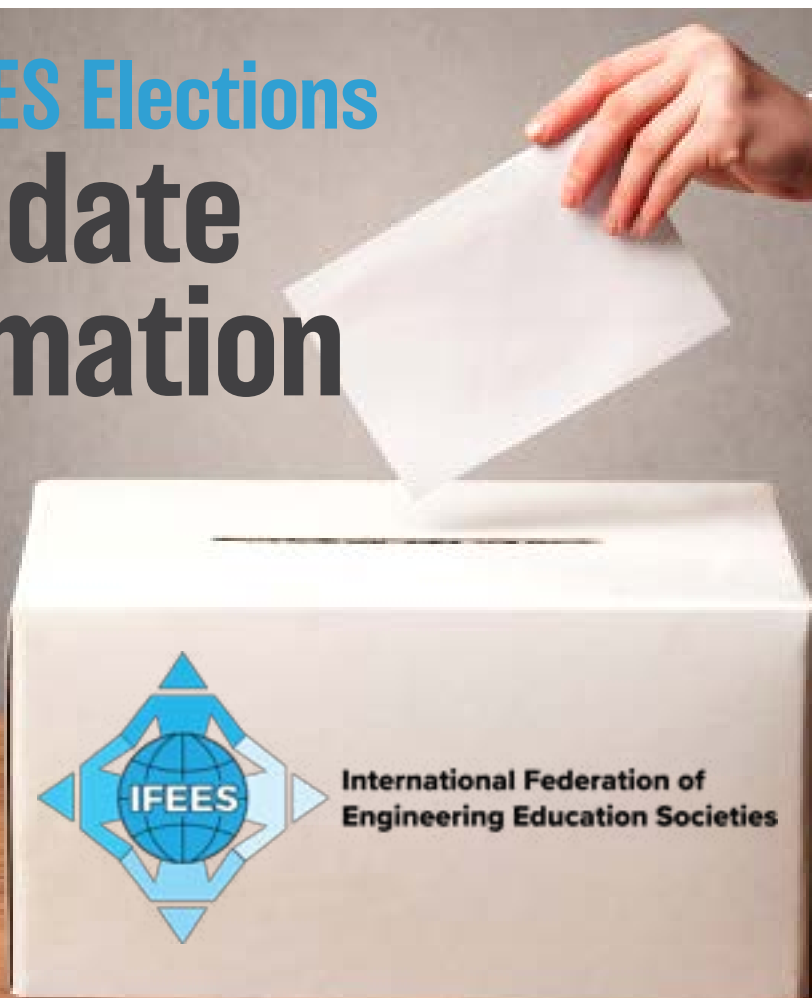


2021 IFEES Elections

Candidate Information



INSTRUCTIONS FOR VOTING



We ask that our representatives of the member societies in the International Federation of Engineering Education Societies (IFEES) submit their votes to IFEES Election Chair, Michael Auer (auer@cti-online.net), Hans Jürgen Hoyer (h.hoyer.ifees@gedc.info), and Alikı Pappas (a.pappas@ifees.net).

During our WEEF/GEDC 2021 Madrid conference, we will host our IFEES Member Assembly between November 15 - 18, where we will have our first Executive Committee meeting with newly elected officials. It will be chaired by IFEES President, Alaa Ashmawy, the IFEES President-Elect, and will include Former IFEES President, Ramiro Jordan, the members of the newly elected Executive Committee and the Secretary General.

Please be assured that your response is confidential and will not be published in any electronic or print form. If you have questions, please contact [Hans Jürgen Hoyer](mailto:Hans.Juergen.Hoyer@gedc.info) (+1 202-299-4942). Thank you for taking the time and assisting with the election of the leadership of our Federation.

** Only members who have paid their 2021 IFEES membership fee will have their votes counted*

VOTING PROCEDURES



- ▶ Select one (1) candidate you would like to serve for President-Elect. The official elected will serve for one year before assuming the two-year term as President during the IFEES General Assembly at WEEF/GEDC 2023.

- ▶ Select five (5) candidates you would like to elect for the IFEES Executive Committee. All elected will serve for a two-year term.

Method of Submitting Votes:

1. Email
 - >> Start a new email to Michael Auer (auer@cti-online.net), Hans Jürgen Hoyer (h.hoyer.ifees@gedc.info), and Alikı Pappas (a.pappas@ifees.net).

 - >> Write in the Subject Line: 2021 IFEES Election

 - >> List the one (1) President-Elect candidate you would like to elect and the five (5) candidates you choose for the Executive Committee and/or attach the filled ballot in your email with your selections noted.

2021 IFEEES Elections

Candidate for President-Elect

Stephanie Farrell

IUCEE // Indo-Universal Collaboration for Engineering Education
United States of America



► BIOGRAPHY

[Click Here for Video](#)

Dr. Stephanie Farrell is Interim Dean of the Henry M. Rowan College of Engineering at Rowan University and Professor and Founding Chair of the Department of Experiential Engineering Education (ExEEd). Stephanie began her career as a faculty member in the Chemical Engineering Department at Louisiana Tech University. She joined Rowan as a founding faculty member of the Chemical Engineering Department in 1998, where she served until launching ExEEd in 2016.

Stephanie is past president of the American Society for Engineering Education, and she has served two terms on the IFEEES Executive Committee. For the last decade, she has been actively involved in the Indo-US Collaboration for Engineering Education, serving as an international partner, teaching certification cluster leader, and IFEEES representative.

Stephanie leads Rowan's Revolutionizing Engineering Diversity organizational change initiative, funded through NSF's Revolutionizing Engineering Departments (RED) Program. She is on Rowan's ADVANCE team for organizational change to promote intersectional gender equity in STEM, and she leads ASEE's national initiative to promote LGBTQ+ inclusion in engineering, both funded by NSF.

Stephanie's contributions to engineering education have been recognized with numerous national and international awards. She has been honored by the American Society of Engineering Education (ASEE) with several teaching awards such as the National Outstanding Teaching Medal and the Quinn Award for experiential learning. She received the highest award from the International Society for Engineering Pedagogy (IGIP), the Nikola Tesla Award for outstanding achievements in engineering pedagogy. She received AIChE's national award for Service to Chemical Engineering Education. Stephanie was the 2014-2015 Fulbright Scholar in Engineering Education at Dublin Institute of Technology (Ireland).

