

# SECRETARIAT REPORT



20

22

November 2021 - November 2022

GEDCouncil.org

## CONTENTS

Overview and Mission	1
Strategic Initiatives	2
Governance	3
Membership Overview	4
New Members	5
Annual Conferences	6
Industry Forum	7
GEDC Diversity Award	8
Quanser Sustainability Award	9
Regional Activities	10
Rising to the Top	11
Webinars	12
CEDC Secretariat	1 3

## Overview

Since its inception 14 years ago in Paris, the Global Engineering Deans Council (GEDC) has continued to successfully increase membership and expand into new regions of the world. The community developed through the GEDC has provided vital support to continue the GEDC mission of serving as a global network of engineering deans, leaders, and industry, allowing the organization to leverage the collective strengths of members from every continent in the pursuit of advancing engineering education and research throughout the world.

The 2022 GEDC Secretariat Report summarizes the internal and external activities of the GEDC since November 2021. Individuals wishing to stay engaged and current with the latest information can access the most recent GEDC news and details about member activities at gedcouncil.org or by subscribing to the GlobalEngineer mailing list.

## Our Mission

To serve as a global network of engineering deans, and to leverage on the collective strengths, for the advancement of engineering education and research.

## Strategic Initiatives



### **Mobility**

The GEDC supports the global exchange of programs, students and faculty both physically and virtually, while leveraging on the various challenges and opportunities that exist around the world. The GEDCExchange is a digital platform designed to serve as forum for exchange of information and opportunities supporting our members around the world.



#### Research

We facilitate inter-institutional research collaborations characterized by teams with a unique set of complementary expertise that will work on a global challenge.



### <u>Industry</u>

Industry serves as a vital partner supporting the GEDC's mission. Our GEDC Industry Forums bring together engineering employers and engineering deans to exchange and share knowledge.



#### Network

With a global network of more than 500 engineering leaders, members of industry and multilateral institutions, the GEDC connects its members to the largest global network of stakeholders in engineering education.

## Governance

## GEDC Chair & Chair Elect

Sunil Maharaj resumes his service as GEDC Chair until November 2023. During the GEDC General Assembly in 2023, he will transition the role of Chair and will continue serving as the GEDC Past Chair until the 2024 GEDC General Assembly. Our 2022 Chair Elect, Sushma Kulkarni, elected by GEDC members, will join the leadership team this year.





Sushma Kulkarni Chair Elect 2022 - 2023 India

# 2022 Election Committee

Michael Milligan (Chair), United States of America

Hans Jürgen Hoyer (ex-officio), United States of America

#### 2022 Elections

Each year, GEDC Regular Members elect candidates to serve as the organization's leaders. All officials elected in 2021 will serve their terms until the 2024 in the GEDC General Assembly.



Ahmet Oztas Executive Committee 2022- 2025 Albania



Babak Behesti Executive Committee 2022- 2025 United States of America



Jane Goodyer Executive Committee 2022- 2025 Canada



Robert Bishop
Executive Committee
2022- 2025
United States of
America



Rohit Kandakatla Executive Committee 2022- 2025 India



Zhenghe Xu Executive Committee 2022- 2025; 2nd Term China



Manivannan Kaliappan Secretary/Treasurer 2022 - 2023; 2nd Term India

Thank you to the colleagues who complete their terms in 2021: Elizabeth Croft (Australia), Tagwa Musa (Sudan), Guillermo Oliveto (Argentina), Julia Ross (USA).

## Membership Overview

GEDC leadership and the Secretariat continue to steadfastly work at expanding membership while growing exposure in new regions. The Secretariat anticipates growth of the organization to continue throughout 2022 and requests that GEDC members assist in fostering new connections with potential members.

GEDC members should note that membership invoices for 2023 will be issued in December 2022. We ask that members pay their membership dues within the first three months of 2023. Any members who have not paid their 2022 GEDC membership dues are asked to do so by December 31st, 2022.

