



Workshop Women in Engineering – Thursday 22 April, 9:00-11:00

The road towards a more diverse post-covid era: challenges and opportunities

The workshop is organised in the format of a panel session and aims to discuss and promote diversity and inclusion in the research community in the post-covid era. The speakers will talk about the challenges and opportunities regarding diversity in research with particular focus on the effects of COVID-19 on the policies to promote diversity in industry and academia.

The workshop discussion will be driven by the following questions:

- How will COVID-19 impact the future career and diversity?
- Which are the policies to guarantee diversity in the industry and research community and how will they change after COVID-19?
- Did COVID-19 affect only negatively or did it also bring opportunities to women in research?
- Are new roads and different perspectives envisioned/opened/included?

This event is open and free of charge for everybody. Interested attendees not registered to the conference must register <u>here</u> ("Workshop 2 – Women in Engineering (Wie) event" option).

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Workshop chair: Michela Svaluto Moreolo, Centre Tecnològic de Telecomunicacions de Catalunya (CTTC), Spain

SESSION PROGRAM

1. Introduction by Workshop Chair Michela Svaluto Moreolo, Ligia Moreira Zorello, and WIE Chair Dajana Cassioli



Michela Svaluto Moreolo (CTTC) received the M.Sc. degree in Electronics Engineering and the Ph.D. degree in Telecommunications Engineering from University Roma Tre, Rome, Italy, in 2003 and 2007, respectively. She currently is a Senior Researcher and the Coordinator of the Optical Transmission and Subsystems research line within the Optical Networks and Systems Department, at the Centre Tecnològic de Telecomunicacions de Catalunya (CTTC), Spain. She also serves as member of the CTTC Management Team, with the role of Director of Quality Programs. Her research interest areas include advanced programmable/software-defined multi-dimensional transmission systems and photonic technologies for future optical networks. She has been actively involved in several National and EU-funded R&D projects and industrial contracts. She has authored and co-authored more than 180 journal and international conference papers and two

book chapters. She has organized different scientific events and serves as TPC member of various conferences in the field of optical communications and photonics (such as OFC, ECOC, Photonics West and OSA APC). Dr. Svaluto Moreolo is IEEE Senior Member and OSA Member.



Ligia Moreira Zorello (Politecnico di Milano) is currently a Ph.D. student in Information Engineering – Telecommunications section (Networking research area) in the Department of Electronics, Information and Bioengineering at Politecnico di Milano. She received a M.Sc. degree in Computer Engineering from Universidade de São Paulo, Brazil, in 2018 and a M.Sc. in Telecommunications Engineering from Télécom Paris, France, in 2016. Her research interests involve optimization and resource allocation in optical networks, more specifically Centralized Radio Access Networks, with application of machine learning techniques, SDN, NFV and energy efficiency.



Dajana Cassioli (University of l'Aquila) is Associate Professor of Telecommun. Engin. at the University of L'Aquila, Italy. Her main research interests are in wireless communications, 5G/B5G and Cybersecurity. She is the Chair of the IEEE WIE AG Italy Section, and Past Chair of the IEEE VT06/COM19 Italy Chapter. She is the Coordinator of the University of L'Aquila Node of the CINI National Lab of Cybersecurity, where she leads the CyberEquality working group to boost inclusivity in cybersecurity. She has been awarded the ERC StG VISION (Video-oriented UWB-based Intelligent Ubiquitous Sensing) - 2010 and the ERC PoC Grant iCARE (MobIle health-Care system for monitoring toxicity and symptoms in cAncer patients Receiving diseasE-oriented therapy) - 2016. She served as PIMRC2018 Industry Co-Chair, RTSI WIE Chair in 2018, 2019 and 2020, MELECON2020 and MetroInd4.0, and TPC member of several International Conferences

(ICC, PIMRC, VTC, GLOBECOM, etc). She is Associate Editor of IET Electron. Lett. and IEEE Communicat. Lett., and Executive Editor of Wiley Internet Technol. Lett. and Transact. on Emerging Telecommun. Technol.

2. An OFC for the History Books: the final weeks leading up to OFC 2020 – Jun Shan Wey, ZTE TX, USA.

When we convened on March 4th, 2019, the OFC 2020 Technical Program Committee promised to make our OFC one of the most memorable events ever. Little did we know, our wish would come true, although not as we had imagined. We spent 18 months planning the OFC 2020 program. Then, in the final two weeks leading up to the event, we had to re-plan it all. Ultimately, we successfully hosted the first hybrid in-person and online conference in our industry. In this talk, I will share my experience as the OFC 2020 network-track program chair and as a female member of the program committee.



Jun Shan Wey (ZTE TX, USA) After receiving a Ph.D. from the University of Maryland, College Park, Shan has devoted her career to optical communications R&D, and in particular PON standardization. She is currently a Sr. Director of Fixed Networks Technology Strategy and Standards at ZTE TX Inc., USA. Her prior affiliations include startups Terabeam and Myrio, Fortune 500 and multinational corporations Siemens, Nokia Siemens Networks, and Coriant, and her own consulting firm, LightNotes. Shan has been volunteering in the OFC conference technical program committee since 2015. She is currently serving as a 2022 General Chair, a member of the Steering Committee and the John Tyndall Award Selection Committee.

