

Optics & Photonics in Sweden 2025 (OPS) 21-23 October 2025

Kista, Stockholm at KTH-Electrum

 **PhotonicSweden**
The Swedish Technology Platform in Optics and Photonics



**Career Symposium
Kista**

Optics & Photonics in Sweden 2025 for Bachelor's and Master's students

- Overview of the photonics landscape
- Academic and industrial parallel sessions
- Exhibition and poster session
- Networking , career corner and matchmaking



22-23 October 2025 (9:00-18:00)

PhotonicSweden, KTH-Electrum (Kista)
Glasgatan. Kistagången 16, SE 164 29. Kista (Sweden)

Organized by



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kista
SCIENCE CITY



Register here
(by October 6th)



EUROPEAN UNION
European Regional Development Fund

 **PHOTONICS²¹**

PHOTONICS PUBLIC PRIVATE PARTNERSHIP
This project has received funding from the European Union Horizon Europe
research and innovation program under grant agreement No 871457.

GENERAL INFORMATION

The Optics & Photonics in Sweden conference (OPS 2025) will be held on 21-23 October 2025 in Kista, Stockholm at Electrum. The conference is organised by PhotonicSweden (PS).

More information: photonicsweden.org

LOCAL ORGANIZING COMMITTEE

- Mattias Hammar, KTH, Kristinn Gylfason, KTH

PROGRAMME COMMITTEE ACADEMIC SESSIONS

- Arne Alping, IEEE
- Cord Arnold, Lund universitet
- Petra Bindig, PhotonicSweden
- Joakim Bood, Lund universitet
- Kristinn Gylfason, Kungliga tekniska högskolan
- Mattias Hammar, Kungliga tekniska högskolan
- Fredrik Laurell, Kungliga tekniska högskolan
- Ana Predojevic, Stockholms universitet
- Sergiy Valyukh, Linköping universitet
- Max Yan, Umeå universitet

PROGRAMME COMMITTEE INDUSTRIAL SESSIONS

- Mårten Armgarth, PhotonicSweden
- Åsa Claesson, RISE
- Petter Elgh Ansys AB
- Petra Hardtke, Thorlabs
- Per Olof Hedekvis, RISE
- Olov von Hofsten, Eclipse Optics AB
- Julius Hållstedt, Excillum AB
- Elizabeth Ilyy, Cobolt AB - Hübner Photonics
- Lennart B.M. Svensson, PhotonicSweden
- Fredrik Wikfeldt, Laser Components AB
- Elisabet Österlund Svensk Elektronik
- Mikael Winters Coherent

KEYNOTE SPEAKERS

will highlight European research and developments.

INVITED TALKS

will cover a variety of topics in Optics and Photonics, reflecting current Swedish research and development at universities, institutes and industry.

POSTER SESSIONS

will provide an additional opportunity to display to the most recent developments and achievements. It will also give an overview of Optics and Photonics in Sweden and offer a good platform for creating new collaborations.

BEST POSTER AWARDS

The best poster will be awarded with 3,000 SEK
The second and third prize will be awarded with 1,000 SEK. The poster awards are sponsored by:



AN EXHIBITION AND A SESSION WITH COMPANY PRESENTATIONS

will be held in parallel to the technical sessions to provide industry, institutes, and associations an opportunity to display their products and services and bridge the gap between science and industry.

Contact: lennart@photonicsweden.org

ABSTRACT SUBMISSION FOR POSTER PRESENTATIONS

Authors are requested to submit an abstract of a half to one page (font 11, including figures and references). Contributions will be accepted for poster presentation. All authors are requested to register for the meeting separately from abstract submission.

Required poster size: The posters should have a maximum size of DIN A0 (841 x 1189 mm) preferably in a portrait format (not landscape format). Pins and similar pads will be provided by the organizer.

Abstracts shall be sent to petra@photonicsweden.org

Deadline for abstracts: 5 October 2025

SPONSORING OPPORTUNITIES

Please contact Lennart BM Svensson if you are interested in our exhibition and sponsor opportunities:

Contact: lennart@photonicsweden.org

FURTHER INFORMATION

For further information please go to

photonicsweden.org

CONFERENCE & EXHIBITION VENUE

Kungliga Tekniska Högskolan (KTH)

Electrum, Kista

Kistagangen 16

Isafjordsgatan 22 Taxistop

164 40 Kista

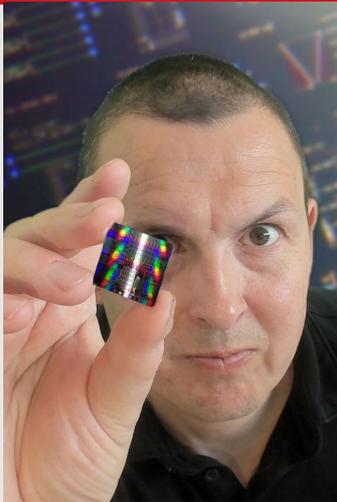
JOB FAIR AT EXHIBITION

We will arrange a matchmaking between companies and job seekers at the conference Optics and Photonics in Sweden 2025. It will take place on 22 and 23 October in the exhibition area. All exhibiting companies welcome students (graduates, undergraduates and PhD students) to discuss jobs, internships, etc.

