# SEMICON<sup>®</sup> EUROPA

NOV 14-17, 2023 | MUNICH, GERMANY

# imec ITF



K. Marent EVP & Chief Marketing & Communications Officer imec, Leuven, Belgium



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## Biography

Katrien has an engineering degree in microelectronics. She joined imec in 1992 as analog design engineer and specialized in design of low-noise readout electronics for high-energy physics. In 1999, she became press responsible and scientific editor at imec's business development division and was responsible for authoring and editing the research organization's numerous company technical documents and publications. In 2001, she was appointed corporate communications director at imec. Her responsibilities expanded in August 2007, when she got the position of external communications director including corporate, marketing and outreach communications. In October 2016, she became VP corporate, marketing and outreach communication. Since April 2020 she is Executive Vice President & Chief Marketing and Communications Officer and member of the executive board of imec.

# **Topic Coming Soon**



L.-A. Ragnarsson Sustainable Technologies and Systems (SSTS) imec, Leuven, Belgium



Abstract Coming Soon

# Biography

Lars Åke Ragnarsson received the M.S. degree and the PhD degree in electrical engineering from Chalmers University of Technology, Göteborg, Sweden, in 1993 and 1999, respectively. Between 2000 and 2002, he did postdoctoral studies with the IBM T.J. Watson Research Center, Yorktown Heights, NY, focusing mainly on the electrical characterization of high-k dielectrics. Since 2002, he has been with imec in Leuven, Belgium, focusing on the development of advanced technologies using high- κ dielectrics and metal gates. Today Lars-Åke is a scientific director in compute and memory technologies with a strong focus on the Sustainability of current and future technologies.

# **Topic Coming Soon**



M. Bhat VP Sustainability Programs SEMI, Milpitas, California, United States of America



Abstract

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## Biography

Dr. Bhat is a Semiconductor Expert who has held senior positions within the Semiconductor Industry, Motorola, GlobalFoundries and Micron to name a few over the last 25 years. She has a Ph.D. from the University of Texas at Austin, Masters from MIT and University of Maryland and an executive MBA from Stanford Business School. During her career she has led Transversal, cross functional and multicultural teams across various continents and has led transformation projects that require foundational culture changes.

She is also passionate about creating sustainable business practices and thereby creating an ecosystem of changemakers such as corporates, government, academia and society to accelerate social and economic parity through technological innovations.

In SEMI, within her role as VP of Sustainability Programs, she is responsible for leading teams, directing client engagements, and overseeing processes and deliverables in Environmental Stewardship, Supply Chain and Supplier Resilience, including Responsible Sourcing.

# **Topic Coming Soon**



C. Jones Environmental Solutions Business Development Manager Edwards, London, United Kingdom



Abstract Coming Soon

**Biography** Coming Soon

# **Topic Coming Soon**



P. Barnabé Group Chief Executive Officer & Director Soitec, Paris, France



Abstract

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#### Biography

Pierre Barnabé is a businessperson who has been at the helm of 5 different companies and currently occupies the position of Group Chief Executive Officer & Director at Soitec SA, Chairman for Elexo SAS and Chairman of Bull SAS. He is also on the board of Ipsos SA and Bull SA.

In his past career he occupied the position of Co-CEO & Global Head-Manufacturing Industry at Atos SE and Chairman & Chief Executive Officer of Evidian SA (a subsidiary of Atos SE), General Manager for Société Française de Radiotéléphone SA and Vice President-Human Resources & Transformation at Alcatel-Lucent SAS.

He received an undergraduate degree from NEOMA Business School and an undergraduate degree from École supérieure d'électricité.

High NA EUV introduction – the more sustainable choice? - joint presentation with Carlo Luijten, Principal Architect Sustainability ASML



E. Gallagher Principal Member of Technical Staff imec, Leuven, Belgium



Abstract Coming Soon

## Biography

**Emily Gallagher** is a Principal Member of Technical Staff at imec, focusing on sustainability in semiconductor manufacturing, EUV pellicle membrane development, and advanced patterning. Emily earned her PhD in physics from Dartmouth College where she studied free electron lasers. After graduation, she joined IBM and became immersed in semiconductor technology. She held many wafer fabrication roles at IBM from functional characterization to process integration; the last was leading the EUV mask development effort. She joined imec in 2014 to continue EUV development work. Emily has authored over 100 technical papers, holds over 20 patents, is an SPIE Fellow and co-leads the SEMI SCC Scope1 Working Group.

**Carlo Luijten** joint ASML in 1999 as a System Engineer, after finishing his PhD in Applied Physics. Over the years he worked on various topics such as Focus control, cost of goods and machine conditioning. In 2005 he left ASML for a University position pursuing research on clean engines, fuels and sustainable mobility, then returned to ASML in 2011. From 2018 onwards he has been involved with energy consumption of EUV tools, initially from a System Engineering position. After joining ASML's ESG Sustainability Strategy team in 2021, his main role is now to define and drive the CO2 emissions reduction roadmap of ASML

# Is Digitalization Really Worth it? The Latest Approaches for Fab Efficiency and Resilience

P. Colombo Strategic Account Executive Infineon Schneider Electric, Marktheidenfeld, Germany



#### Abstract

Are your fabs challenged by lack of efficiency and low resiliency? Attend this keynote to see the latest examples of how digitalization comes to the rescue of both. You'll also see how addressing these challenges through addresses another strategic priority for the industry: sustainability.