► RATIONALE FOR CANDIDACY

To be nominated for IFEEES President-Elect and to be given the opportunity to play a significant role in setting the direction for engineering education worldwide is humbling and for that I am grateful. My passion for advancing engineering education has been the driving force for my entire academic career, and my background aligns very well with IFEEES' mission and vision. It is IFEEES' vision for excellence in engineering education that motivates me to run for president-elect. Building on the momentum of the recent initiatives related to sustainability, peace engineering and micro-credentialing, I welcome the opportunity to lead IFEEES toward the common goals important to our members and to help shape the strategic direction of future activities.

I have been actively involved with IFEEES for over a decade - first representing the American Society for Engineering Education (ASEE), and since 2014, representing the Indo-Universal Collaboration for Engineering Education (IUCEE). I have served two terms on the IFEEES Executive Committee from 2012-2016, including two years as Vice President for Engineering Education. IUCEE is dedicated to improving Engineering Education in India, and I am a founding member of the IUCEE International Engineering Educator Certification Program (IIEECP) which launched in 2015 - the only such program specifically developed for the Indian educational context. I remain active in a leadership role working to advance engineering education in India.

As an active member of ASEE for almost 25 years, I have served three elected terms on the Board of Directors, most recently in the president rotation from 2017-2020. I launched a multi-year program to develop initiatives that serve diverse member groups better - students, veterans, persons with disabilities, LGBTQ+, low income and first-generation college students, and non-tenure track faculty. This resulted in many institutional changes ranging from inclusive conference programming to professional development opportunities to institutional data collection, and has had a lasting impact on ASEE strategic activities.

2021 IFEEES Elections

Candidate for President-Elect

Stephanie Farrell

IUCEE // Indo-Universal Collaboration for Engineering Education
United States of America



► RATIONALE (CONTINUED)

[Click Here for Video](#)

In leadership positions at ASEE and AIChE and at Rowan University I have championed initiatives that increase the participation of underrepresented groups in engineering. For example, I have played a major role in establishing institutional and nationwide initiatives that have significantly increased the visibility and inclusion of groups that are traditionally left unseen and underserved, such as LGBTQ+. I have established synergistic partnerships between ASEE and other organizations, for example AIChE, that will broaden the impact of best practices for diversity and inclusion. At Rowan, I lead our Revolutionizing Engineering Diversity initiative, and I'm a member of our ADVANCE intersectional gender equity team, major programs funded by the (US) National Science Foundation.

As the collective voice and change agent in engineering education worldwide IFEEES strives to achieve excellence through quality, relevance, equity, access, and diversity. My career as an engineering educator is demonstrably in sync with IFEEES' mission and vision and, should I be elected, in my role as President-elect I would continue to make strides in IFEEES' mission toward excellence.

2021 IFEEES Elections

Candidate for President-Elect

Maria Teresa Garibay

CONFEDI // Federal Organization of Engineering Deans of the Argentine Republic
Argentina



► BIOGRAPHY

[Click Here for Video](#)

Mg. Ing. Maria Teresa Garibay received a Civil Engineering degree from the Faculty of Exact Sciences, Engineering and Land Surveying of the National University of Rosario- Argentina in 1979 and received a Master's degree in Technology-Mediated Educational Processes from the University of Córdoba-Argentina in 2011. Between 2015 and 2019 she was dean of the Faculty of Exact Sciences, Engineering and Land Surveying of the National University of Rosario- Argentina. From 2011 to 2015 she was director of the Civil Engineering degree at the same Faculty.

She attended the editions of the WEEF 2012 (Buenos Aires-Argentina), WEEF 2016 (Seoul- Korea), WEEF 2018 (New Mexico- USA) and WEEF 2019 (Chennai- India) and the editions of the Global Engineering Deans Council - GEDC LATAM in October of 2016 in Colombia as a panelist and the Global Engineering Deans Council - GEDC LATAM in September 2017 in Argentina. This allowed her to know these organizations and see how important their activities are for the development of engineering education. She was a member of the Consultative Council of the Global Engineering Deans Council Latin American Chapter (GEDC LATAM) between October 2016 and September 2017. As a researcher at the National University of Rosario- Argentina, she attended and presented research papers at conferences, seminars and meetings at national and international level on issues related to student-centered learning and skills development.

In 2005 she was a member of the technical team of the Federal Organization of Engineering Deans of the Argentine Republic (CONFEDI) for the definition of Generic Engineering Competencies and between 2006 and 2013 she was a member of the ALFA TUNING Project- LATIN AMERICA- University of Deusto -Spain to define the Specific Competencies of Civil Engineering. As dean, the creation of the "Maker Space" stands out in her management, a space for students to share resources and knowledge, work on projects, generate networks around topics of interest for the development of creative activities. The "Gender and Diversity Area" was also created with the objective of generating actions to ensure that the members of the Faculty can develop their activities under equal conditions.

Mg. Ing. Maria Teresa Garibay is a member of CONFEDI. She was Vice President between 2017 and 2018, period when the Commission of Women in Engineering was created to disseminate engineering degrees so that more women study engineering, select women engineers as referents to promote the career to prospective students, incentivize the admission and improve the permanence of female students in these degrees. As from 2019 she has been vice president of Capacity Building IFEEES. Since then, she has organized Spanish webinars for the Latin American Community regularly. These webinars have dealt with a diversity of issues such as post pandemic teaching, students' development skills, gender equality policies and virtual teaching, among others.

In 2020 Maria Teresa was one of the founder members of Cátedra Abierta Latinoamerica Matilda y las Mujeres en Ingeniería (Open Chair Latin America Matilda and Women in Engineering). The objective of this chair is to promote equal rights and opportunities for women in the academic and professional fields of engineering and to promote engineering vocation among girls and young people in Latin America and the Caribbean. Maria Teresa is also member of the Executive Committee and Coordinator of the Communication Committee.