APPLICATION FOR STUDENT FREE ADMISSION

Up to 40 students in a Bachelor's degree or Master's degree program can apply for free admission for OPS-2025. 20 are sponsored by ThorLabs Sweden AB, and 20 by Kista Science City.





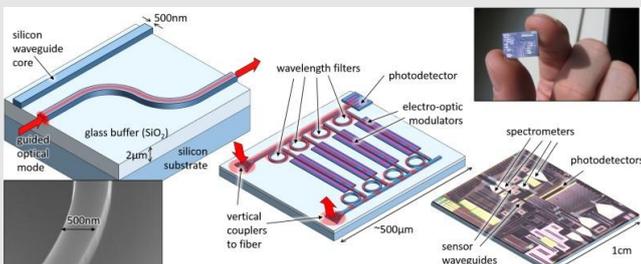
WIM BOGAERTS
 Professor at Ghent University/IMEC, Belgium

“Silicon photonics chip and its complex circuits performance of electrical-to-optical conversions and light coupling”

Biography



Wim Bogaerts is full professor in the Photonics Research Group of Ghent University and IMEC. He 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 technology 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. In 2019 he was an invited professor at EPFL in Lausanne, Switzerland. Wim teaches photonic circuit design techniques, at the level of master students as well as specialists in dedicated short courses. He is a very strong adept of Agile and Lean philosophies, with a passion to apply them to the peculiar ecosystem of academic research. He holds a black belt in Lean, and applies this in hands-on workshops for early-career researchers. 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.



JOHN LINCOLN
 Director, Chief Executive Harlin Ltd, UK

“Photonics present and future:- the scale and impact of as industry vital to the 21st century”

Biography

John Lincoln, Director, Harlin Ltd; Chief Executive, Photonics Leadership Group; Europe Strategy Director, SPIE; Member of multiple advisory boards

<https://www.linkedin.com/in/johnrlincoln/>

John is SPIE's Europe Strategy Director and Chief Executive of the UK Photonics Leadership Group supporting the alignment 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 opportunities 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.



Source: Photonics Leadership Group (PLG), 2025



YEN-CHIEH HUANG
Professor at National Tsing Hua University (NTHU),
Taiwan

“Photonic Chips for Electron Acceleration and Radiation.”

Biography

Professor Yen-Chieh Huang

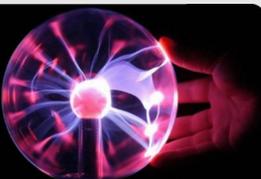
Co-inventor of laser-driven particle acceleration on a chip—a breakthrough poised to miniaturize high-energy accelerators. His compact design generates nano-electron bunches for x-ray superradiance, potentially brighter than large-scale synchrotrons, with applications in materials science and radiotherapy. He also holds the record for high-energy THz generation used in particle acceleration and is known as a highly inspiring speaker.

Prof. Huang is a distinguished professor at National Tsing Hua University (NTHU), Taiwan, where he has led major photonics centers. He’s renowned for pioneering work in nonlinear 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.

A key figure in global photonics, Prof. Huang has held visiting positions at Stanford, KTH, and Peking University, and collaborates widely. He’s authored numerous papers, patents, a widely used optics textbook, and helped organize over 40 conferences. His contributions span research, innovation, and outreach.

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Electronics Laboratory (HOPE Lab)
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... committed to create knowledge



CHARLOTT SAMUELSSON
Senior Vice President at Mycronic AB, Sweden

“More than 50 years of innovation – Mycronic’s journey to the heart of the display and semiconductor industry”

Biography

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.

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 commercial 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.

MYCRONIC



08:45 - 09:30 Room: **Glasgatan**
On-side registration and welcome coffee

09:30-09:45 Room: **Sal A**
Opening Remarks
Åsa Claesson, PhotonicSweden RISE, and Mattias Hammar, KTH

09:45-10:30
Keynote Talk:
Silicon photonics chip and its complex circuits performance of electrical-to-optical conversions and light coupling
Wim Bogaerts, Professor at Ghent University/IMEC

10:30-11:45
Exhibitor presentations

11:45-13:15 Room: **Glasgatan**
Lunch & Poster Session & Exhibition

13:15-14:00 Room : **Sal A**
Keynote Talk: *Session Chair: Lennart BM Svensson*
Photonics present and future:- the scale and impact of as industry vital to the 21 st century
John Lincoln, UK Photonics Leadership group

14:00-14:15 Room: **Sal A**
Break

Room: **Sal A**

14:15-15:35
Session A1 | Photonics and Artificial Intelligence
Session Chair:

