### **Session 1: Digitalization of Today and for Tomorrow**



Mads Nygård, Dean of Engineering Education Norwegian University of Science and Technology (NTNU), Norway Moderator

Mads Nygård is since 1997 a Full Professor in IDI (Department of Computer Science) at NTNU (Norwegian University of Science and Technology), from which he was also awarded his Doctorate degree in 1990. From 2017 and also in the period 2009-2013 he is and was Dean of Engineering Education for all NTNU, while in the period 2013-2017 he was Head of External Relations and Cooperation at IDI/NTNU. In the period 1983-1997, he was employed in SINTEF (Foundation for Scientific and Industrial Research at the Norwegian Institute of Technology) in different ICT departments as Scientist, Principle Research Scientist, Section Head and Research Manager. From 2014, he is Chairman of the Executive Council for Information and Communication Technology at Universities & Colleges in Norway (under the Norwegian Association of Higher Education Institutions). In the period 2010-2014, he was Vice President and Member of the Board of Directors of CESAER (Conference of European Schools for Advanced Engineering Education and Research), and he still is CESAER's Task Force Chair for its benchmarking activities. In the period 2009-2013, he was Chairman of the Board of Directors at UNIK (University Graduate Centre at Kjeller), in the period 2009-2013, also Chairman of the Executive Board for the National Council of Technology Education in Norway (under the Norwegian Association of Higher Education Institutions), and in the period 2012-2016, Chairman of the Executive Board for the Strategic University Colleges Program in Norway (under the Research Council of Norway). From 2007, he has been and is General Co-Chair for HPCS (the High Performance Computing and Simulation Conferences), in the period 2009-2016, was Technical Program Committee Co-Chair for CTS (the Collaborative Technologies and Systems Conferences), and in 2005, was Organization Committee Chair for VLDB (the Very Large Data Base Conference). In the period 2009-2011, he was Vice President of the Board of Directors, and in the period 2011-2013 Chairman of the Board of Representatives of TEKNA (Norwegian Society of Chartered Technical and Scientific Professionals).



#### Henrik Pedersen, Dean Aalborg University (AAU), Denmark

Henrik Pedersen (HP) is Professor of Mathematics since 1997, The Dean of Science and Engineering 2001-06, and Dean of Science 2006-15 at The University of Southern Denmark. From 2015 to 2017 he was Chairman of The Danish National Data Management Forum, Member of a number of Boards on Research Data and Research Publications working with the Ministry of Culture and the Ministry of Higher Education and Science, Representing Denmark in EUDAT, Research Data Alliance and Knowledge Exchange. Since 2017 he has been Dean of the Technical Faculty of IT and Design, Aalborg University. HP earned his M.Sc. in Mathematics and Physics from the University of Copenhagen, 1980, and a D.Phil. in Mathematics from University of Oxford, England, 1985, funded by The Royal Society, London. HP has been member and Chairman of numerous boards of public and private companies, and Chairman for Science Ventures Denmark Ltd, spinning out companies based on IPR; He has established collaboration with foreign institutions

#### Rapporteur



# Gernot Spiegelberg, Vice President Siemens, Germany

including The Chinese Academy of Sciences.

Since May 2008, Gernot Spiegelberg (born 1959) has headed as Vice President Siemens AG's Lighthouse Project eCar in the company's central research. Previously, in his role as Executive Vice President and CTO, Spiegelberg bore global responsibility for group Strategy / Technology at Siemens VDO Automotive AG. Spiegelberg holds a doctorate in engineering and an honary professorship and teaching position at the Technical University of Budapest. He has held a variety of management positions in industry, including 18 years at Daimler-Chrysler where he was responsible for global advance development in mechatronics. Gernot Spiegelberg is selected as a Rudolf-Diesel-Industry Senior Fellow at the Technical University of Munich since July 2010. In this capacity, he will examine electromobility issues together with TUM researchers. In Siemens his focus today are smart services in IoT with smart autonomous agents and Industrial Data Space IDS. Parallel he is busy at the University of Skt. Gallen for "disruptive business models" and shares several BoM gremia in automotive and automation domain.



