
WFEO YE/FL member

**Dr. Marlene Kanga**  
Immediate Past President, WFEO

**Davide Stronati**  
Chair of WFEO Committee on Engineering and the Environment

**Bert D'Hooghe**  
Policy Director at the European Round Table for Industry (ERT)

**Sara Nyberg**  
Junior Consultant Corporate Sustainability (at South Pole) - YOUNGO (UNFCCC) Representative

**Vane Aminga**  
Research Assistant, SIPRI

**Firas Bou Diab**  
Chair of WFEO YE/FL Committee

13 CLIMATE ACTION

Register: <https://bit.ly/3m0KQFG>

## INVOLVEMENT WITH OTHER STCS / PICS

### 2020 UN/WFEO YOUTH CREATIVITY FOR SUSTAINABLE TRANSPORT

*Involvement with Committee on Engineering for Innovative Technologies*

**Sustainable Development Goal 11**

Make cities and human settlements inclusive, safe, resilient and sustainable

Goal 11.2: By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons

11 SUSTAINABLE CITIES AND COMMUNITIES

**UN/WFEO Call for Innovations 2020**

YOUTH CREATIVITY FOR SUSTAINABLE TRANSPORT

Visit our website at [www.wfeo.org/innoCall](http://www.wfeo.org/innoCall)

Submit your innovation by March 1, 2020

Send your queries to [wfeo-ceit@wfeo.org](mailto:wfeo-ceit@wfeo.org)

The United Nations Department of Economic and Social Affairs (UNDESA), in collaboration with WFEO, launched a call for innovations on January 7, 2020, inviting young innovators from around the globe to submit their creativity for sustainable transport.

With the newest innovation being submitted on March 21, the **2020 UN/WFEO Call for Innovation - Youth Creativity for Sustainable Transport** has received 7 submissions from 6 countries of Kenya, Lebanon, Malaysia, Zimbabwe, China, and Nigeria.

Submissions were reviewed by an expert team led by **Prof. Jianping Wu** (Director of Tsinghua-Cambridge-MIT Centre for Future Transport) as the chair, and **Firas Bou Diab** (Transport Expert - Chair of YE/FL) as the vice chair.

Given the current concerns regarding coronavirus disease (COVID-19), it has been decided that the Second United Nations Global Sustainable Transport Conference will be postponed. Accordingly, the deadline of this Call for Innovations will be extended, and the submission will remain open. Please stay tuned for future announcements.

### YE/FL IN 23<sup>RD</sup> CHINA BEIJING INTERNATIONAL HIGH-TECH EXPO

*Involvement with Committee on Engineering for Innovative Technologies*

**FRIDAY 18TH SEPTEMBER 15:00-17:00 BEIJING TIME (CET+6)**

**A Sustainable Future: Young Engineers and 4IR**  
during the 23rd China Beijing High-Tech Expo

Moderator: **Dr. PENG Jing**  
Chair of WFEO Committee on Engineering for Innovative Technologies

Speakers:

- Prof. GONG Ke**  
President of World Federation of Engineering Organizations (WFEO)
- Mr. Yohan Ramasundara**  
Member of AI and BD W.G., Immediate Past President, Australian Computer Society
- Ms. Carol Cal**  
Product Owner of Digital Manufacturing in SAP
- Eng. Firas Bou Diab**  
Chair of WFEO Young Engineers / Future Leaders Committee

CEIT and YE/FL organized a webinar “A Sustainable Future: Young Engineers and the Fourth Industrial Revolution (4IR)” on the 18th September 2020, during the **23rd China Beijing International High-Tech Expo (CHITEC)**

Webinar highlighted on the below:

- Technological Innovations done by Young Engineers to promote the SDGs
- Necessary knowledge and skills for young engineers in the context of 4IR and the SDGs
- COVID-19 impact: How are Young Engineers around the world are making a difference?

## COLLABORATION WITH UN MAJOR GROUP FOR CHILDREN AND YOUTH (UNMGCY)

**Youth Science–Policy Interface Platform:** A global network of young people at the intersection of science (including engineering), technology, policy, & diplomacy

### Capacity Building

Capacity building for youth to effectively engage in science-policy and SETI, as it relates to the implementation, monitoring, and review of sustainable development frameworks

- Workshops at the Annual ST&I Forum for SDGs and High Level Political Forum
- Online community and resource sharing



### Knowledge

Generate with and share knowledge from various formal, traditional, and non-formal SETI knowledge systems (e.g. science-policy publications)

- Collaboration with the Journal of Science Policy & Governance on a publication “implications of emerging technologies on sustainable development and inequalities
- Host webinars (e.g., HLPF), conduct surveys, engage members in consultations



[unmgcy.org](http://unmgcy.org)  
[@UNMGCY](https://twitter.com/UNMGCY)  
[spiteam@unmgcy.org](mailto:spiteam@unmgcy.org)



Advancing the dialogues on issues related to 1) science for policy, 2) policy for science, ST&I as a ‘means of implementation’, and data

- Engage in various ST&I-related fora, dialogues (e.g., Digital Cooperation Summit at the UNGA, Expert Group Meeting on Digital Technologies, etc.)
- Develop position papers/statements

Youth actions leveraging SETI to support sustainable development efforts, in particular the Sustainable Development Goals, including through open science

- COVID-19 Youth Action Platform (examples of 250+ youth-led initiatives)
- SDG 7 (sustainable energy) Action Hub – portal of youth-led innovations

## POTENTIAL COLLABORATION WITH FIDIC FUTURE LEADERS



**FIDIC Future Leaders** is the group of young professionals of the International Federation of Consulting Engineers (FIDIC). As a leadership committee, the Future Leaders Committee (FLC) was formed to develop communication and networking opportunities for all FLs involved in the FIDIC community.