► RATIONALE FOR CANDIDACY

My role as a teacher started more than 40 years ago, in the Faculty of Exact Sciences, Engineering and Land Surveying of the National University of Rosario- Argentina. Since then, my main interest has been the way we teach and the way students learn. During these years, I have attended and presented papers in several national and international conferences and meetings related to the teaching of Engineering.

From 2019 I have been vice president for Capacity Building of IFEEES. Most of you know the work I have done, you know about my experience together with the energy and responsibility I put into all the tasks I undertake. In fact, my attendance at all the IFEEES' Committee Executive meetings has always aimed at contributing and sharing ideas, always respecting team work.

2021 IFEES Elections

Candidate for President-Elect

Maria Teresa Garibay

**CONFEDI // Federal Organization of Engineering Deans of the Argentine Republic
Argentina**



► RATIONALE (CONTINUED)

[Click Here for Video](#)

My experience working at the IFEES's Executive Committee during these two years, has showed this is a most suitable place to encourage education in engineering, especially in pandemic time.

If I were re elected as a member of IFEES' Executive Committee, I would focus on developing what I have been working on during the last years, especially how professors can teach in virtual classrooms and how students can develop skills. As you can see in the IFEES's website, a lot of lecturers from Latin American countries as well as from other parts of the world have been invited to take part in the webinars I organized. This has proved to be very useful for the attendees.

As I said in 2019, when I presented my candidature at this Committee for the first time, I am still convinced new professionals need to be engaged in continual learning throughout their whole professional life. They need to be flexible enough to work with multidisciplinary teams, be capable of adapting to and applying new technologies to their day to day activities, and above all, act ethically to promote a sustainable society.

Another point I consider of vital importance is to encourage more women to study Engineering. Thus I have been working in different spaces such as Cátedra Abierta Latinoamérica Matilda y las Mujeres en Ingeniería, CONFEDI's Women in Engineering Committee and also organizing webinars related to this question. My intention is to keep on working strongly on this subject.

At present we are facing a new, different world, because of COVID 19. This pandemic has added other issues, such as mental health of the university community. I am convinced we need to take this challenge in IFEES and keep on working in this direction.

Because of the aforementioned, and because I firmly believe I can contribute to make this organization grow globally, help to foster Engineering education, develop a more egalitarian, sustainable and responsible society, I would like to continue working for IFEES either as President or Member of the Executive Committee.

2021 IFEES Elections

Candidate for President-Elect

K. Manivannan

ISTE // Indian Society for Technical Education
India



► BIOGRAPHY

[Click Here for Video](#)

Dr K Manivannan is currently working as Director-Industry & Academia Relations, Vinayaka Mission's Research Foundation Deemed to be University comprising Engineering & Technology, Medical Education, Para Medical Education HQ at Chennai, Salem in Tamilnadu State and Puducherry a Union Territory in India. He received his Ph.D. in Theoretical Fluid Mechanics from University of Madras. He earned his M.Tech in Computer Science & Engineering. His research interests and expertise include Theoretical Computer Science, Theoretical Fluid Mechanics, Fuzzy Logic and Transform Techniques.

He is chiefly prominent as a stickler for quality, team builder and a natural motivator with perseverance and integrity. Complemented with these qualities, Dr K Manivannan's excellent communication skills and leadership qualities have earned him several leadership and management positions. He is now the Secretary/Treasurer, GEDC and National Vice-President of Indian Society for Technical Education (ISTE), New Delhi. Before assuming this coveted position he has been elected as National Executive Council Member of ISTE for five terms. He was the member of Academic Council of the prestigious University of Madras for two terms of six years. It is worthy to note that he has been appointed as National Experts Advisory Committee (NEAC) member of National Council for Science & Technology Communication (NCSTC) Division, Department of Science & Technology (DST), Govt of India.

He is also a member of various professional organizations such as IEEE CSI, Society of Statistics, Computer & Applications, and Indian Society for Probability & Statistics, Ramanujan Mathematical Society, and Association of Mathematics Teachers of India. Dr K. Manivannan has authored Five books and published 25 papers in the International/National Journals.

Dr K Manivannan is a frequent contributor to national and international journals and a regular speaker at conferences. He has visited Malaysia, Singapore, Thailand, China, Hong Kong, South Korea, Argentina, Dubai and Italy to participate in the International Federation for Engineering Education Societies (IFFES) & Global Engineering Deans' Council (GEDC) International Conference and to interact with various Stakeholders in Engineering Education.

Dr. Manivanan has been associated with Lions International for more than 2 decades as a member of Lions Club of Madras Central. A couple of years back, he established a new club called Lions Club of Chennai Coastal and was its elect President. During his term, he made a personal contribution of \$1000 towards two students' education fee and sponsorship of members to the Club and was also involved in other Community services. Now he serves a Club LCIF Coordinator. The experience he gained in various leadership roles has made him more enduring in handling the very challenging circumstances and approach situations with a humane attitude.

Dr K Manivannan's life philosophy has always been:

"Laugh so Hard That even Sorrow Smiles at You, Live Life so Well that even Death Loves to see you Alive, Fight so Hard that even Fate accepts its Defeat."

► RATIONALE FOR CANDIDACY

With more than 32+ years of experience as teacher, I am now serving as DIRECTOR- Industry & Academia Relations, VINAYAKA MISSION'S RESEARCH FOUNDATION (DEEMED TO BE UNIVERSITY). This long experience as a teacher has given me a great understanding of the teaching learning process. Meeting brilliant students, erudite teachers and proficient industry professionals taught me to contribute to and learn from the academically challenging environment.

In addition to my academics, I have been very active, participating in professional bodies and served in different leadership positions. I have been a Member of Board of Studies, Board of Examinations, Industry-Institution-Interaction Cell and also elected as Academic Council, University of Madras, National Vice-President, Indian Society for Technical Education, New Delhi, Executive Committee Member of Society of Statistics, Computer and Applications, New Delhi and these positions provided me new experiences so as to push myself and broaden my horizons apart from contributing to engineering education.

2021 IFEES Elections

Candidate for President-Elect

K. Manivannan

**ISTE // Indian Society for Technical Education
India**



► RATIONALE (CONTINUED)

[Click Here for Video](#)

I also elected as Executive Committee member of International Federation of Engineering Education Societies (IFEES) twice at Seoul (2016) and Albuquerque (2018) subsequently appointed as Vice President (Industry & academia Relations) and served till 2020.