3. Exploring opportunities for change in research and education - Fatima Gunning, Tyndall National Institute & University College Cork, Ireland

2020 is a year where an unprecedented humanitarian challenge in modern times was experienced by all of us. The challenge on dealing with the scare, fears and real threat of a pandemic, has significant consequences, which are unequal and have a greater impact depending on your status, such as employment, gender, age, race, etc, but women in particular. However, we can also observe and learn on how the pandemic fast forwarded change that was ripe to happen. In higher education, for example, this challenge was transformed into opportunities, such as changing old-fashioned paper-based processes, re-thinking teaching and learning initiatives (even for those who were reluctant to change), managing research and automation of experiments, and closer connectivity between people. In this talk I will revisit some of the challenges I faced during the pandemic, but how some of these challenges turned into opportunities for change. I will highlight some issues related to diversity and inclusion, and explore how organisations may adapt their policies and best practices to ensure a true work-life balance and inclusive environment post-pandemic era.



Fatima Gunning (Tyndall National Institute & University College Cork) is a Head of Graduate Studies at Tyndall National Institute, and Fellow of the Department of Physics and the School of Engineering at University College Cork, Ireland. She is a Principal Investigator for the Science Foundation Ireland Centre IPIC, and her research focus on flexible high capacity transmission devices and systems, software defined networks and also on sensing. She has over 200 publications in journals and conferences, 4 patent families and is involved in a number of outreach and public engagement activities. She's a Senior Member for IEEE and OSA, and VP of Membership for IEEE Photonics Society.

4. StrongHer, the Nokia women community for facing difficulties together and paving the way to new opportunities – Annalisa Morea, Nokia, Italy

COVID-19 has brought, no doubt, a lot of challenges. People were suddenly forced to work at home, not with the conventional home-working but with a more constrained way. At home, often in a small space with all the family. Too many people walking around, kids at Home-schooling and asking for attention. In the first period nobody was there to help since we were in a hard lockdown and all the Nokia organization was not prepared to this new situation. Thankfully, Nokia reacted in a short time and understood the urgency of the new situation, the diverse difficulties that every employee could face. Nokia organized several meetings with medical doctors, psychologists for helping people understand the issues associated with Covid-19 and how to facilitate the effort required by the homeworking and the different extra tasks required by the new restrictions associated with the various nuances of the lockdown. The lockdown period has been lasting more than expected and Nokia has been organizing mindfulness sessions for helping people manage the various difficulties. All these initiatives were organized for all the employees, but in many cases most difficulties impacted on women, as children in early age depend more on their mothers. In Nokia there is an employee community for women called Strongher, aiming to virtually collaborate, learn & grow together globally across Nokia. Never like in this period, this special network helped women in Nokia face these new difficulties, help them in time scheduling, but also guide women in their personal development. Many women reported about the support Strongher gave them and explained how they were able to also develop new skills in 2020 and took new roles in 2021, thanks to great mentors and coaches. This community is supported by Nokia because Nokia believes in the added value provided by every kind of diversity: gender is one of those.



Annalisa Morea (Nokia, Italy) graduated both in Italy at Politecnico di Torino and also in France at the ENST in Paris. She got a double diploma in Telecommunication Engineering within the framework of a collaboration between these two universities through Erasmus-Socrates project. After she did a PhD at the France Telecom (today Orange France) premises and with the ENST-Paris in Computer Science and Networks on the TechnoEconomic Interests of translucent optical networks. Terminated the PhD, she joined Bell Labs in Paris where she stayed for 8 years and had the opportunity to work on WDM optical networks, by proposing routing algorithms and resource allocation strategies for optical networks having resiliency specifications compliant with Alcatel-Lucent, now Nokia, 1830PSS products. She participated in several national and European projects and contributed in publishing many conference and journal technical articles.

Since 2015 she joined the ION teams in Italy where she is working on the optical multilayer tools, both on the physical infrastructure design and on the routing aspects.

5. Is the Digital Transformation accelerating or is it just a temporary crutch? - Roberto Saracco, IEEE FDC Chair Industry Advisory Board / co-Chair Digital Reality, Italy

The pandemic has pushed people and business in the cyberspace. Is this a permanent shift? How is technology helping and how could we exploit technology further? This more significant presence of the cyberspace in our lives is changing the workspace and the social landscape. What are the new opportunities that open up and to what extent should we re-invent ourselves to leverage them?



Roberto Saracco fell in love with technology and its implications long time ago. His background is in math and computer science. Until April 2017 he led the EIT Digital Italian Node and then was head of the Industrial Doctoral School of EIT Digital up to September 2018. Previously, up to December 2011 he was the Director of the Telecom Italia Future Centre in Venice, looking at the interplay of technology evolution, economics and society. At the turn of the century he led a World Bank-Infodev project to stimulate entrepreneurship in Latin America. He teaches a Master course on Technology Forecasting and Market impact at the University of Trento and serves as Senior Advisor of the Reply Group. He is a senior member of IEEE where he leads the Industry Advisory Board within the Future Directions Committee and co-chairs the Digital Reality fostering Digital Transformation Initiative. He is a COMSOC Distinguished

Lecturer and in 2021 he is Chair Elect for the New Initiative Committee. He has published over 200 papers in journals and magazines and 30 books/ebooks. He writes a daily blog, https://cmte.ieee.org/futuredirections/category/blog/, with commentary on innovation in various technology and market areas.