#### Olav Bolland, Dean Norwegian University of Science and Technology (NTNU), Norway

YouTube

Olav Bolland is Professor of Thermal Power Engineering at the Norwegian University of Science and Technology (NTNU). He is Dean of the Faculty of Engineering since 2017. Bolland obtained a PhD in Thermal Engineering in 1990, and has since then worked at NTNU. Since 1989, Bolland has worked with CO<sub>2</sub> capture, and is widely published (H-index 31 in Scopus) in the areas of various power cycle analyses, integration of CO<sub>2</sub> capture in power cycles, and dynamic performance. Olav Bolland was one of the lead authors for the 2005 IPCC Special Report on Carbon Dioxide Capture and Storage. In 2007 Bolland was among the IPCC scientists researching climate change issues to receive the Nobel Peace Prize. Bolland organized the 2006 GHGT-8 conference in Trondheim Norway with almost 1000 participants. Since 2005, he has been a Member of the Advisory Board for the international research project CCP (Carbon Capture Project) and in the period 2006-2013 he has been Associate Editor for the Journal of Greenhouse Gas Control.



#### Martin Mose Bentzen, Associate Professor Danish Technical University (DTU), Denmark

YouTube

Martin Mose Bentzen is an associate professor at the Technical University of Denmark where he teaches philosophy of science and ethics in engineering. He has a background in philosophy and wrote his PhD dissertation about deontic logic. Bentzen currently researches philosophical aspects of social robotics, in particular the possibility of devising logical systems for ethical robots . In 2016, he formalized the principle of double effect and applied it to ethical dilemmas of rescue robots. Bentzen and Felix Lindner, Freiburg U. Started the HERA (Hybrid Ethical Reasoning Agents) project in 2016. The goal of the HERA project is to provide novel, theoretically well-founded and practically usable machine ethics tools for implementation in physical and virtual moral agents such as (social) robots and software bots.



#### Karen Sæbbø Osmundsen, PhD student Norwegian School of Economics (NHH), Norway

YouTube

Karen holds a MSc from the Norwegian School of Economics (NHH) and a BSc from Bergen University College (HiB). Working in consulting has given her experience from several industries, including Oil & Gas, Higher Education, Media and Health Care. As a consultant

	she assisted clients in different areas of expertise, including Business Process Management, Continuous Improvement, Strategy, Organisational Restructuring, Post Merger Integration, Profitability Analysis, etc.	
At At	Arlindo Oliveira, President of School of Engineering University of Lisbon, Portugal  Arlindo Oliveira was born in Angola and has lived in Mozambique, Portugal, Switzerland and California. He obtained his MSc degree from Instituto Superior Técnico (IST) and his PhD degree from the University of California at Berkeley, in Electrical Engineering and Computer Science. He is a professor at the computer science and engineering department of IST and a researcher at INESC-ID. He is the author of two books, one on computer architecture (in co-authorship) and another on the future evolution of digital technologies, translated in a number of different languages.	Keynote
VDI Pein Deu	Jonas Gallenkämper, Secretary of Advisory Council Association of German Engineers (VDI), Germany  Dr. Jonas Gallenkämper has been secretary of the Advisory Board for Engineering Education at the Association of German Engineers (VDI) since May 2017. There, he advocates a modernization of the study courses, a higher flexibility and up-to-date digitalization in the curriculum. During his doctorate in mathematics, he was project manager of the cooperation project "Good Start in Engineering Study" of the University of Applied Sciences Aachen and RWTH Aachen University. Mr. Gallenkämper also taught and researched at the RWTH Aachen University and the German University of Technology in Oman.	Keynote
	Xavier Fouger, Senior Director Dassault Systèmes, France  An Industrial Engineer, former Science Attaché in Vienna, Xavier Fouger joined Dassault Systemes in 1990. He developed new innovation processes for various automotive manufacturers in Germany and Korea. He created the corporate organization in charge of global academia. He designed cutting edge learning initiatives for secondary and vocational education in the USA, Malaysia, Canada and France where he introduced a STEM program for 11,500 middle/high school students. He initiated PLM (Product Lifecycle Management) competency centres in India, China, Brazil, Mexico, Colombia, South Africa, Kenya, Ivory Coast, Vietnam and	Panel

Argentina. He manages Dassault Systemes' Learning Lab that conducts collaborative educational research with various universities, funded by US and European agencies on the use of digital technologies in education and the development of lifelong learning of emerging engineering practices. Research areas of the Learning Lab are on virtual labs, collaborative engineering, 3D in MOOCs, Problem Based Learning and textbook virtualization. Current research field in teaching emerging engineering practices all relate to the fourth industrial revolution: social innovation, precision agriculture, the Internet of Things, Additive Manufacturing, Smart farm/factory/building and Systems Engineering. A founding member of IFEES (International Federation of Engineering Education Societies) and GEDC (Global Engineering Deans Council), steering committee member of SEFI (European Society of Engineering Education), he provides lectures and seminars on innovation management in various engineering and business schools. He was awarded the 2016 Peter the First medal of the Association for Engineering Education of Russia for significant contribution to the development of engineering and engineering education.