I am also serving now as Chair - Global Engineering Deans Council (GEDC), India chapter.

It is my privilege and pleasure to state that I made the presence of both IFEES and GEDC in India in organizing WEEF 2019 in India first time.

My participation as an Indian delegation in the World Engineering Education Forum (WEEF) and Global Engineering Dean's council (GEDC) at Singapore (2010), Beijing (2011), Argentina (2012), Dubai (2014), Florence (2015), Seoul (2016), Kuala Lumpur (2017), Albuquerque (2018) and Chennai (2019) gave me a great opportunity to interact with various Stakeholders in Engineering Education.

I am happy to mention that, as a panel member, my presentation 'Cultivation of Practical Ability of Innovation and Entrepreneurship in Engineering Education' at Zhejiang University, Hangzhou, China Asian engineering Deans summit (AEDS 2016) 16-17 May 2016, and "Industry -Academia Collaboration in India- Initiatives, Issues, Opportunities and Strategies" at 8th edition of AEDS 2018 at Tokyo Institute of Technology

, Tokyo, Japan (May 21-23 2018) and my presentation at AEDS 2015 at NUS, Singapore in May 2015 were well-received. I also grew to a much more independent and confident person. I am now comfortable adapting to new situations and interacting with people, who are different from me, qualities which will be tremendously useful when interacting with global audience.

I am well aware that world now is facing greater challenges than any time in the past. Global warming, pollution, terrorism, un-employability, and financial meltdowns are just a few of the problems today's students will be called upon to tackle. With a multitude of challenges facing our younger generation, along with direct connectivity to an international society, students of engineering should be exposed to these challenges and also they should be equipped well with skills to overcome them. I strongly believe that my Executive Committee Member to IFEES has certain alluring components like multidisciplinary interactions with performing engineers, several networking opportunities, international exposure which I will be able to take back to India and help aspiring engineering students to solve some of these challenges.

Generally, partnership and alliance have been accepted as key components that are vital to accomplish significant and efficient solutions. At present it has become progressively clearer that partnership is not only important but necessary for students and professionals, due to globalization and the rise of technology. As a coordinator of Innovation and Entrepreneurship Development Centre and Business Incubation, I reckon that this kind of association will also help student community to be 'job creators' in other words 'Entrepreneurs' than 'job seekers'.

I strongly believe that modern youth should nurture creativity. Only a creative intelligence complemented with entrepreneurial skills can couple creative ideas to life in a business setting. My exposure to an international body like IFEES helped me to bridge my students' creativity with international business acumen. Also with more than 16 million students graduating from 3000+ institutions offering engineering education in India, my partnership with IFEES helped me contribute in terms of counseling in their career and entrepreneurship ventures. Now if I get elected as the President elect of IFEES I will be able to continue my efforts and contribution to the academia with new vigor and leadership.

I end, quoting IFEES statement that my Executive Committee membership of IFEES will help me gain skills and expertise that will 'enhance the ability of engineering faculty, students and practitioners to understand the varied cultures of the world and work effectively in them.'

I thank you for the opportunity.

Ariela Sofer

INCOSE // International Council on Systems Engineering
United States of America



► BIOGRAPHY

[Click Here for Video](#)

Dr. Ariela Sofer is Interim Divisional Dean of the Volgenau School of Engineering in the College of Engineering and Computing at George Mason University. She has previously served as Associate Dean for Administration and Faculty Affairs in the College (2017-2020) and as Chair of the Systems Engineering and Operations Research Department (2002-2017). She is coauthor of the textbook “Linear and Nonlinear Optimization” McGraw Hill, 1996 and SIAM Books 2008, coeditor of three volumes, author /coauthor of over refereed 40 publications, and author of a chapter in the IFEES-sponsored book “Rising to the Top.” Her research has been sponsored by the US National Science Foundation and the US Air Force Office of Scientific Research. Dr. Sofer was elected Fellow of the Institute of Operations Research and Management Science (INFORMS) in 2016, and Fellow of the Institute of Industrial and Systems Engineers (IISE) in 2018.

Dr. Sofer is in her second term as a member of the Executive Committee of IFEES. She has served as Director of Academic Matters (2017-2020) on the Board of the International Council on Systems Engineering (INCOSE). She has also held Board positions as Secretary of IISE and as Vice President for Sections and Societies of INFORMS. She has also served as Chair of the Association of Chairs of Operations Research Departments (ACORD), as Chair of the INFORMS Computing Society, and as Secretary/Treasurer of the SIAM Special Interest Group on Optimization. She was the General Co-Chair of the 2020 INFORMS Annual Meeting (held online) that attracted over 5,500 registered participants. On a personnel level, she has lived in 3 continents and travelled to 6, loves to travel, garden, and dance ballroom and salsa.

► RATIONALE FOR CANDIDACY

This is a challenging time for engineering education. With the upheaval wrought by the COVID pandemic, the changing engineering profession, economic uncertainty and relentless competition, engineering educators face a formidable road ahead. Yet these challenges also offer IFEES opportunities to greatly influence engineering education and to benefit society. I hope to work together with you to achieve this.

I believe my leadership experience will serve me well in advancing the IFEES mission and objectives. I have had many years of service and leadership within a number of engineering professional societies, including my current service on the IFEES Executive Committee. I have served for four years on the IFEES Duncan Fraser Global Award selection committee, and for the past two years as its chair. Through this, I have had the wonderful opportunity to learn about the myriad ways engineering educators around the globe have made lasting impact on society.

