PhotonicSweden

Optics & Photonics in Sweden 2025

Conference & Exhibition

www.photonicsweden.org

OPS-2025 Webpage: https://photonicsweden.org/event/optics-and-photonics-in-sweden-conference-2025/

22nd – 23rd October: OPS-2025 Conference & Exhibition

OPS-2025 Pitch talks by exhibitors 22nd October

OPS-2025 Academic & Industrial Sessions 22nd October

Keynotes –22nd October

 **John Lincoln** Director, Chief Executive,	**Harlin Ltd,** UK https://photonicsuk.org/directory/listing/harlin-ltd	***"Photonics present and future:- the scale and impact of as industry vital to the 21st century"*** Photonics Leadership Group; Europe Strategy Director, SPIE; Member of multiple advisory boards John is SPIE's Europe Strategy Director and Chief Executive of the UK Photonics Leadership Group supporting the align-ment of policy, industry and research strategy in the £18.5bn UK Photonics industry. John has over 35 years' experience in the industry developing products, business and policy impacts. John has run his business development consultancy, Harlin Ltd, since 2006 helping SMEs, Universities, VCs and governments to identify growth opportuni-ties and technology impact at company, national and international level. John sits on multiple advisory boards, is a non-executive director of Dialight PLC and entrepreneur coach for the European Innovation Council. https://www.linkedin.com/in/johnrlincoln/
 **Wim Bogaerts,** Professor	**Ghent University/IMEC**, Belgium, Photonics Research Group at Ghent University - imec	***"Silicon photonics chip and its complex circuits performance of electrical-to-optical conversions and light coupling"*** Prof Wim Bogaerts specializes in silicon photonics, design of complex photonics circuits, and programmable photonics. During and after his PhD, he laid the foundations for IMEC's silicon photonics platform, and the multi-project-wafer service ePIXfab which made this techno-logy accessible for many researchers in Europe and beyond. To enable design of these circuits, Wim and his colleagues developed the parametric design software IPKISS. In 2014, Wim co-founded the spin-off company Luceda Photonics (since 2025 part of the Semitronix group), to commercialize IPKISS, which is now used by thousands of designers worldwide. In 2016, Wim received a consolidator grant from the European Research Council, and returned full-time to Ghent University, with a research focus on programmable photonics. Since 2023 Wim is also chair of ePIXfab, the European alliance to promote the silicon photonics ecosystem. He is a Fellow of the IEEE and OPTICA, and senior member of the SPIE. https://www.linkedin.com/in/wimbogaerts/?originalSubdomain=be https://biblio.ugent.be/person/801001267525

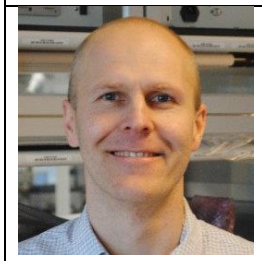
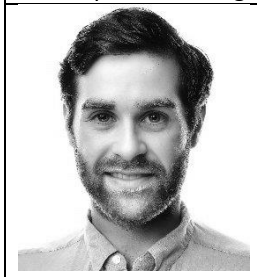
Keynotes –23rd October