#### Jan Gulliksen, Vice President Royal Institute of Technology (KTH), Sweden

Jan Gulliksen is the Vice President for Digitalization and Professor in Human Computer Interaction at KTH Royal Institute of Technology in Stockholm, Sweden. Jan was the Dean of the School of Computer Science and Communication (CSC) at KTH 2011-2017. Before this Jan was a Professor in Human Computer Interaction at Uppsala university, where he did a Master in Engineering Physics and a PhD in Systems Analysis. He is still a Guest Professor at Uppsala university and have been a Visiting Professor at INSEAD. In 2017 Jan was awarded Scientist in Residence by the university of Duisburg-Essen. Between 2012 and 2016 Jan was the chairman of the Swedish Committee for Digitalization belonging to the Ministry of the Enterprise. Currently he is a member of the Swedish Digitalization Council working to realise the Swedish Digital Strategy. Jan is also the Digital Champion of Sweden for the European Commission. Jan chairs the Nordic collaboration in Human Computer Interaction, NordiCHI, since its start in 2000, being in charge of the NordiCHI conference series. He also chaired the International federation of Information Processing, IFIP TC 13 on Human Computer Interaction, 2010-2016, who is in charge of the INTERACT conference series. For IFIP he is now the vice chair and INTERACT steering committee chair. He is

**Panel** 

### ECED-ULD 2018 at NTNU in Trondheim, Norway

digital work environments for everybody. His latest textbook on Digitalization and the Work environment has just been released.
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### **Session 2: Digitalization in Learning and Researching**



### Martin Vigild, Senior Vice President Danish Technical University, DTU

Moderator

Professor Martin Vigild leads undergraduate education at DTU with more than 6000 students in 30 programmes covering all lines of engineering. He is interested in ongoing reforms of engineering education in order to constantly serve the needs of society and industry, and to give engineering students the best possible start to their professional careers in industry or academia. At DTU he carries a special responsibility for the study environment, and how it is expressed in aesthetic, mental and physical dimensions. Martin holds a Ph.D. degree in Polymer Physics from the University of Copenhagen, Denmark, and a M.Sc. degree in Engineering from DTU, the Technical University of Denmark. He started his academic career as a post doctoral researcher at the University of Minnesota, USA. He has founded the Consortium in Polymers for Industrial Research at DTU and is a founding member of ESS-S, the European Spallation Source -Scandinavia. He has served as a member of the International Council for the CDIO Initiative and is now the President of SEFI (European Society for Engineering Education). He carries the Knight's Class Cross of the Order of Dannebrog. Martin's research has spiralled around structural-property relationship of polymeric systems and he has applied techniques ranging from anionic living polymerisation, transmission and scanning electron microscopy to neutron and x-ray scattering and reflectivity. His h-index is 17. He has developed new courses and new learning material at both undergraduate and graduate level engineering education. He has authored over 40 scientific peer-reviewed journal articles, two theses and one text book.



### Gerhard Müller, Vice President Technical University of Munich (TU Munich), Germany

Rapporteur

Professor Müller (b. 1960) conducts research into structural dynamics and vibroacoustics, in particular dynamic soil structure interaction, structural dynamics, sound radiation and sound fields generated by vibrations in buildings and vehicles. For this research he applies hybrid deterministic and statistical approaches. After studying civil engineering at TUM, Professor Müller completed his PhD at the same university (1989). His postdoctoral teaching qualification (habilitation) is in engineering mechanics (1993). Between 1992 and 2004 he worked for a large engineering firm focussing on all

aspects of sound, vibration and air pollution control. For nine years he was managing director of this firm. He has been a professor at TUM since 2004. In 2009/10 he was chairman of the umbrella association of the Faculty Associations for Engineering and Computer Science (4ING e.V.). Professor Müller is chairman of the Education Committee of the Bavarian Chamber of Engineers (Civil Engineers). He was executive president of the European Association for Structural Dynamics (EASD) from 2012 until 2017. Since 2014 he has been Senior Vice President for Academic and Student Affairs. In 2018 Professor Müller assumes the chairmanship of BayWISS and a member of the European Society for Engineering Education (SEFI) Board of Directors.