222+
Members

40+
Countries

#### **Industry Partners**

































### **Quality Partner**









## New Members







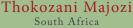






















Fulufhelo Nemavhola South Africa





Ghada Amer Egypt







ALABAMA

Clifford Henderson United States of America



NELSON MANDELA

Marshall Sheldon South Africa





Mina Hoorfar Canada





Farzad Rayegani

## ANNUAL CONFERENCES

## WEEF-GEDC 2021 Hybrid Conference, Madrid

The 2021 WEEF/GEDC was held in Madrid, Spain and online on November 15 to 18 in 2021. The theme was "Diversity and Ethics in Education for an Inclusive and Sustainable World" and with all the diverse attendees joining the conference in person and virtually, it was an incredible step in the direction of crafting such a world together. The Universidad Politécnica de Madrid and Universidad Nacional de Educación a Distancia were proud to host an



integration of Academia, Industry, Social Institutions, Associations and Students.

Following a hybrid model, which utilized both face-to-face and online integration, enabled us to allow participants from all over the world to choose the way they wanted to join based on their level of accessibility and comfort.

We would like to express our profound gratitude to our conference sponsors: Siemens, Dassault Systèmes, Coursera, MathWorks, Quanser, ABET, Arçelik, CTI, UNESCO, and UC Davis without whom, the conference would not have been possible. We would also like to thank our workshops sponsors: Altair, Infineon, and Labs Land, as well as our conference collaborators for their invaluable support during our hybrid conference.

### WEEF-GEDC 2022 Cape Town

The 2022 World Engineering Education Forum partnering with the African Engineering Education Association (AEEA), is to be held from 28 November to 01 December 2022 at the Cape Town International Convention Centre (CTICC). The theme of the 2022 Conference is "Adapting to Global Disruption: Meeting the challenge with integrative, holistic, and sustainable engineering."



## IFEES-WEEF-GEDC 2023

will be held in Monterrey, Mexico in collaboration with Tecnológico de Monterrey

## INDUSTRY FORUM

### 2022 Industry Forum

The 6th GEDC Industry Forum which will be held alongside the World Engineering Education Forum (WEEF) and GEDC conference in Cape Town, South Africa from 28th November to 1st December 2022.

This highly interactive half-day workshop brought to you by the Global Engineering Deans Council (GEDC) and Petrus, is taking place for the first time in Africa and follows the WEEF on Thursday 1st December 2022 from 11:00-19:30 SAST.









Innovation



2024 GEDC Industry Forum

Shenzhen, China
In partnership with Southern University of Science and Technology,
College of Engineering, and Petrus

For reports, resources and the most up-to-date detail about the GEDC Industry Forums, visit <u>GEDC-IndustryForum.com</u>

## GEDC DIVERSITY AWARD

### GEDC Diversity Award

The Global Engineering Deans Council in partnership with Siemens and George Mason University, is proud to announce the 2022 GEDC Diversity Award, a global award for innovative projects that inspire students of all profiles and backgrounds to study and succeed in engineering.

Our committee is ably headed by our GEDC Chair, Sunil Maharaj and includes:

- Marshall Sheldon (South Africa)
- Ken Ball (United States)
- Nilza Aples (Jamaica)
- Paloma Diaz (Spain)
- Rohit Kandakatla (India)





Broad diversity has been showcased by the entries of the last 10 years of the Award Program: in terms of diversity of discipline, cognitive style; gender; and national, geographic, demographic, racial, ... background. This year, true to tradition, we cast a wide net on the definition of diversity and look for inclusion that is as expansive as possible.

The GEDC wants to recognize good practice around the world and inspire others to replicate successful initiatives in their own institutions. The long-term goal of the award is to increase diversity among the global community of engineers so that the engineering industry reflects the diversity of the communities it supports, with diversity recognized as a driver for innovation and growth.