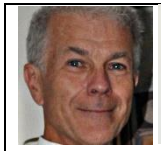
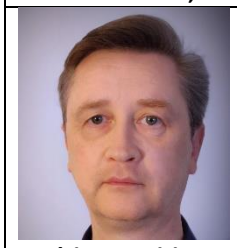
 **Yen-Chieh Huang,** Professor	**National Tsing Hua University (NTHU),** Taiwan https://oga.site.nthu.edu.tw/?Lang=en	***"Photonic Chips for Electron Acceleration and Radiation."*** Prof. Huang is Co-inventor of laser-driven particle acceleration on a chip—a break-through poised to miniatu-rize high-energy accelerators. His compact design generates nano-electron bunches for x-ray superradiance, poten-tially brighter than large-scale synchrotrons, with applications in materials science and radiotherapy. He also holds the record for high-energy THz generation used in particle acceleration. He's renowned for pioneering work in nonlin-ear optics, especially with periodically poled lithium niobate (PPLN) crystals. In 2000, he founded HC Photonics, first to commercialize quasi-phase-matched crystals. He also pioneered LED-pumped lasers—cost-effective, long-lived sources. His team built megawatt-class systems able to machine hard materials. In 2023, he founded LEDlas, commercializing the world's first MW-class LED-pumped solid-state laser. https://topcenter.site.nthu.edu.tw/p/404-1488-166366.php
 **Charlott Samuelsson** Senior Vice President	**Mycronic AB,** Sweden https://www.mycronic.com/	***"More than 50 years of innovation – Mycronic´s journey to the heart of the display and semiconductor industry"*** Charlott is head of the Pattern Generator divisions at Mycronic AB. She is MSc in Technical Physics and Tech. Lic. in Electron Physics from Chalmers University of Technology in Gothenburg. After five years in the defence industry, Charlott joined Mycronic in 1996 and has since then been part of Mycronic journey from a start-up to large cap. Since 2017, Charlott has been managing the Pattern Generator business. https://www.linkedin.com/in/charlott-samuelsson-570ba034/?locale=sv_SE **Mycronic** is a world-leading provider of flexible, high-precision production solutions for electronics manufacturing. In 1971, a group of Swedish engineers from the Royal Institute of Technology in Stockholm began work on developing what was later became Mycronic´s first comer-cial laser mask writer. This fundamental technology is today strategic for the whole display industry and key for a cost-efficient manufacturing of semiconductor. Mycronic has maintained its role as a global leader in laser mask writer expertise and the mask writers are now the core business for one of Mycronics four divisions. Charlott will present parts of Mycronic´s more than 50 year long history of innovation, which has resulted in a position as a leading supplier to the global electronics industry.

Speakers – Industrial Sessions

Photonics Applications 22nd & 23rd October

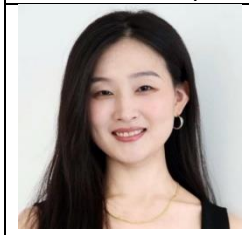
 **Per Olof Hedekvist,** Ph.D. Senior Scientist	**RISE**, Borås https://www.ri.se/sv/nyheter/meterkonventionen-150-ar-den-20-maj	Per Olof is working at SP in R&D on photometry, radiometry and time & frequency distribution, and some efforts in microwave metrology. His main responsibility is to develop new business opportunities in Metrological Internet-of-Things, combining the need for reliable data in connected devices with the expertise of the engineers and researchers at SP Metrology department. In photometry, he is working on the development of future illumination sources. Evaluating LEDs as the alternative to lightbulbs and CFLs, to assemble an independent knowledge base useful for users, private as well as commercial. He has collaborations with LTU and the Center for Energy Efficient Lighting, ceebel, with presentations and lectures. Another task is developing methods for measurement of both photmetric and radiometric properties when analysing new light sources not based on black body radiation. https://www.ri.se/sv/person/per-olof-hedekvist https://www.linkedin.com/in/per-olof-hedekvist-852792a/?originalSubdomain=se
 **Sara Abrahamsson,** Ph.D.	**Freelance Optics specialist** (Former Sandberg Development AB, Malmö)	Sara is a scientist, engineer, teacher, writer, problem solver, inventor and designer in optical systems and imaging. She has spent most of my career in academia, developing and employing new and unique optical designs for visible light biomicroscopy. Her research lab created and employed optical systems for live biological imaging, with a focus on simultaneous live 3D imaging and super-resolution microscopy using Structured Illumination. The work involved hands-on nanofabrication of exquisite diffractive Fourier optics elements at academic nanofabs. Her main contribution to the field of Optics has been the invention, with her mentor Dr. Mats Gustafsson, of aberration-corrected multifocus microscopy and MF-SIM. As faculty at UCSC and teaching faculty at the Marine Biological Laboratory at Woods Hole, MA, USA, I taught and developed courses in optics, biomicroscopy, neuroimaging, technical photography and image processing. https://www.linkedin.com/in/sara-abrahamsson-37803024/ https://bit.ly/4muEQbx