If elected, I will focus on the following goals:

- Increase the value of IFEES membership. IFEES already has an outstanding record of creating global communities of engineering educators and their industrial partners. I hope to further expand our members’ exchanges to include strategies for recruiting new members to our societies, for achieving diversity, mentoring faculty, creating industry-university relationships, and promoting entrepreneurship. We should look at new learning paradigms such as stackable credentials, accelerated programs and new pathways to engineering. In addition, we should develop ways to recognize our IFEES volunteers for the extraordinary work they are doing.
- Grow the IFEES membership base. This is vital to increasing our relevance and to our financial health. I am particularly keen on fostering societies in developing countries and expanding our corporate membership. Should the proposal to add a new membership category of Academic Partners pass, I would support a cost structure that would make it easier for institutes in developing countries to join IFEES, and would work actively to recruit new academic partners
- Expand our global impact. IFEES has been a leader in the development and promotion of Peace Engineering. Following the 2018 Peace Engineering Conference, the 2020 IFEES Peace Engineering and Sustainability Declaration was a call for action for engineering education societies to act in concert from a systems mindset to advance towards a more sustainable and peaceful society. This focus is near and dear to my heart, and I commit to continue our engagement and actions towards establishing a sustainable planet.

I pledge to serving our community, with collegiality, inclusion, and transparency. I would be greatly honored to serve as the IFEES president-elect.

2021 IFEES Elections

Candidate for Executive Committee

Jean-Pierre Auffret

IACIO // International Academy of CIO

United States of America



► BIOGRAPHY

[Click Here for Video](#)

J.P. Auffret is co-founder and current president of the International Academy of CIO (IAC), an NGO headquartered in Tokyo, Japan with the objectives of fostering the development of CIO and IT executive leadership education and institutions; and the application of emerging technologies to major challenges including ageing societies and natural disasters.

The IAC has active participation from Asia, Europe, Africa and the Americas, partners with NGOs such as the World Bank, U.N. and APEC and publishes the annual Waseda - IAC Digital Government Rankings, provides accreditation for university CIO master's degree programs, partners on a digital government book series with IOS press, and hosts an annual conference. The IAC has been a member of IFEES since 2020.

Auffret is also director, Center for Assurance Research and Engineering in the Volgenau School of Engineering and director, research partnerships in the School of Business at George Mason University.

Auffret's work and research span a range of applied technology fields including CIO and ICT governance; cybersecurity leadership, and innovation and application of emerging technologies and with APEC, NSF, U.S. Department of State, World Bank, ITU and IBM. His experience includes executive positions with MCI and its joint venture with British Telecom, Concert and academic positions with George Mason, Duke University's Center for International Development and as physicist-in-residence at American University. Auffret earned a B.S. from Duke University where he was an A.B. Duke Scholar, M.B.A. from the University of Virginia and Ph.D. in Physics from American University.

► RATIONALE FOR CANDIDACY

As cofounder in 2005 and now current president of the International Academy of CIO (IAC), I would be able contribute to the continued development of IFEES benefiting from board experience with a similar international organization and also contribute to developing the partnership between IFEES and the IAC and between IFEES member organizations and IAC country chapters. (The IAC joined IFEES in 2020.)

Even before the COVID-19 pandemic and now with increasing pace, engineering is becoming multidisciplinary with leadership, management and policy having major roles in engineering and organizational success. In addition, society is more reliant on technology and new and emerging technologies will play a major role in the post pandemic economic recovery bringing both opportunities as well as risks. I think that I can add to these discussions, perspectives and related initiatives on the IFEES executive committee having both private sector and academic experience and academic appointments in a range of fields including engineering, business and public policy.

2021 IFEES Elections

Candidate for Executive Committee

Deborah Blaine

SASEE // South African Society for Engineering Education
South Africa



► BIOGRAPHY

[Click Here for Video](#)

Debby Blaine is an associate professor in Mechanical and Mechatronics Engineering at Stellenbosch University, South Africa. She teaches undergraduate engineering classes in Strength of Materials and Materials Science, and supervises both undergraduate and postgraduate research students. Debby's disciplinary research area is powder metallurgy (PM), including sintered materials and additive manufacturing, and the mechanical behaviour of materials. She is also keenly interested in engineering education and has been awarded a Teaching Fellowship at Stellenbosch University (2021-2022) where she is researching the collaborative design of learning opportunities within engineering, seeking out the student voice in order to promote diversity and inclusion.

Prior to joining Stellenbosch University, she was the Deputy Manager of Materials Research and Development (2006) at Bleistahl Produktions GmbH & Co. KG, Germany, a PM valve seat insert and valve guide manufacturer. She holds a PhD in Engineering Science from The Pennsylvania State University, USA (2004) and BEng in Mechanical Engineering from Stellenbosch University (1996). She is a fellow of the South Africa Institution for Mechanical Engineering, was national president 2018-2020, and was chair of the Western Cape branch 2011-2013. She is a founding board member of the South African Society for Engineering Education, and was national president (2017-2019).

► RATIONALE FOR CANDIDACY

I am an associate professor, positioned in the Faculty of Engineering at Stellenbosch University, a research-led university in South Africa. I see my teaching role as integral to my identity as an academic, and I have actively participated in Engineering Education communities at my university, as well as nationally and internationally, in order to develop my competence as an educator. My passion lies in creating a holistic and inclusive learning environment for my engineering students, one that embraces the individuality and diversity in the classroom as a microcosm of the world at large. I have witnessed the exceptional value to be found when spaces are created to share practice and approach change as a collective, this being especially true when opportunities for interactions between a diverse group of stakeholders are fostered. I believe that I am well-positioned to leverage the connections I have in different engineering education spaces, with students, academics and industry, to expand and sustain the IFEES network of people who are passionate about engineering education on a global scale.

2021 IFEES Elections

Candidate for Executive Committee

Soma Chakrabarti

IACEE // International Association for Continuing Engineering Education

United Kingdom



► BIOGRAPHY

[Click Here for Video](#)

Dr. Soma Chakrabarti has over 25 years of experience in engineering education leadership, administration, teaching and research in both academia and industry. Chakrabarti leads the Materials Education Resources team at the Ansys UK, located in Cambridge and provides worldwide leadership as the president of International Association for Continuing Engineering Education (IACEE). She is the current first vice president of International Federation of Engineering Education Societies (IFEES), and a director of the College-Industry Partnership Division Board of American Association for Engineering Education. Earlier she has worked as the assistant dean of Summer Term at the University of Wisconsin-Madison, director of Continuing Studies at the University of Delaware, and the director of Center for Engineering and Interdisciplinary Professional Education at the University of Kansas. She is known for developing professional engineering education programs for all major aircraft manufacturers in the world and for international partnerships in continuing engineering education. At the University of Kansas, Chakrabarti was personally responsible for building collaboration with aircraft companies in Turkey, Brazil, India, China, South Africa, South Korea, and Mexico among other countries. Earlier she was the president and chief executive officer of BioComp Systems, Inc., a University of Kansas spin-off, that developed a near commercial quality true 3-D display system for biomedical imaging using two National Science Foundation Small Business Innovation Research Phase I and Phase II grants with Chakrabarti as the principal investigator. She has taught chemical engineering and was an associate research engineer in the Department of Chemical and Petroleum Engineering at the University of Kansas. She has a doctorate in biochemical engineering and biotechnology from Indian Institute of Technology, Delhi.