# Carlos Cocovi Higueras, Continuous Improvement Lead Philips Lighting, USA

YouTube

As Continuous Improvement Lead within the Finished Goods Planning department in Philips Lighting USA, Carlos drives continuous improvement in Service, Inventory and Cost through Six Sigma and Lean. He also provides analytical expertise to projects conducted to minimize Cost and increase Supply Chain efficiency. Previously he was the Senior Supply Chain Analyst for Miele USA, managing a multi-million dollar supply chain. In his role, he analysed complex statistical data for demand forecasting; becoming the most accurate team in Miele worldwide. Carlos also optimized the inventory levels by identifying excess and obsolete stock, reducing storage fees by 36%, and led the operations involved in the launch of new products generations, to achieve inventory targets. Carlos was part of the EU / US International Triple Degree program in Engineering Management, graduating in M.S. Industrial Management Engineering by Technical University of Valencia (UPV), Spain; B.S. Industrial Engineering by New Jersey Institute of Technology, USA and B.S. Management Engineering by University of Parma, Italy. He previously obtained a Bachelor's Degree in Industrial Design Engineering and Product Development by Technical University of Valencia (UPV), Spain.



# Ulrik Juul Christensen, Chief Executive Officer Area9 Lyceum, USA

YouTube

Dr. Christensen is recognized worldwide as an expert in learning technology. He has pioneered adaptive learning, data-driven content development, simulation and debriefing technologies. He is responsible for the strategy of Area9 Group's businesses, that span from purposebuilt platforms for optimization of business processes for large corporations over digital product design to corporate training based on intelligent, adaptive learning. He founded his first company, Sophus Medical, in 1997 while still in medical school. Sophus Medical was acquired by Laerdal Medical in 2002. Dr. Christensen was responsible for Laerdal's global learning technologies initiatives from 2002-2006. Dr. Christensen co-founded Area9 Group in 2006, which has been at the forefront of adaptive and personalized learning with more than 1500 adaptive learning products based on the Area9 technologies and millions of students using the systems every semester. Area9 Education was sold to McGraw-Hill Education in 2014 and Area9 Learning was established to focus on adaptive learning in corporate and organizational environments. Dr. Christensen was part of the McGraw-Hill Higher Education leadership team from 2011 to 2014 and the MHE Executive Leadership Team from February 2014 to 2016, where he stepped down to focus on the rapidly growing Area9 Innovation and Area9 Learning enterprises. His primary focus is Area9 Lyceum which in January 2018 assembled all the group's educational investments and technologies, and set out to create the 4th generation adaptive learning platform and the first generation supporting four dimensional education. He is also the chairman of Altus Care (precision patient compliance software platform), and in 2017, Dr. Christensen was appointed expert-in-residence at the translational accelerator at Brigham and Women's Hospital-Harvard Medical School. Dr. Christensen is on the boards of LEAP Innovation and Mastery Transcript Consortium. He is also on the advisory board for Transcend Education, CharacterLab, Center for Curriculum Redesign at Harvard University and is the cochair of the advisory board in emergency medicine at Brigham and Women's hospital in Boston.



Roger Midtstraum, Vice Dean Norwegian University of Science and Technology (NTNU), Norway

Roger Midtstraum is the Vice Dean for Education at the Faculty of Information Technology and Electrical Engineering and Associate Professor of Computer Science

at the Norwegian University of Science and Technology (NTNU) in Trondheim, Norway. Roger Midtstraum was the Dean of Engineering Education at NTNU 2013-2017. Roger Midtstraum has been the chairman of the Norwegian council of mathematics, natural sciences and technology (UHR-MNT) 2017-2018 and was chairman of the Norwegian council of technological education (NRT) 2013-2017. Roger Midtstraum was member of the NORDTEK board 2013-2017. Roger Midtstraum's main interest are within engineering education, data modelling and database systems.
David Kofoed Wind, PhD Student
Danish Technical University (DTU), Denmark
David is a PhD student in machine learning at The Technical University of Denmark as well as the CEO and



co-founder of Peergrade.