 **Mikael Winters,** Ph.D. Area Sales Manager	**Coherent,** Mölndal	As a researcher at Chalmers University of Technology, Mikael functioned as a project coordinator and lab manager for two laser laboratories. As a result of this, Mikael has acquired solid experience in planning and executing research plans with several co-workers. Mikael did a large part of his work in collaboration with other research groups, such as Harry Anderson group at Oxford University, David Phillips group at Imperial College London, Niels Harrit group at Copenhagen University, and Jerker Mårtensson group at Chalmers University of Technology. Coherent (Optoskand AB) delivers the power from your laser source to the workpiece with minimal losses thanks to a successful technology. We have developed and manufactured a wide range of beam delivery products for high power lasers for our customers: Fiber Optic Cables, Incoupling Optics and Process Optics. Many of these products are certified, which is a testament of the skill of our innovative R&D engineers. https://www.linkedin.com/in/mikaelwinters/
 **Olle Rosenqvist** Development Manager	**Thorlabs Sweden AB,** Mölndal https://www.thorlabs.com/careers/sweden	At Thorlabs Sweden AB, located in Mölndal near Göteborg, our team of over 60 employees provide sales and technical support to the Scandinavian and Baltic countries as well as Poland. As our third-largest European entity, the facility has a modern 800 m2 cleanroom and designs and manufactures a line of advanced optical components and instruments, including beam expanders, objectives, scan lenses, spectrometers, fabry-perot interferometers, and optical spectrum analyzers (OSAs). https://www.linkedin.com/in/olle-rosenqvist-8269a18/
 **Daniel Brauda** Sales and product manager laser	**Toptica-Eagleyard GmbH,** Germany (Represented by Tillquist in Sweden) https://www.toptica-eagleyard.com/application-overview/	Daniel is aphotonics engineer with hands-on experience in assembly, miniaturization and characterization of laser diode systems. He has a strong background in product development and project management in the field of semiconductor technology, especially in high power lasers from several kW for material processing down to a few mW with small linewidth for metrology and quantum applications. TOPTICA EAGLEYARD is a global leading provider of high power laser diodes with wavelengths from 630 nm – 1120 nm based on GaAs (Gallium Arsenide). Our products combine maximum power, great durability and excellent beam quality – a perfect match for high-end applications. We put responsibility and innovation first and transform research-based know-how into market-ready products with the highest degree of professionalism and a special focus on highly integrated components. https://www.linkedin.com/in/daniel-brauda-76b823141/ https://www.linkedin.com/company/eagleyard-photonics-gmbh/posts/?feedView=all
 **Clément Raigner** UK, Nordics & Benelux Sales Manager	**Exail Photonics,** France https://www.exail.com/photonics/sensing	As a Sales Manager at Exail Photonics, I drive business growth by bringing cutting-edge and reliable optical solutions (specialty optical fibers, electro-optical modulation solutions, ultra-stable fibered micro-optical benches, lasers and quantum sensors) to industries. With a deep understanding of optics and photonics, I lead sales strategies that align with customer needs and market trends, ensuring innovative solutions reach the right partners. https://www.linkedin.com/in/cl%C3%A9ment-raigner-9649b122a/

