ITF IMEC

Welcome

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

Abstract
Coming Soon

Biography
Katrien Marent 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.

References

Opening Keynote

L. Van den hove
President & CEO
imec, Leuven, Belgium

Abstract
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Biography
Luc Van den hove is President and CEO of imec since July 1, 2009. Before he was executive vice president and chief operating officer. He joined imec in 1984, starting his research career in the field of silicide and interconnect technologies.
In 1988, he became manager of imec's micro-patterning group (lithography, dry etching); in 1996, department director of unit process step R&D; and in 1998, vice president of the silicon process and device technology division. In January 2007, he was appointed as imec's EVP & COO. Luc Van den hove received his PhD in electrical engineering from the KU Leuven, Belgium.
In 2023, he was honored with the Robert N. Noyce medal for his leadership in creating a worldwide research ecosystem in nanoelectronics technology with applications ranging from high-performance computing to health.
He has authored or co-authored more than 200 publications and conference contributions.

References

Nanopores in Health: Where Silicon Meets Biology

S. Lenci
Principal Member of Technical Staf
imec, Leuven, Belgium

Abstract
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Biography
Silvia Lenci graduated in Electronic Engineering at the University of Pisa (Italy) with a Master Degree in 2006, and a PhD in 2010, focusing on MEMS and bioMEMS. After her PhD, she started her career in imec Leuven as device and process engineer in GaN power electronics and sensors. She continued as integration engineer and project manager in the field of microfluidics, photonics, optics and MEMS, fabricated in the CMOS-compatible imec fabs. She is today project manager in solid state nanopore technology, focusing on the chip fabrication in fab. Bringing technology to life is her passion. Multidisciplinary interaction with processing, design, tape out and characterization teams is the core of her daily work.

References

Topic Coming Soon

F. Thei
CEO & Founder
Elements srl, Milan, Italy

Abstract
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Biography
Dr. Federico Thei is CEO and Founder at Elements srl (Italy) since 2014, responsible for strategic business development, new products concept design and industrial partnerships building, focusing on enabling nanopore technology to industrial applications.
Graduated in Telecommunication Engineering in 2007, he received the Ph.D. in Information and Communication Technologies in 2011 at the University of Bologna, Italy, with a research activity focused on low noise microelectronics systems for nanopore and biosensors readout.
He was visitor Ph.D. student at the University of Southampton (UK), University of Twente (NL) and several EU Companies in the electrophysiology field. For four years he was assistant professor for the electronic engineering course “Electronic digital systems” at the University of Bologna.
He attended in 2015 the Technology Venture Launch Program Express in Menlo Park, Silicon Valley, winning the final pitch competition. In 2018 he attended The Business side of Biomedical Start-ups course at the University of Bocconi, Milan. In 2025 he received the American Innovation prize from the Italian – USA foundation.
Coauthor of patents and papers in the microelectronic and nanopore field, he builds strong partnerships with Companies and research centers across the world, like EPFL, IMEC, Stanford NF, Bosch, offering the most advanced microelectronic solution for low noise and high bandwidth nanopore readout.

References

Driving European Semiconductor Leadership: A Chiplet-Based Approach for the Automotive Sector

D. Hoffend
Business Director Automotive Sector
imec, Leuven, Belgium

Abstract
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Biography
Dieter Hoffend is Business Director for the Automotive Sector at imec, where he leads strategic initiatives in chiplet technology and edge AI for the automotive industry. Based in Munich, he joined imec in February 2025, bringing more than 30 years of international experience in semiconductors, automotive electronics, and business leadership.
Before joining imec, Hoffend built a distinguished career at Intel Corporation. He played a pivotal role in shaping Intel's entry into the automotive market, serving on a three-person team that launched the company's automotive strategy in 2005. This work set the foundation for Intel's efforts in in-vehicle infotainment, advanced driver assistance systems (ADAS), and autonomous driving, and became a model for the broader semiconductor industry's engagement with the automotive sector.
Hoffend went on to lead Intel's automotive sales in Europe, covering IT, connectivity, and Industry 4.0 and manufacturing solutions. He managed global relationships with major automotive OEMs and Tier-1 suppliers, driving significant growth and fostering long-term strategic partnerships. His leadership also extended to high-level collaborations with IT OEMs such as Hewlett Packard, Fujitsu Siemens Computers, and MEDION AG, as well as establishing Intel's Foundry Services Business Development organization.
Recognized for his ability to navigate complex markets and cultivate executive-level relationships, Hoffend has consistently delivered growth and innovation in highly competitive technology-based environments.