Keynote

YouTube



#### Hans-Ulrich Heiss, Vice President Technical University of Berlin (TU Berlin), Germany

Hans-Ulrich Heiss received his academic degrees (diploma, doctorate, habilitation) all in Informatics from Karlsruhe Institute of Technology, Germany. He had research and teaching positions at IBM Watson Research Center (Yorktown Heights, NY), University of Helsinki, University of Ilmenau and University of Paderborn. Since 2001 he has been full professor of Computer Science at Technische Universität Berlin (TU Berlin). In 2012 he was elected Vice President for Education at TU Berlin, a position he still holds. In his current term, he is also in charge of digitalization and sustainability. From 2009 to 2014 he was Chairman of the German Informatics Deans Conference, and 2015-2016 he was President of the German Council of Faculties in Engineering and Informatics. In this capacity he is also member of "Nationales MINT Forum", a German national initiative for the promotion of STEM education. At the European level, he has been member of the board of Informatics Europe since 2009 and Vice President from 2012 to 2015. He was founding president (2009-2014) of the European Quality Assurance Network for Informatics Education (EQANIE). Since 2017 he has been member of the supervisory board of EIT Digital.



### Lars Kai Hansen, Section Head Danish Technical University (DTU), Denmark

Keynote

Lars Kai Hansen has MSc and PhD degrees in physics from University of Copenhagen. Since 1990 he has been with the Technical University of Denmark, where he currently heads the Section for Cognitive Systems. He has published more than 300 contributions on machine learning, signal processing, and applications in AI and cognitive systems. His research has been generously funded by the Danish Research Councils and private foundations, the European Union, and the US National Institutes of Health. He has made seminal contributions to machine learning including the introduction of ensemble methods('90) and to functional neuroimaging including the first demonstration of brain state decoding based on PET('94) and fMRI('97). More recently his team has published brain state monitoring in the classroom based on electric brain waves ('17). In Hansen was elected "Catedra de Excelencia" at UC3M Madrid, Spain 2011.



#### Alex Tarchini, Director Mathworks, Italy

**Panel** 

Born in Genova in 1962, since 1982 he has worked in ICT, initially developing firmware for numeric control systems, then spending three years at the computing data center "Sergio Borgogno", developing Finance applications for the public administration. From 1985 to 1990 Alessandro Tarchini worked in Stratos – a company providing services to Aerospace and Defense, as a consultant to aerospace companies, representing Italy in international project teams defining and developing processes for the engine management in the civil aviation business. In 1992, after moving to Teoresi, he started to work on software systems for number crunching, modelling and simulation; since 1993 Tarchini has facilitated the adoption of MATLAB in Italy. In 2002, when the Italian operations of MathWorks Inc. were opened, Tarchini was appointed as the managing director of the new company. After managing MathWorks Italian operations for 10 years, Alessandro has now moved to the role of EMEA EDU Business and Market Development.



# Mike Murphy, Director Dublin Institute of Technology (DIT), Ireland

**Panel** 

Mike is currently the Academic Registrar and the Director of Academic Affairs, Digital & Learning Transformation at Dublin Institute of Technology. In this role he is responsible for a number of DIT-wide functions including

Management of academic affairs for DIT, Office of the Registrar, Academic quality assurance, Library services, Learning Teaching & Technology Centre, Information & Communications Technology Services & Staff development. In addition, he is responsible for two strategic initiatives within Dublin Institute of Technology. These are to: 1) Develop a vibrant digital campus, and 2) Enable a transformation in how students learn within DIT. Mike spent 7 years as Dean of the Faculty of Engineering at DIT, and subsequently 5 years as Dean of the College of Engineering & Built Environment at DIT. Mike holds PhD and MEng degrees in electrical engineering from Stevens Institute of Technology in the United States. He holds an Honours Diploma in Electrical Engineering from Dublin Institute of Technology, and BSc (Eng) Honours Degree from Trinity College Dublin. He is a Fellow of Engineers Ireland. He is the President of the European Society for Engineering Education (SEFI) and is a founding member of the European Engineering Deans Council. He sits on the Board of Directors for HEAnet, EduCampus, and the Central Applications Office. Mike commenced his industry career with AT&T Bell Labs in New Jersey, and later with Bell Communications Research before returning to the academy.