## Biography

Infineon Technologies Strategic Account ExecutiveInfineon Technologies Strategic Account Executive Jun 2023 - Present · 2 mosJun 2023 - Present · 2 mosAschaffenburg, Bavaria, Germany · RemoteAschaffenburg, Bavaria, Germany · Remote

Driving our strategic partnership with Infineon Technologies to deliver more Sustainable values through Manufacturing Excellence, Digitization and Energy Efficiency.Driving our strategic partnership with Infineon Technologies to deliver more Sustainable values through Manufacturing Excellence, Digitization and Energy Efficiency.

Europe Segment Leader for SemiconductorEurope Segment Leader for Semiconductor Jan 2022 - Present · 1 yr 7 mosJan 2022 - Present · 1 yr 7 mosMarktheidenfeld, Bavaria, GermanyMarktheidenfeld, Bavaria, Germany

EcoStruxure & Internet of Things (IoT) for Innovation and Energy Management | Schneider ElectricEcoStruxure & Internet of Things (IoT) for Innovation and Energy Management | Schneider Electric At Schneider Electric, we aim to improve your business by using EcoStruxure Platform, our IoT-enabled system that leverages Microsoft Azure technology to optimize your operations. Our platform will help you manage energy efficiency and business...At Schneider Electric, we aim to improve your business by using EcoStruxure Platform, our IoT-enabled system that leverages Microsoft Azure technology to optimize your operations. Our platform will help you manage energy efficiency and business...

Head of the IT Division Go To Market for Industrial OEM's and Food & Beverage segmentHead of the IT Division Go To Market for Industrial OEM's and Food & Beverage segment

Mar 2017 - Jan 2022 · 4 yrs 11 mosMar 2017 - Jan 2022 · 4 yrs 11 mosMarktheidenfeld

# The Journey to Sustainable Intelligent System Design



K. Nisewaner Corporate VP, General Counsel & Corporate Secretary Cadence, London, United Kingdom

# cādence<sup>®</sup>

#### Abstract

The world is converting to data-driven everything, enabled by a seemingly endless stream of amazing semiconductor technological innovations. But the Earth is struggling to keep up, and a mindset of sustainable design is taking its rightful place near the top of the list of priorities. The promised value is tremendously exciting, yet how will we meet the demands of information gathering and knowledge extraction within the global energy envelope?

As Moore's Law is increasingly unable to keep up with the steep transistor scaling challenges ahead, purpose-built intelligent systems and computational software are rapidly becoming the pathway to extracting actionable business insights from exascale datasets. But even the processing Goliaths are challenged to bring these intelligent systems forward, increasingly overcome by an engineering skills shortage and resource and time-to-market constraints.

Cadence general counsel and corporate secretary Karna Nisewaner will provide a glimpse of how Cadence engages in sustainable best practices and offers state-of-the-art generative AI system design strategies that will empower and embolden designers, accelerate innovation, and widen the path to a sustainable future.

## Biography

Karna Nisewaner joined Cadence in 2011 and has served as general counsel and corporate secretary since September 2022. She is responsible for Cadence worldwide legal operations. In this role, she owns the creation of the company's annual environmental, social, and corporate governance (ESG) report. Prior to this role, she was corporate vice president and deputy general counsel at Cadence where she led many key functions in the legal department.

Karna received her BSE in civil engineering and operations research from Princeton University and her Juris Doctor degree from UCLA Law School.



J.-H. Mohr Managing Director & Partner Boston Consulting Group, Munich, Germany



#### Biography

Jan-Hinnerk Mohr is Managing Director and Partner at Boston Consulting Group, co-leading BCG's European semiconductor practice, and is based in Berlin, Germany.

Jan has a deep passion for technology. He has served BCG's semiconductor clients for more than a decade – his experiences covers in particular strategy & PMI, marketing & sales, and sustainability and digital. Jan has also helped many application industries in semiconductor-related questions, e.g. in the automotive industry with the digitalization/softwarization of vehicles.

His passion for passion led to several publications in the tech and semiconductor space, e.g. most recently on CO2 emissions (scope 1,2 *and 3*) in the semiconductor industry. Prior, Jan has served as an ambassador to the World Economic Forum to push the thinking of Future Mobility and self-driving cars, and presented the results at the Annual Meeting in Davos in 2015.

Jan holds a Master's degree in Business Administration & Econometrics with distinction from Mannheim University. Besides, Jan has studied in London, Shanghai and the United States.

# **Coming Soon**



J.-M. Girard CTO and Sr. VP of Manufacturing Technologies Air Liquide Advanced Materials (ALAM), Paris, France



Abstract Coming Soon

#### Biography

Jean-Marc Girard, Ph.D. is the CTO and Sr. VP of Manufacturing Technologies at Air Liquide Advanced Materials (ALAM), which has become a leading supplier and technology provider in the field of ALD/CVD materials and advanced Dry Etching gases (the enScribe<sup>™</sup> product line). He has been appointed Air Liquide Group Fellow in 2012, and is a co-inventor to ~50 patents, mainly related to semiconductor processing, materials and dispense technologies.

Within ALAM, Jean-Marc globally manages the Research and Development (from inception to scale up of novel materials), oversees strategic engagements and collaborations with leading customers, equipment companies, and research institutes, and supervises the Intellectual Property generation and portfolio management associated with this activity.

Prior to this position, Jean-Marc has 10 years of experience of semiconductor R&D in Japan and Europe. Jean-Marc holds a B.Sc. in Physical Chemistry and a Ph.D. from the CEA / Université Paris-Sud in Plasma Physics.