As the president of IACEE since 2016, Chakrabarti is engaged in promoting global sustainability initiatives and strategic partnerships for continuing engineering education. Chakrabarti has been associated with IACEE since 2008 and became a Council member in 2012. She was the first vice president and vice-president for member engagement and communication for the 2014-2016 term. At IACEE, Chakrabarti has also taught for the IACEE Quality Program for Continuing Education-based leadership and management workshops in China. Under her leadership, IACEE has formed a Global Sustainability Initiative, named Sustainability Education and Research in Action (SERINA, serina.iacee.org) which is a growing database of higher education institutions' initiatives in teaching sustainability in engineering education and a database of research performed worldwide on sustainability at higher education institutions. Her collaborative leadership helped gather a group of continuing engineering administrators and educators together for authoring a chapter on lifelong learning in engineering for the prestigious Global Engineering Report, *Engineering for Sustainable Development: Delivering on the Sustainable Development Goals*, published by United Nations Educational, Cultural and Scientific Organization (UNESCO).

Chakrabarti has also worked with the American Society for Engineering Education (ASEE) as a director of Continuing Professional Development Division for the and as the Senate Network Chair, provided executive board leadership at the University Professional and Continuing Education Association (UPCEA) in North America.

As an IFEES Executive Board member, Chakrabarti has contributed to the coordinating committee for the Rising to the Top, facilitated numerous webinars in collaboration with United Nations Institute for Training and Research (UNITAR) and from IFEES, was in the World Engineering Education Forum South Africa planning committee, is in the WEEF Madrid committee, chaired 2020 Board election committee, is a member of the Duncan Fraser award committee, in the Advisory Board for the 2021 Global Engineering Deans Council Industry Forum, representing Ansys and developing Industry-Academia collaborations.

► RATIONALE FOR CANDIDACY

Dr. Soma Chakrabarti is passionate about engineering education, and especially about a lifetime of education that spans from undergraduate level until retirement of an engineering professional. In the era of Industry 4.0 and in the post Covid world, where digitization, robotics and artificial intelligence compel engineers to rethink the future of their work, Chakrabarti emphasizes on continuous reskilling and upskilling of engineers during their entire career for a lifetime of

2021 IFEEES Elections

Candidate for Executive Committee

Soma Chakrabarti

IACEE // International Association for Continuing Engineering Education

United Kingdom



► RATIONALE (CONTINUED)

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education. Her research and continuous quest are on the future of learning, especially related to engineering education, and combines the geopolitical, societal, and socio-economic aspects with technological advances and resultant learning styles in a system of new learning curricula suitable for future engineers. IFEEES is an organization that brings the worldwide expertise in engineering education together, and Chakrabarti believes that it is a perfect opportunity for developing a global conversation on the changing landscape of engineering education for today and tomorrow. She will bring her expertise and experience in this collaborative effort and create the appropriate framework with fellow members.

Having raised in a developing country where studying engineering for a woman was not easy in the 80's. Therefore, as a woman engineer, Chakrabarti also aims to focus on engineering education efforts in developing countries. Chakrabarti's second term as an IFEEES Executive Board member will continue to focus on developing next generation women engineering leaders and developing a framework for continuous collaboration among member societies, industry, and academia in accomplishing the United Nation's 17 Sustainable Development Goals. Since November 2019, Chakrabarti, as the First Vice President of IFEEES, has shown her continuous and consistent efforts and success in the projects that involved such work, and she aims to continue that.

2021 IFEES Elections

Candidate for Executive Committee

Mario Chauca

IIITEC // International Institute of Innovation and Technology
Peru



► BIOGRAPHY

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Mario Chauca is the first Peruvian to receive the “Global Engineering Education Award 2021” by International Society, the first Peruvian Vice-President and Member of the Executive Committee of the International Federation of Engineering Education Societies IFEES 2019-2021. Mario Chauca was a member of the Executive Committee and Director of the Association Overseas Technical Scholarship AOTS-Kenshu Kiokay (Peru) for two consecutive periods 4 years, a member of the technical committees since 2010, invited by the University of Washington IEEE, in 2010 joined the Steering Committee Member (first Peruvian) of the IEEE International Midwest Symposium on Circuits and Systems-MWSCAS, IEEE’s oldest in the world, has participated in committees in the European Union, Asia, America and Africa in countries as Argentina, Brazil, Canada, Cuba, China, India, Japan, Korea, Malaysia, United States, Mexico And Peru. Currently, he is on committees for the ICEMT2020 Japan, SEE2020 Japan, ICCCV 2020 China, ICCEE 2020 China, LACCEI 2020 Argentina, ICMES2020 Italy, AECCC2020 Germany, ICACR2019 Czech Republic, LACCEI2019 Jamaica ICIMA2019 Japan, SEE2019 Thailand, ICCCV2019 South Korea, DSDE2019 South Korea, Australia ICISDM, ICCEE Netherlands, ICMME2019 Japan, ICMES2019 Czech Republic, ICACS2019), ICCEE2021 China, ICMES2021 China, ICIMH2021 China, ICACIT2021, ICIMA2021 China, ICCCV2021 China, ICECC2021 Korea, ICEPS2021 Japan, ICEMT2021 Japan, ICACS2021 China, ICETC2021 China, among others. All event proceedings are indexed in Scopus and Journals.