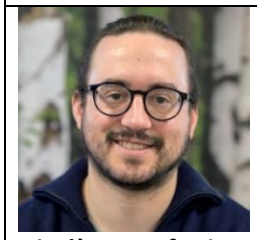
  **Per Olof Holtz,** CSO, or **Lisa Rullik,** CTO	**Polar Light Technologies AB,** Linköping https://www.polar-light-technologies.com/	"Pyramidal microLEDs in the same material system paving the way for RGB emission in micro displays" Polar Light Technologies is sprung out of Professor Per-Olof Holtz's and his research team's longstanding research into semiconductors and optoelectronics at Linköping University. This research has enabled technology development that results in unmatched pixel size, brightness and energy efficiency. The research translates into more efficient and better-functioning technology, serving our commercial goals, which include creating state-of-the-art solutions for applications as varied as head mounted displays, head-up displays, wearables, white light applications, optical interconnects and quantum cryptography, among others. https://www.linkedin.com/in/per-olof-holtz-0a8403a/ https://www.linkedin.com/in/lisa-rullik/
 **Nada IRAQI,** nternational business developer	**HEF Groupe Photonics,** France**,** Poland https://hef.group/en/photonics/	HEF specializes in photonics, offering innovative polishing, etching, and optical coating solutions for various industries. https://www.linkedin.com/in/nada-iraqi-966b2b8a/ https://www.youtube.com/watch?v=yHOiNjq3f9I https://hef.group/wp-content/uploads/2024/07/data_sheet_Leaflet-HEF-PHOTONICS-4-pages-1-1.pdf
 **Robert Kvist,** Area Sales Manager Europe	**Silex Microsystems AB** https://www.silexmicrosystems.com/en/	The world's largest pure-play MEMS foundry, enabling customers to develop and bring the most advanced solutions to market. https://www.linkedin.com/in/robertkvist/
 **Håkan Karlsson,** CEO	**Cobolt AB-HÜBNER Photonics** https://hubner-photonics.com/	***"Lasers for applications in quantum technology enabled devices"*** Håkan has over 15 years of entrepreneurship and engagement in the photonics industry and research community. A well-developed understanding of a broad range of laser photonics markets including bioinstrumentation, process control, semiconductor metrology, environmental monitoring and micromachining with their respective dynamics, trends and main actors. **HÜBNER Photonics** offers a full range of high performance lasers and terahertz systems including single and multi-line Cobolt lasers, tunable C-WAVE lasers, C-FLEX laser combiners, VALO femtosecond fiber lasers and Terahertz imagers and spectrometers. https://www.linkedin.com/in/h%C3%A5kan-karlsson-b156933/
 **Audrius Jasaitis** Application Specialist and Sales	**Imagine Optic,** Paris https://www.imagine-optic.com/	***"Adaptive Optics Solutions and Optical Metrology Tools applied by Imagine Optic"*** Development of wavefront sensing instruments https://www.linkedin.com/in/audriusjasaitis/

Speakers – Academic Sessions

Session: Teraherz

 **Jan Stake,** Professor. Head of Division at Terahertz and Millimetre Wave Laboratory	**Chalmers University**	Jan Stake was 2006 appointed Professor and the Head of the Terahertz and Millimetre Wave Laboratory at the Chalmers University of Technology. He was a Visiting Professor with the Submillimeter Wave Advanced Technology (SWAT) Group at Caltech/JPL, Pasadena, CA, USA, in 2007 and at TU Delft, the Netherlands, in 2020. He is also the co-founder of Wasa Millimeter Wave AB, Gothenburg, Sweden. Prof. Stake was the Editor-in-Chief for the IEEE Transactions on Terahertz Science and Technology between 2016 and 2018. He teaches semiconductor device physics and microwave engineering in different courses at Chalmers.https://www.linkedin.com/in/jan-stake-87ba826/
 **Yaqun Liu,** PhD student	**KTH,** Laser physics, Light and Matter Physics, KTH Royal Institute of Technology	https://www.linkedin.com/in/yaqun-liu-15b532333/
 **Esben Pilgaard Skovsen,** Associate Professor	**Aalborg University** Department of Materials and Production The Faculty of Engineering and Science Physics and Mechanics https://www.en.aau.dk/	Esben has a bragground within time-resolved and nonlinar optics and have more than twenty years hands-on experience working with ultrashort laserpulses and optica in general. Over the last ten years, Esben has built up a new research group at Aalborg University focussing on terahertz optics and spectroscopy. Other active research activities in our group includes development of nanostructured metamaterials for high-sensitivity terahertz spectroscopy, machine-learning assisted identification of specific substances using terahertz spectroscopy, THz Synthetic Aperture Radar (THz-SAR), development of THz photonic crystals, and nonlinear optical and THz spectroscopy. https://www.linkedin.com/in/esben-skovsen-37b6505/ https://vbn.aau.dk/en/persons/esben-pilgaard-skovsen

Session: Photonics Applications

 **Nicolò Maccaferri,** Assistant Professor	**Umeå University** https://www.umu.se/en/staff/nicolo-maccaferri/	In my group, we study fundamental aspects of light-matter interactions in materials and molecules by using frequency- and time-resolved (magneto-)optical spectroscopy, finite-element computational methods and bottom-up/top-down nanofabrication techniques. Our research is funded by Umeå University, the Swedish Research Council, the European Innovation Council, Kempestiftelserna, Wenner-Gren Foundations and the European Commission through the Marie Curie Fellowships program. We are also supported by the Knut and Alice Wallenberg Foundation through the Wallenberg Academy Fellow Programme and by the European Research Council through an ERC Starting Grant. Experimental Condensed Matter Physics, Docent in Photonics and Materials Science, Group Leader and Wallenberg Academy Fellow at Umeå University | ERC Grantee | Member of the Young Academy of Europe https://www.linkedin.com/in/nicol%C3%B2-maccaferri-a5695533/