### **Session 3: Diversity and Dynamite!**



# Mike Hounslow, Vice President University of Sheffield, England

Mike is a chemical engineer with BE and PhD degrees from the University of Adelaide in South Australia. He is a Chartered Engineer and Fellow of the Institution of Chemical Engineers and a Fellow of the Royal Academy of Engineering. After completing the first of his degrees he worked for ICI Australia for four years in a variety of technical and management roles before taking up a lectureship at Adelaide and commencing his PhD. In 1990 he moved to a lectureship at the University of Cambridge, becoming a Fellow and then Dean of Selwyn College. In 1998 he moved to Sheffield and became Professor of Chemical Engineering, serving as Head of Department from 2000–2008. Mike's research is in the general area of particle technology and he has published extensively on industrial crystallization, granulation (particularly as it applies to the pharmaceutical industry) and on various forms of computer modelling. The engineering of particles lies at the heart of most industrial chemical processes and nearly all pharmaceutical processes, yet is very much less well understood than the processing of fluids. In seeking to address that gap in knowledge, Mike has published well over 100 papers and supervised more than 30 PhD students. Mike is an enthusiastic champion of

engineering as a profession and discipline and believes that the history and achievements of Sheffield – the University and the city – make it an ideal place to show why. When not working he divides his time between

#### Moderator



### Calum MacKichan, Communication Officer CESAER, Belgium

family, food, wine and cycling.

Calum MacKichan is Communication Officer at CESAER, an association uniting 51 universities of science and technology. He was previously Publications Officer at the European Plant Science Organization, an independent academic organization representing 72 institutional members and bringing together more than 220 research institutes. He served as a Global Coordinator of the Fascination of Plants Day, a global celebration of plant science that in 2017 reached all continents with over 1000 events and is chair of Communication for the Marie Curie Alumni Association. Calum holds a PhD in Microbiology from the Université Paris-Sud, and completed his undergraduate study in Biochemistry at

#### Rapporteur

the University of Glasgow in the UK, and the University of Queensland in Australia.



# Bevlee Watford, Associate Dean Virginia Tech, USA

YouTube

Watford is a Professor of Engineering Education in the College of Engineering at Virginia Tech. She received her B.S. in Mining Engineering, and her M.S. and Ph.D. in Industrial Engineering and Operations Research from Virginia Tech. Since 1992 she has been the Founding Director of the Center for the Enhancement of Engineering Diversity (CEED). She has secured more than \$12 million dollars in funding and support for CEED and other undergraduate initiatives. Her research activities have focused on the recruitment and retention of students in engineering, with a particular emphasis on under-represented students. CEED has implemented nationally recognized programs that have enhanced the success of all students. These include freshmen peer mentoring, a summer bridge for incoming freshman and residential living-learning communities that house nearly 600 freshman engineering students. In 2008 Watford received the WEPAN Founders Award in recognition of her service to WEPAN and her efforts to increase the participation of women in the engineering profession. CEED received the 2010 Claire Felbinger Diversity Award from ABET and the 2011 NSBE-ExxonMobil Impact award for implementing successful research based efforts to improve retention. In 2014 Watford was one of three finalists in the Global Engineering Deans Council Airbus Diversity Award, selected "for her wide-ranging programs aimed at building an inclusive and diverse engineering student body at Virginia Tech." Watford has served as Associate Dean for Academic Affairs in the College of Engineering since 1997, responsible for all undergraduate activities from recruiting to commencement. From 2010-2011 she served as Interim Department Head of Engineering Education. From 2005-2007, she served as a program manager in the Division of Undergraduate Education for the National Science Foundation, returning from 2013-2015 to serve as the program director for broadening participation in the Directorate for Engineering. Watford was the 2004-5 President of the Women in Engineering ProActive Network (WEPAN) and has served on the Board of Directors of the National Association of Minority Engineering Program Administrators (NAMEPA). She is currently a member of the National Academy of Engineering's EngineerGirl Website Committee. An active member of ASEE since 1986, Bevlee A. Watford has served the organization in several capacities. She has

held multiple elected offices in both WIED and MIND and
served as Chair of PIC IV. She chaired the Diversity Task
Force that resulted in the creation of the ASEE Diversity
Strategic Plan as well as the formation of the ASEE
Diversity Committee. She serves as an associate editor of
AEE. In 2010, she was elected as a Fellow of ASEE. In
June 2017 she began serving her term as ASEE President.