14:15-14:35
TBD
Annie Lehmuskero, PhD, Senior optics specialist, Entangly AB

14:35-14:55
AI for Photonics and Microscopy
Giovanni Volpe, Gothenburg University

14:55-15:15
Dynamic nanoscale control of light
Magnus Jonsson, Linköping University

15:15-15:35
Artificial Intelligence as Photonic Design Engineers
Philippe Tassin, Chalmers Technical University

Room: **Sal B**

14:15-15:35
Session B1 | Photonics Applications
Session Chair:

14:15-14:35
Back in Swedish ownership - Continued global leadership in MEMS
Robert Kvist, Area Sales Manager Europe, Silex Microsystems AB

14:35-14:55
Pyramidal microLEDs in the same material system paving the way for RGB emission in micro displays
Per Olof Holtz, CSO, or Lisa Rullik, CTO, Polar Light Technologies AB, Linköping

14:55-15:15
High-Performance Laser Diodes for Advanced Application
Daniel Brauda, Sales and product manager laser, Toptica-Eagleyard GmbH

15:15-15:35
Shaping light and focusing with diffractive optics
Sara Abrahamsson, Ph.D. Freelance Optics specialist

CONFERENCE SCHEDULE

WEDNESDAY, 22 OCTOBER 2025

Room: **Sal A**

15:40-17:00

Session A2 | Terahertz

Session Chair:

15:40-16:00

Electronic solutions for generating terahertz signals

Jan Stake, Chalmers Technical University

16:00-16:20

Photonic crystal-based photonics for 6G wireless technology

Esben Pilgaard Skovsen, Aalborg University

16:20-16:40

Synthesised THz vortex fields based on nonlinear optics

Yaqun Liu, Royal Institute of Technology (KTH)

Room: **Sal B**

15:40-17:00

Session B2 | Photonics Metrology

Session Chair:

15:40-16:00

150 years of international collaboration of measurements, and the importance of optics in the evolution of accuracy

Per Olof Hedekvist, Ph.D. Senior Scientist, RISE, Borås

16:00-16:20

Adaptive Optics Solutions and Optical Metrology Tools applied by Imagine Optic

Audrius Jasaitis, Application Specialist and Sales, Imagine Optic, Paris

16:20-16:40

Meeting the optical challenges of evolving industrial and defense markets

Nada IRAQI, International business developer, HEF Groupe Photonics, France and Poland

17:00-19:00 **Poster Session & Exhibition**

Room: **Glasgatan**

19:00-22:30 **Conference dinner**

08:45 **Welcome coffee** Room: **Glasgatan**

09:30-10:15 **Keynote Talk** Room: **Sal A**
Photonic Chips for Electron Acceleration and Radiation. Session Chair:
Yen-Chieh Huang, Professor at National Tsing Hua University (NTHU), Taiwan

10:30-12:00 Room: **Sal A**
PhotonicSweden Awards and Poster Prize
 Session Chairs: *Mikael Sjöberg, Luleå University, and Peter Strömberg, Acoem AB*

12:00-13:30 **Lunch break and exhibition** Room: **Glasgatan**

13:30-14:15 Room: **Sal A**
Keynote Talk Session Chair:
More than 50 years of innovation – Mycronic’s journey to the heart of the display and semiconductor industry
Charlott Samuelsson, Senior Vice President at Mycronic AB, Sweden

14:15-14:25 **Break**

Room: **Sal A**

14:25-15:45 **Session A3 | Photonics Applications**

Session Chair:

14:25-14:45 **Aberration-insensitive optical imaging**
Andriy Shevchenko, Aalto University

14:45-15:05 **Interferometric femtosecond videography of ultrafast phenomena**
Elias Kristensson, Lund University

15:05-15:25 **Femtosecond activation of Bloch plasmon polaritons in transient plasmonic grating-coupled hyperbolic metamaterials**
Nicolò Maccaferri, Umeå University

15:25-15:45 **Dielectric metasurfaces for 3D nanofabrication**
Matias Kagias, Lund University

Room: **Sal B**

14:25-15:45 **Session B3 | Photonics Industrial Applications**

Session Chair:

14:25-14:45 **The age of the photon - Photons are indispensable to advanced manufacturing and the fabric of AI data-centers**
Mikael Winters, Ph.D. Area Sales Manager, Coherent

14:45-15:05 **Lasers for applications in quantum technology enabled devices**
Håkan Karlsson, CEO, Cobolt AB-HÜBNER Photonics, Sweden

15:05-15:25 **Expanding your quantum technology capabilities with high-performance optical solutions**
Clément Raigner, UK, Nordics & Benelux Sales Manager, Exail Photonics, France

15:25-15:45 **Design and manufacturing of optical systems at Thorlabs Sweden.**
Olle Rosenqvist, Development Manager, Thorlabs Sweden AB



KTH Electrumlab. View from outside at Isafjordsgatan 22



Aerial overview of central Kista. Photo by Gustav Kaiser/JM AB, CC BY-SA 4.0

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