 **Elias Kristensson,** Researcher	**Lund University,** Department of Physics	https://www.linkedin.com/in/elias-kristensson-404b33160/ https://www.lth.se/article/elias-kristensson-researcher-at-the-department-of-physics-receives-erc-starting-grant/
 **Matias Kagias,** Assistant Professor	**Lund University**	Matias Kagias joined Lund University as an assistant professor in 2023. His research is focused on developing and characterizing novel materials with structural control spanning several length scales. Specifically, he is interested in studying structure property relationships that arise in macroscopic materials due to nanoscale organizational control. The aim of his research is to enable materials with unprecedented properties that will contribute to sustainable development. He specializes in 3D nanofabrication and advanced X-ray characterization at 4th generation synchrotron sources. His research is currently funded by the Knut and Alice Wallenberg Foundation (KAW) through the WISE initiative. https://www.linkedin.com/in/matias-kagias-63557425/
 **Andriy Shevchenko, Dr.** Senior University Lecturer	**Aalto University,** Finland Department of Applied Physics	Andriy's areas of expertise are: Optics and photonics, Metamaterials, Nanotechnology, Statistical optics, Plasmonics. He has a Doctoral degree in Engineering and Technology from Helsinki University of Technology Award Date: 19 Oct 2004. https://www.linkedin.com/in/andriy-shevchenko-0ab77272/ https://www.aalto.fi/en/people/andriy-shevchenko
Session: Photonics and AI		
 **Giovanni Volpe,** Professor	**University of Gothenburg** Department of Physics https://softmatterlab.org/	Giovanni Volpe's research focuses on the intersection of physics and life sciences, specializing in the development of advanced imaging techniques using AI and optical tools. His work includes designing deep learning frameworks for high-resolution microscopy (e.g., the Python frameworks DeepTrack and Deeplay, the neuroscience software BRAPH and BRAPH2) and optical manipulation methods for single-cell studies (e.g., optical tweezers, light-sheet microscopy). https://www.linkedin.com/in/gvolpe/ https://www.scilifelab.se/researchers/giovanni-volpe/ https://smart.mit.edu/post/celebrating-scientific-achievement-professor-giovanni-volpe-receives-g%C3%B6ran-gustafsson-prize

 **Nils Henriksson,** PhD student	**Umeå University -** Ultrafast Nanoscience	Nils received his MSc in engineering physics at Umeå University in 2023, where hi specialized in calculational physics. His MSc focused on ultrafast dynamics of nanoscale materials, where he simulated a full pump-probe experiment. Today, Nils is a PhD student in the Ultrafast Nanoscience research group, supervised by Nicolò Maccaferri. In his project he studies ultrafast non-thermal magnetization dynamics of nanomaterials with both plasmonic and magnetic properties. Specifically, he is working on simulating such ultrafast effects. https://www.linkedin.com/in/nils-henriksson/ https://www.umu.se/en/staff/nils-henriksson/
 **Philippe Tassin,** Professor	**Chalmers University** Condensed Matter and Materials Theory, Physics	Dr. Tassin is professor of physics at Chalmers University, where he teaches physics, optics, quantum mechanics, and computer science courses. His teaching was recognized with the Golden Chalk by the students and with Chalmers' Pedagogical Prize. Philippe Tassin's research interests encompass the physics of electromagnetic structured materials and systems, including metamaterials, plasmonics, and nanophotonics. He received the BAEF Alumni Award from the Belgian-American Educational Foundation and the Frans Van Cauwelaert Award, one of the major awards of the Royal Flemish Academy of Belgium for Science and the Arts. https://www.linkedin.com/in/ptassin/ https://www.chalmers.se/en/persons/tassin/
TBD	**TBD**	**TBD**