Chauca was an observer member of IFEES and participant as speaker at WEEF 2018 in Albuquerque (USA), a round table during WEEF 2017 in Kuala Lumpur (Malaysia). He obtained a scholarship from the Japanese Association Overseas Technical Scholarship (AOTS) for studies and training in Technology Management at the Tokyo Kenshu Center in Japan, from the National IT Industry Promotion Agency NIPA and Ministry of Science, ICT and Planning of the Future of Korea in the city of Seoul with certification signed by the minister of the Korean sector. He is a Consultant in Information and Communication Technologies in the government sector of Peru and in the United Nations Project-Inter-American Development Bank-Congress of the Republic of Peru and the Ministry of the Interior of Peru and in the private sector. He is a Peruvian researcher registered by the Peruvian government, advisor: From the first award-winning work CONEIMERA2018. From the IEEE chapters at the National University of Callao. Of the First General Project Prize for more than 5000 projects in the Romero Group contest. First projects in the INTERCON, CONEIMERA congress and was nominated for the Graña y Montero Prize for Research in Peruvian Engineering. Nominated Peruvian Research Southern Prize 2019 and nominated research award 2018 MEXICO. Dr. Chauca has participated as a speaker motivating students, participates in the organization of academic research events with the publication of articles, obtained recognition from PROMPERU for contributing to the development of research meetings in Peru encouraging the visit of prestigious academics, teachers, students from abroad, those who shared their knowledge and experiences. He has published more than 50 papers in Peru and internationally, served as author and advisor of articles published in IEEEExplore, Scopus and other database, organizer of international academic events and editor of proceedings, and advisor to the IEEE chapters at the National University of Callao and the Ricardo Palma University. He teaches at the postgraduate and undergraduate level, with 30 years of experience. He graduated as an Electronic Engineer from Ricardo Palma University in Lima Peru, obtained his Master’s Degree in Business Administration with a mention in “Business Management” and his Doctorate in Education from San Luis Gonzaga National University.

► RATIONALE FOR CANDIDACY

It is an honor will be candidate for the Executive Committee of IFEES. My 30-year professional experience as an electronic engineer professor in Peru, as a scholarship student in Japan and Korea, and as a researcher with active participation in international committees in the European Union, countries of America and Asia has allowed me to know the backgrounds of engineering professionals and students from developed and underdeveloped countries, as a member of the IFEES Executive Committee will lead me to focus my efforts on achieving social inclusion, gender equality, optimizing engineering education with new teaching methodologies. My commitment to IFEES will consist of leading the effort to connect the engineering education societies of the world and take advantage of the collective strengths of our members to improve engineering education throughout the world. From the bottom of my heart, thank you.

2021 IFEES Elections

Candidate for Executive Committee

Hanno Hortsch

IGIP // International Society for Engineering Pedagogy
Germany



► BIOGRAPHY

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Expert with over 35 years of scientific and practical experience in technical higher professional education in companies and scientific institutions. Proven expertise in engineering pedagogy and technical teacher training and education. Focus on organizational and personnel capacity building as well as methodical implementation of competencies and qualifications in modern production and service structures.

Already at the presentation of the DUNCAN FRASER Award in Kuala Lumpur in 2017, I realized that an umbrella organization for the consolidation of the many activities in the field of engineering education and engineering education is very important for the quality development of engineering education.

I would like to bring my experience in the field of engineering education, in particular the training of engineering educators, to the IFEES Executive Committee as the key to high quality engineering education. I can imagine that my curricular experience as well as the connections to the economy and the demands on engineers in modern production and service structures can give impulses.

[Click here for CV.](#)

► RATIONALE FOR CANDIDACY

After many activities in the field of engineering education and engineering pedagogy, especially in the further training of engineering educators, I would like to contribute my IFEES experience as part of my work on the Executive Committee.

For years I have been working in many international projects, especially in Asia and Latin America, on quality assurance and quality development of engineer training. The reference here is particularly to the consequences of the change in the character of work in companies for engineering education itself and especially for the competencies of training staff at universities (engineering educators).

With its visions and goals, IFEES is in many respects identical to my intentions and activities. That is why I think that my experience and certainly my activities can contribute to the achievement of IFEES 'goals. I would like to apply as a candidate for the election of a member of the IFEES EC. It would be a great honor for me to be able to actively participate in the IFEES EC.

2021 IFEES Elections

Candidate for Executive Committee

Dora Smith

Siemens // Siemens Digital Industries Software
United States of America



► BIOGRAPHY

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Dora Smith directs the global academic program for Siemens. Under her leadership, the global academic program is a strategic initiative for the company. The program empowers the next generation of digital talent through industrial strength software and curriculum, project-based learning, and STEM competitions to support more than 1.5 million students and more than 4,000 institutions worldwide. Dora serves in academic-industry advisory roles as chair-elect on the American Society for Engineering Education's Corporate Member Council and as director and vice president for Diversity and Inclusion on the International Federation of Engineering Education Societies executive committee. Dora earned her bachelor's degree in journalism from University of Missouri-Columbia and a master's in business administration from Washington University. She is an accredited business communicator with more than 25 years of experience in the engineering and manufacturing industry with leadership roles across disciplines.

► RATIONALE FOR CANDIDACY

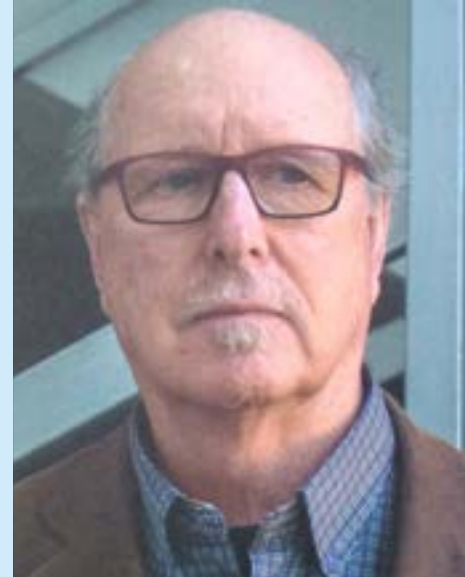
I have been proud to serve on the IFEES Executive Committee the past two years. In that time, I've seen the impact IFEES has in improving engineering education worldwide. I'd like to continue the work we've started in closing the skills gap through stronger industry-academic engagement and collaboration.