The GEDC is delighted to announce the top three finalists for the 2022 GEDC Diversity Award represented by the below universities:





## SUSTAINABILITY AWARD



### **Quanser Sustainability Award**



2022 marked the first year of the Quanser Sustainability Award in partnership with IFEES and GEDC. This award encourages the development of initiatives that prepare students to discover and develop sustainable engineering methods throughout their careers.

- Paul Gilbert, (Canada), Co-Chair (non-voting), Quanser CEO
- Stephanie Farrell, (USA), Co-Chair, Professor & Founding Department Head, Rowan University
- Hans J. Hoyer (USA) (non-voting)
- Maria João Viamonte, (Portugal), President at Instituto Superior de Engenharia do Porto
- Elizabeth Croft, (Australia & Canada), Dean, Faculty of Engineering at Monash University
- Sushma Kulkarni, (India), Director at Rajarambapu Institute of Technology
- Soma Chakrabarti (United Kingdom), Ansys, IFEES
- Mario Chauca Saavedra (Peru), IFEES
- Şirin Tekinay (USA), GEDC
- Lelanie Smith (South Africa), University of Pretoria, IFEES

We are delighted to share an update on the Quanser Global Sustainability Award - a number of outstanding applications advanced to the second stage of the evaluation process and the Award Committee has now completed its review of those applications. Applications from the following universities have been successfully shortlisted with the winner announced in Cape Town, SA.







## REGIONAL ACTIVITIES

### 2023 IFEES/GEDC/EPOKA Regional Conference

EPOKA University invites you to participate in the 2023 IFEES/GEDC/EPOKA international conference entitled "Challenges in the Western Balkans: Infrastructure and Development in the Region" to be held March 29th & 30th, 2023, in Tirana, Albania. This high-level international conference brings together academics, higher education administrators, industry leaders, government officials, nonprofit organizations, and other important stakeholders to discuss relevant substantive issues of importance within the global engineering community and beyond that impact contemporary society.

2023 IFEES/GEDC/EPOKA will attract 200 delegates from engineering and related disciplines.



#### **GEDC-Latin America**

The Latin American Chapter of the Global Engineering Deans Council (GEDC-LATAM) brings together the deans and other leaders of faculties, schools, universities or technological institutes in Latin America and the Caribbean that make up the GEDC. GEDC-LATAM's overall mission is to facilitate collaborations between deans from Latin America, the Caribbean and around the world, while promoting the advancement of engineering education, research, and community service throughout the region. One of the main projects has been the development of a digital exchange platform for deans and our IFEES-GEDC webinar series: Conversatorios. This initiative arose as a result of a Conversation on University Mental Health in Pandemic held during 2020. The wealth of the exhibitions led the GEDC Latam to propose the development of a survey in the different Universities that make up said institution. This undoubtedly contains highly relevant data for the decision-making of executive authorities of the different Engineering Faculties in Latin America.

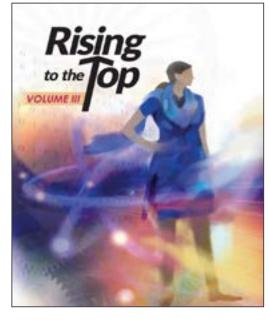
## <u>African Engineering Education Association</u>

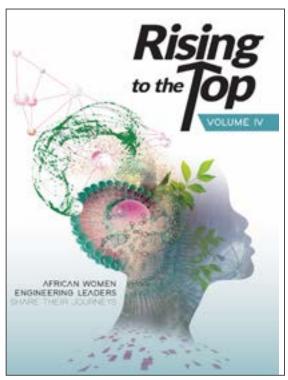
Teaching and learning were disrupted or halted in many African Countries during the most of COVID-19. It's in recognition of these challenges that the African Engineering Deans Council [AEDC] and the African Engineering Education Association [AEEA] in collaboration with Nigeria' Infrastructure Agency, NASENI [National Agency for Science and Engineering Infrastructure] set up a research and collaboration team to develop an affordable, effective and portable mobile carry-on device for online teaching and learning.