# Gülsün Saglamer, Former Rector Istanbul Technical University (ITU), Turkey

Prof. Dr. Gulsun Saglamer, Former Rector of Istanbul Technical University (ITU) (1996-2004) is a professor of architecture, was as a post-doc researcher in Cambridge University (1975-1976), visiting Prof. (1993-1996) and an external examiner (1999 and 2003) in Queen's University of Belfast. She was a Board Member of European University Association (2005-2009). Prof. Saglamer is an Executive Committee Member of the International Association of University Presidents (IAUP) (2003-), President of CMU (Community of Mediterranean Universities) (2012-2017), President of European Women Rectors Association (EWORA) (2015-) and Founding Board member of Global Relations Forum GRF (2009-2016). She was a member the EC's Advisory Groups of Marie Sklodowska-Curie Actions (MSCA) (2006-2017) and Gender AG (2016-2017). She chaired the MSCA AG between 2013-2016. She has received several architectural prizes and was awarded Honoris Causa by Carleton University, Canada (2001), Universitatea de Nord Din Baia Mare University, Romania (2002) and Ovidius University of Constantza in Romania (2009). American Institute of Architects (AIA) awarded her "Honorary Fellowship (Hon FAIA) in 2006 and she has been also awarded "Leonardo da Vinci Medal" by SEFI (Société Européenne Pour la Formation Ingénieurs-European Society for Engineering Education) in 2005-2006. She is a member of European Academy of



#### Susanne Ihsen, Associate Professor Technical University of Munich (TU Munich), Germany

Sciences, Arts and Letters since 2011.

Professor for Gender Studies in Science and Engineering at the Technical University Munich (TUM) (since 2004). Vocational training as Educator. Studies in Social Sciences at Comprehensive University Duisburg and RWTH Aachen (until 1994). Research Assistant and PhD (Promotion) at RWTH Aachen, Centre for Research and Development in Higher Education and Chair for Informatics in Mechanical Engineering (1994-99). Research Assistant at VDI Verein Deutscher Ingenieure

#### YouTube

(1999-2001). Head of Department "Profession and Career", VDI Verein Deutscher Ingenieure (2001- 2004). Main Research in Gender and Diversity in (Research) Organizations, in Engineering Education, in Engineering Profession and in technical development (<a href="http://www.gov.tum.de/gender-studies">http://www.gov.tum.de/gender-studies</a>). Deputy chair of Competence Center Technology-Diversity-Equal Chances (since 2005); chair of the SEFI working group Gender and Diversity in Engineering Education (2008-2017); deputy chair of the SEFI working group Gender and Diversity in Engineering Education (since 2017), member of VDI, dib, SEFI. Expert in several national and international commissions and bodies. Consultant for public institutions and industry.



## Carlos Cocovi Higueras, Continuous Improvement Lead Philips Lighting, USA

As Continuous Improvement Lead within the Finished Goods Planning department in Philips Lighting USA, Carlos drives continuous improvement in Service, Inventory and Cost through Six Sigma and Lean. He also provides analytical expertise to projects conducted to minimize Cost and increase Supply Chain efficiency. Previously he was the Senior Supply Chain Analyst for Miele USA, managing a multi-million dollar supply chain. In his role, he analysed complex statistical data for demand forecasting; becoming the most accurate team in Miele worldwide. Carlos also optimized the inventory levels by identifying excess and obsolete stock, reducing storage fees by 36%, and led the operations involved in the launch of new products generations, to achieve inventory targets. Carlos was part of the EU / US International Triple Degree program in Engineering Management, graduating in M.S. Industrial Management Engineering by Technical University of Valencia (UPV), Spain; B.S. Industrial Engineering by New Jersey Institute of Technology, USA and B.S. Management Engineering by University of Parma, Italy. He previously obtained a Bachelor's Degree in Industrial Design Engineering and Product Development by Technical University of Valencia (UPV), Spain.



### Nomen Nescio, Professor Technical University, Europe

Submitted by N.N., an associate professor at a large research based university somewhere in Northern Europe.