2021 IFEEES Elections

Candidate for IFEEES Executive Committee

Bill Williams

SPEE // Portuguese Society for Engineering Education
Portugal



► BIOGRAPHY

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Bill Williams originally trained as a chemist at University College Cork, Ireland and went on to work in education in Ireland, UK, Eritrea, Kenya, Mozambique and Portugal and to run international distance courses for the International Labour Organization in various African countries.

He is a member of the Centre for Management Studies (CEG-IST) of Instituto Superior Técnico, Universidade de Lisboa, Professor Jubilado of Instituto Politécnico de Setúbal, Portugal and Adjunct Senior Research Fellow at the Technological University Dublin (TU Dublin), Ireland.

His research interests include engineering practice, gender and diversity and active learning. He is editor of the volume *Engineering Practice in a Global Context, Understanding the Technical and the Social* published by Taylor and Francis in 2013 and associate editor of the *Journal of Engineering Education* and of the *European Journal of Engineering Education* and has served as guest associate editor for two special issues of *IEEE Transactions on Education*.

He serves as a member of the Board of the two SEFI Special Interest Groups: Engineering Education Research and Gender and Diversity, is a member of the Review Committee of the Taxonomy of Engineering Education Research curated by the University of Michigan and is a founder member and current International Officer of the Portuguese Society for Engineering Education (SPEE).

► RATIONALE FOR CANDIDACY

I agreed to be nominated to serve on the IFEEES Executive Committee for two reasons:

As current international officer of SPEE and former chair of REEN, I have been very impressed by the evolution of IFEEES contributions to engineering education in recent years. I feel that I can contribute to this work due my background in education in a variety of international contexts and from my experience in engineering education research.

I believe that as a representative of SPEE I can bring a voice that represents the perspective of engineering educators in Portugal and in the other Lusophone organisations with whom we have links. In addition, I can contribute a European perspective from my active participation in the SEFI Special Interest Groups on Gender and Diversity and on Engineering Education Research.

2021 IFEES Elections

Candidate for Executive Committee

You Zheng

CSEE // Chinese Society of Engineering Education
China



► BIOGRAPHY

Professor You Zheng was born in Dec. of 1963. He received his B.S. degree, M.S degree, Ph.D. degree from Department of Mechanical Engineering, Huazhong University of Science and Technology in 1985, 1987, 1990, respectively. In 1990.11-1992.11, he worked as a post-doctorate research fellow in Department of Precision Instrument and Mechanology, Tsinghua University. In 1992.12-1994.11, he became an associate professor in Tsinghua University. Since Dec. of 1994, he is a full professor in Tsinghua University. In 1998.10-2000.3, He was a visiting Professor in University of Surrey, UK. He was awarded as Chinese Ph.D. Degree holder who has made outstanding Achievements by Commission of Education in 1992, awarded as Distinguished Professor of Cheung Kong Scholars Program by Ministry of Education in 1999, and awarded as China Excellent Post-doctorate by Ministry of Human Resource and Social Security in 2005. He is elected as Academician of Chinese Academy of Engineering in 2013.

Prof. You focus his research in Micro-system based on MEMS (Micro Electrical-Mechanical System), Micro-Nano Satellite Technology and Micro-Nano Technology on Measurement and Instrument. He won 2 Second Prizes of National Technology Invention in 2011 and 2012. He won 2 Second Prizes of National Science & Technology Progress in 2004 and 2007. He won other 7 Prizes form Beijing Municipal Government, Ministry of Education and other ministries. Prof. You presented more than 400 papers which are indexed by SCI or EI, and published 2 original works and 2 translation works. He has owned Chinese Invention patents over 90. Since July of 2005, Prof. You served as Chairman of the Department of Precision Instrument and Mechanology (renamed as Department of Precision Instrument in 2013), Tsinghua University. Since Dec. of 2007, He served as Dean of school of Mechanical Engineering. He was appointed as President assistant in Nov. of 2014 and Vice president of Tsinghua University in Sept. of 2015. Now Prof. You is Director of Micro-Nano Technology Research Center (Tsinghua University), Director of State Key Laboratory of Precision Measurement Technology and Instruments (Tsinghua University), Chairman of Chinese Society of Micro-Nano Technology (CSMNT), Vice-President of National Institute Nano-Technology and Engineering, Member of Expert Group of Chinese High Technology Project (863), Vice-Chairman of China Instrument & control Society, Vice-Chairman of China Measurement & Metrology Society and Vice-Chairman of Chinese Society of photoelectric Engineering.

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► RATIONALE FOR CANDIDACY

Throughout the past 30 years, I have been engaged in teaching, research and management at Tsinghua University. My academic career and management experiences tell me that to address inherent societal problems, professional knowledge and skills are important but insufficient. The continuing efforts from all stakeholders are indispensable. More than ever, our community needs to work together to promote cross-disciplinary, cross-sectoral, and cross-boundary cooperation in engineering education and technology.

Engineering education must be oriented towards the future. Engineering science and technological innovation play a fundamental role in supporting economic and social development and enhancing the well-being of mankind. With the advent of emerging scientific and technological disruption, and industrial transformation, modern engineering and education are also undergoing unprecedented profound changes. Nowadays, the scope of engineering is expanding rapidly. Engineering does not only refer to those activities that create artificial systems, but also refer to those activities that link or integrate artificial, natural, social and living systems. Therefore, we need to prepare students to better understand and confront the increasing complexity in engineering that will then allow them to better address universal challenges.

The quality and accessibility of engineering education are persistent major challenges. Furthermore, an emerging trend is the lack of quality in engineering education in Asia and China. Here, there is a need to learn world's best practices, and also share its unique regional experiences with the world. The International Federation of Engineering Education Societies (IFEES) is clearly one of the most active organizations in this global network, and has an instrumental role in promoting international cooperation in engineering education. I hope to work with you to share practices and experiences from Asia and China's perspectives, enhance the IFEES' influences in local universities and industries, and promote further exchange in engineering education amongst developing countries. I hope to make a significant contribution to the realization of IFEES' vision and mission to build a cooperative, inclusive and win-win community in engineering education around the globe.