References

Space and Security Applications (title to be confirmed)

N. V. den Wijngaert
VP Aerospace & Security
imec, Leuven, Belgium

Abstract
Coming Soon

Biography
Coming Soon

References

Enviromentally aware IC chip manufacturing

E. Gallagher
Program Director
imec, Leuven, Belgium

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Biography
Emily Gallagher is a director of the SSTS (Sustainable Semiconductor Technologies and Systems) program at imec, focusing on sustainability in semiconductor manufacturing processes. 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 roles at IBM from functional IC chip characterization to wafer process integration, to leading the EUV photomask development effort. She joined imec in 2014 to continue EUV development work. Emily has authored over 120 technical papers, holds ~30 patents, is an SPIE Fellow, cochairs the Scientific Advisory Board of the Advanced Research Center for Nanolithography (ARCNL) and is active in international organizations like SEMI's Semiconductor Climate Consortium and the PFAS Consortium.

References

Enabling the European Supply Chain

P. Soussan
Technology Portfolio Director
imec, Leuven, Belgium

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Biography
For 20 years **Philippe Soussan** has held different position in R&D management in imec in the field of sensors, photonics, 3D packaging. Addressing these technologies from R&D up to manufacturing levels. His background deals with wafer scale technologies, authoring over 100 publications, and holding more than 20 patents in these fields.
From 2007 till 2011, he has led the group “Packaging, Microsystems and Hybrid Technology”. The group dealt with complex process integration using 3D interconnects, advanced packaging and micro fabrication of scaling and non-scaling driven components. In 2011, he became program manager for the smart system division of IMEC, which mission is to enable novel product in the field of More than Moore, such as sensors, microsystems in the field of RF and opto-electronics. In 2019, he was program director in the field of integrated photonics for sensing applications
Since 2024, Philippe is in charge of strategy definition for IC-link by imec. This imec business line provides an access to design and manufacturing services in the most advanced ASIC and specialty technologies.

References

Panelist

J. De Boeck
EVP & CSO
imec, Leuven, Belgium

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Panelist

Biography
Jo De Boeck received his engineering degree in 1986 and his PhD degree in 1991 from the University of Leuven. Since 1991 he is a staff member of imec (Leuven). He has been a NATO Science Fellow at Bellcore (USA, 1991-92) and AST-fellow in the Joint Research Center for Atom Technology (Japan, 1998).
In his research career, he has been leading activities on integration of novel materials at device level and new functionalities at systems level. In 2003 he became Vice President at imec for the Microsystems division and in 2005 started Holst Centre (Eindhoven) as General Manager of imec the Netherlands.
From 2010 he headed imec's Smart Systems and Energy Technology Business Unit. He is part-time professor at the Engineering department of the KU Leuven and held a visiting professorship at the TU Delft, Kavli Institute for Nanoscience (2003–2016). In 2011 he became Chief Technology Officer and in 2018 he was appointed Chief Strategy Officer. He is member of imec's Executive Board.

References

Panelist

C. Kutter
Director
Fraunhofer EMFT, Munich, Germany

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Biography
Christoph Kutter is director of Fraunhofer EMFT, an institute of the Research Fab Microelectronics Germany (FMD), of which he is currently co-spokesperson. He also holds a professorship specializing in solid-state technologies at the University of the Federal Armed Forces in Munich. His focus at Fraunhofer EMFT is on silicon technologies, MEMS, flexible electronics, biosystem integration and heterogeneous integration of various solid-state technologies.

Christoph Kutter is currently Vice President of the VDE (Association for Electrical, Electronic & Information Technologies), a member of acatech (National Academy of Science and Engineering) and the BBAW (Berlin-Brandenburg Academy of Sciences BBAW).

From 1995 to 2012, Christoph Kutter held various management positions at Infineon Technologies AG and Siemens AG, including Head of Communications Product Development, Head of Chip Card Development and Head of Central Research. Christoph Kutter was responsible for several central improvement projects to increase efficiency in research and development as well as for the management of the company-wide innovation initiative.

From 1990 to 1995, Christoph Kutter worked as a research assistant at the High Magnetic Field Laboratory (Max Planck Institute for Solid State Physics) in Grenoble, France.

Christoph Kutter received his Dipl. Phys. from the Technical University of Munich and his Dr. rer. nat. from the University of Constance in 1995.

References

Panelist

R. Hamelin
CTO
Bluemorpho, Leuven, Belgium

Abstract
Panelist

Biography
Régis Hamelin earned an engineering degree in materials science and a PhD in Electronics from the University of Lille, where he researched semiconductor lasers with the IEMN optronics team in 1993. He spent seven years at CEA-LETI as a process engineer and program manager in optronics, developing expertise in compound semiconductor photonic components and packaging. In 2003, he co-founded Intexys Photonics, serving as CTO and board member in launching active optical cables for high-end supercomputers. In 2010, he joined the “COWIN” support action under FP7, leading to the foundation of BLUMORPHO, which he joined as CTO in January 2015. He is currently coordinator of the aCCCess CSA working closely with the network of Chips Competence Centers.

References