### YouTube



# Teri Reed, Assistant Vice President University of Cincinnati, USA

Keynote

Teri Reed serves as Assistant Vice President for Research Development in the Office of Research and Professor in the Department of Chemical and Environmental Engineering in the College of Engineering and Applied Science at the University of Cincinnati. She received her B.S. in petroleum engineering from the University of Oklahoma and spent seven years in the petroleum industry, while earning her MBA. She subsequently received her Ph.D. in industrial engineering from Arizona State University. She is a member, Board Member and Fellow of the American Society for Engineering Education (ASEE), member and Distinguished Member of the Society of Petroleum Engineers (SPE), and member of the Institute of Electronics and Electrical Engineers (IEEE). Teri was the 2016–2017 President of the Women in Engineering ProActive Network (WEPAN) and currently continues as Immediate Past President. An advocate for research-informed approaches to engineering education and administration, her research interests include statistics education, concept inventory development, assessment and evaluation of learning/programs, recruitment/retention, and diversity/equity/inclusion. Reed helped establish the scholarly foundation for engineering education as an academic discipline through co-authorship of the landmark 2006 Journal of Engineering Education special reports "The National Engineering Education Research Colloquies" and "The Research Agenda for the New Discipline of Engineering Education". She serves as an ASEE/ABET Engineering Accreditation Council Commissioner.



# Doris Klee, Vice Rector RWTH Aachen, Germany

Keynote

Professor Doris Klee was born in 1955, studied Chemistry at RWTH Aachen University and obtained her doctorate in 1983 at the since-renamed DWI Leibniz Institute for Interactive Materials. She completed her habilitation in 1997 at the Institute of Technical and Macromolecular Chemistry and has been as a professor of macromolecular chemistry at RWTH Aachen since 2004. Prof. Klee's research focuses on the improvement of membrane tolerability of biomaterial surfaces and the development of so-called drug delivery systems. In 2010, Prof. Klee became the Equal Opportunities Officer of RWTH Aachen, a position which she held for 19 months. Prof. Klee currently serves as chairman of the supervisory board of the Aachen Centre of Technology Transfer in Ophthalmology (ACTO e.V.) as well as a board

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	member of the Macromolecular Division of the German Chemical Society (GDCh). Since October 2011, Doris Klee	
	has been the Vice-Rector for Human Resources	
	Management and Development at RWTH Aachen.	
	Wallagement and Development at KW III Addien.	
The state of the s	Greet Langie, Vice Dean	Panel
	Catholic University of Leuven (KU Leuven), Belgium	
ASE IN	Greet Langie holds a MSc degree and PhD in Physics from	
	the University of Leuven (Belgium). From 2009-2011 she	
	was the chair of LESEC (Leuven Engineering and Science	
	Education Center, <a href="http://set.kuleuven.be/LESEC">http://set.kuleuven.be/LESEC</a> ), a	
	research center focusing on applied educational research	
	in engineering and science HE-programmes. From 2012	
	until now she's the vice dean of the Faculty of	
	Engineering Technology (KU Leuven, Belgium), a multi-	
	campus faculty with more than 7000 students. In her	
	research she's focusing on the transition from secondary	
	education to university within the STEM-field. She	
	coordinates the Erasmus+ projects readySTEMgo (in	
	which she focuses on early identification of STEM	
	readiness and on targeted academic interventions, see	
	http://iiw.kuleuven.be/english/readystemgo) and	
	PREFER (in which she studies professional roles and	
	employability of future engineers, see	
	http://preferproject.eu/). She was awarded the title	
	ING.PAED.IGIP by IGIP. Greet Langie is committee chair	
	capacity building within SEFI and she's a member of two	
	SEFI Working Groups: 'Physics and engineering	
	education' ( <a href="http://www.sefiphysics.be/">http://www.sefiphysics.be/</a> ) and 'Engineering Education Research'	
	(https://www.sefi.be/activities/working-	
	groups/engineering-education-research/).	
	groups/engineering education researchy).	
	Mogens Rysholt Poulsen, Dean	Panel
	Aalborg University (AAU), Denmark	
	Mogens Rysholt Poulsen became the Dean of the Faculty	
	of Engineering and Science, AAU (Aalborg University,	
	Denmark) in 2017. From 2008 to 2016 he was the Head	
	of Department of the Department of Micro- and	
	Nanotechnology at DTU (Technical University of	
	Denmark), 2010-2013 also Vice Dean for International	
	Affairs at DTU. From 2004 through 2009 he held the	
	position as Director of DTU Danchip. Mogens Rysholt	
	Poulsen obtained his M.Sc. in physics and mathematics	
	from AU (Aarhus University, Denmark) in 1990 and a	
	Ph.D. in natural science (physics) also from AU in 1994.	
	He also holds an Executive MBA in Management of	
	Technology from DTU (2005). During his studies at AU,	
	he spent two years at University College London,	
	England. Mogens is member of Danish Academy of	

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Technical Sciences (ATV), and Danish Academy of Natural	
Science (DNA).	