### **Future Leaders Management Certificate (FLMC)**

The focus of this FIDIC programme is to strengthen the business expertise of young engineers and other professionals working in the field of consulting engineering. It also offers networking opportunities and an insight into FIDIC global activities

## MOU WITH EUROPEAN YOUNG ENGINEERS (EYE)



**EYE represent the voice of 350,000 young engineers**  
Initiated discussions on Memorandum of Understanding or Collaboration  
with

**Objectives**

- ✓ Extend WFEO and YE/FL visibility through EYE Network
- ✓ Share knowledge
- ✓ Collaborate on events for prompting SDGs
- ✓ Contribute to Public Policy working groups

# YE/FL INVOLVEMENT IN THE WORLD ENGINEERING EDUCATION FORUM AND THE GLOBAL ENGINEERING DEANS COUNCIL (WEEF/GEDC)



**Young Engineers / Students Interface**

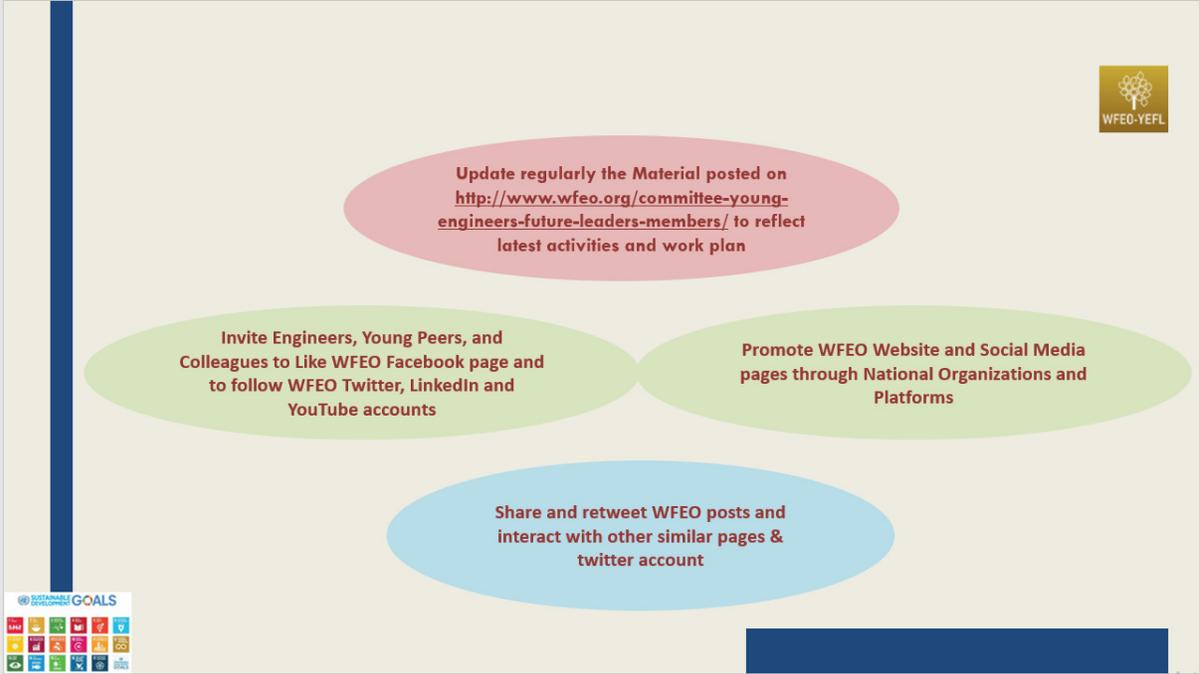
**Transformation and impact of learning technologies**

**Youth Mobilization to Action SDGs**

**This will give YE/FL an opportunity to share experiences, vision, strategy, and also network with engineering leaders from across the world**



# CONTRIBUTION TO WFEO WEBSITE AND WFEO SOCIAL MEDIA (FACEBOOK, TWITTER, YOUTUBE, LINKEDIN)



## REGIONAL UPDATES



The graphic features a blue vertical bar on the left with a white rounded rectangle containing the text "Regional Updates". To the right is a large yellow rectangle containing a list of regional engineering organizations and their representatives. In the top right corner of the yellow area is the WFEO-YEFL logo. In the bottom left corner of the overall graphic is the Sustainable Development Goals logo.

IESF - France	<u>Milène Guermont</u>
China Association for Science and Technology ( CAST )	Zhang Wei
The Ghana Institution Of Engineering (GHIE)	Kwaku <u>Duah</u>
Hong Kong Institution of Engineers (HKIE)	Tak Tang
Federation of Myanmar Engineering Societies	<u>Khin Maung Myint</u>
Ethiopian Association of Civil Engineers (EACE)	Brook <u>Legesse</u>
Engineers Australia (EA)	Nicole Brown
Federation of Lebanese Engineers (FLE)	Firas Bou Diab

All committee materials, meetings minutes, presentations, webinars recordings and regional updates are available here:

<http://www.wfeo.org/committee-young-engineers-future-leaders/>