## RISING TO THE TOP SERIES

#### Volume III - India

Rising to the Top III has the honour to have representation from the crown of Kashmir to down south Bangalore, and from West Bengal to Odisha. Different cultural layering gave different twist to each one of their lives and they have yet managed to rise to the top. By openly sharing their personal journeys in these pages, the author hopes not only to inspire the next generation of engineering leaders, but also provide valuable insight into the challenges facing women engineers all across and the opportunities that are theirs for the taking.





#### Volume IV - Africa

Rising to the Top IV provides an intimate, inspiring and thoughtprovoking look into the varied experiences that have shaped the lives and careers of women engineering leaders from across the diverse African continent. This is a region known for specific challenges that include the legacy of colonialism, civil and internecine warfare, famine and lack of access to basic services. Despite this, Africa is also a continent rich with creativity, innovation and a commitment to community upliftment. It is these rich and fascinating contrasts that you will experience by reading the journeys of leading female engineers based there. These stories are by no means technical, instead they are alive with insight and both engaging and entertaining, presented as interviews, memoirs and third-person biographies.

### The Journey Continues...

IFEES GEDC is in the process of publishing Volumes V and VI in 2023 focusing on the MENA/Arab region lead by Tagwa Musa and Southeast Asia regions lead by Khairiyah Mohd Yusof.

The Beyond the Books webinars creates an open, honest, and engaging space where engineers can learn about experiences from women around the world as they navigate and prosper in STEM fields.



## WEBINARS

IFEES continues to offer capacity building webinars for engineering educators and stakeholders. Each webinar tackles cutting-edge and controversial topics in engineering and engineering pedagogy, facilitated by top rated professionals from academia and industry. With the experience of former IFEES president, Dr. Krishna Vedula, in organizing webinars through the Indo-Universal Collaboration for Engineering Education (IUCEE) organization, IFEES maintains its series of webinars both in English and Spanish and recently launched the Brent-Felder series that focuses on Effective Teaching and Learning. Webinars usually take place every other Wednesday and individuals or institutions interested in delivering a webinar are encouraged to contact us. All webinars are being recorded and can be found on the IFEES webpage.



#### Brent-Felder Webinar Series: 2022-2024





























Topics include addressing critical technical and social challenges facing engineering education; actively engaging students in person and online; using instructional technology effectively; designing inclusive pedagogy; and developing students' skills at metacognition, critical, creative, and multidisciplinary thinking, communication, and high-performance teamwork.

## GEDC SECRETARIAT

In January 2018, the IFEES-GEDC Secretariat transitioned to the Volgenau School of Engineering and Computing at George Mason University (GMU). GEDC Executive Committee member Ken Ball serves as Dean at GMU. Over the past four years, GMU has provided invaluable support to the IFEES-GEDC Secretariat and has allowed both organizations to grow through their gracious donation of office space, equipment, technical support, and other resources.

Located 32 kilometers (20 miles) outside of Washington D.C., this provides the IFEES-GEDC Secretariat strategic access to the large international representation in the region. Originally founded in 1949 as a branch of the University of Virginia, GMU became an independent institution in 1972. Apart from Fairfax, the institution has three other campuses throughout the state of Virginia and a fifth in Incheon, South Korea. GMU is a public institution with nearly 35,000 students, of whom more than 6,000 are enrolled in the university's engineering program. The Volgenau School of Engineering was founded in 1985 as the School of Information Technology and Engineering. Mason Engineering and Computing is one of the first schools to specialize in information security and assurance, was the first school in the USA to be recognized as a civilian center of excellence in this field and was the first to launch a bachelor's degree in Cyber Security Engineering. Mason Engineering is also recognized as a top-tier research university and is the largest public research university in Virginia.

Hans Jürgen Hoyer maintains his role as IFEES Secretary General and GEDC Executive Secretary. Aliki Pappas continues serving as the International Communications Manager and Deborah Donovan continues in her role as Financial Consultant and Peter Tase as Programs Consultant.

Please visit our website and let us know how it can be a better resource for you: gedcouncil.org.

