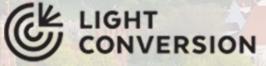


EPIC ANNUAL GENERAL MEETING

7-8 April, 2022 | Vilnius, Lithuania

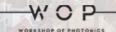


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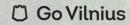




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OPENING OF EPIC ANNUAL GENERAL MEETING 2022



















EPIC BOARD OF DIRECTORS













Basil Garabet

Benno Oderkerk

Berthold Schmidt

Christian Bosshard

Jan Meise

Samuel Bucourt



Adam Piotrowski

Adam Piotrowski, CEO, Vigo Photonics (Poland)
Basil Garabet, President & CEO, NKT Photonics (Denmark)
Benno Oderkerk, President, EPIC (Netherlands)
Berthold Schmidt, Managing Director, TRUMPF Photonic Components (Germany)
Christian Bosshard, Managing Director Swissphotonics (Switzerland)
Jan Meise, CEO, ams Technologies (Germany)
Samuel Bucourt, CEO, Imagine Optic (France)





EPIC STAFF































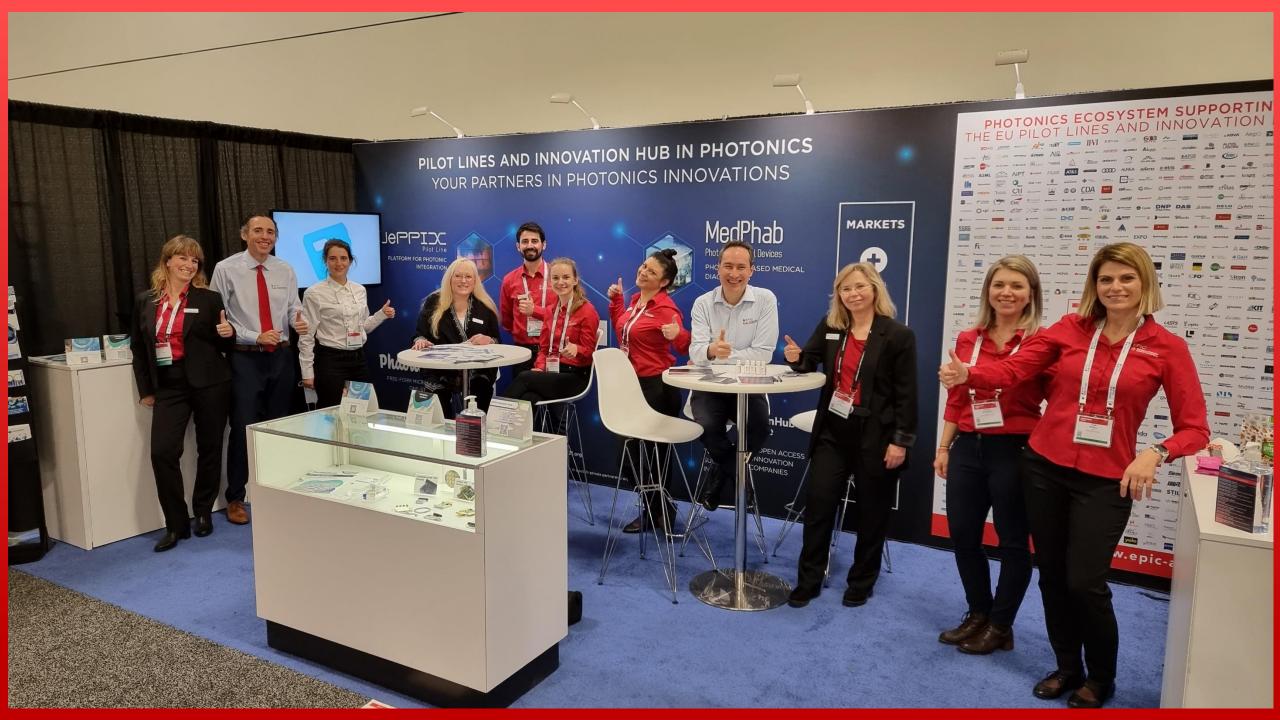














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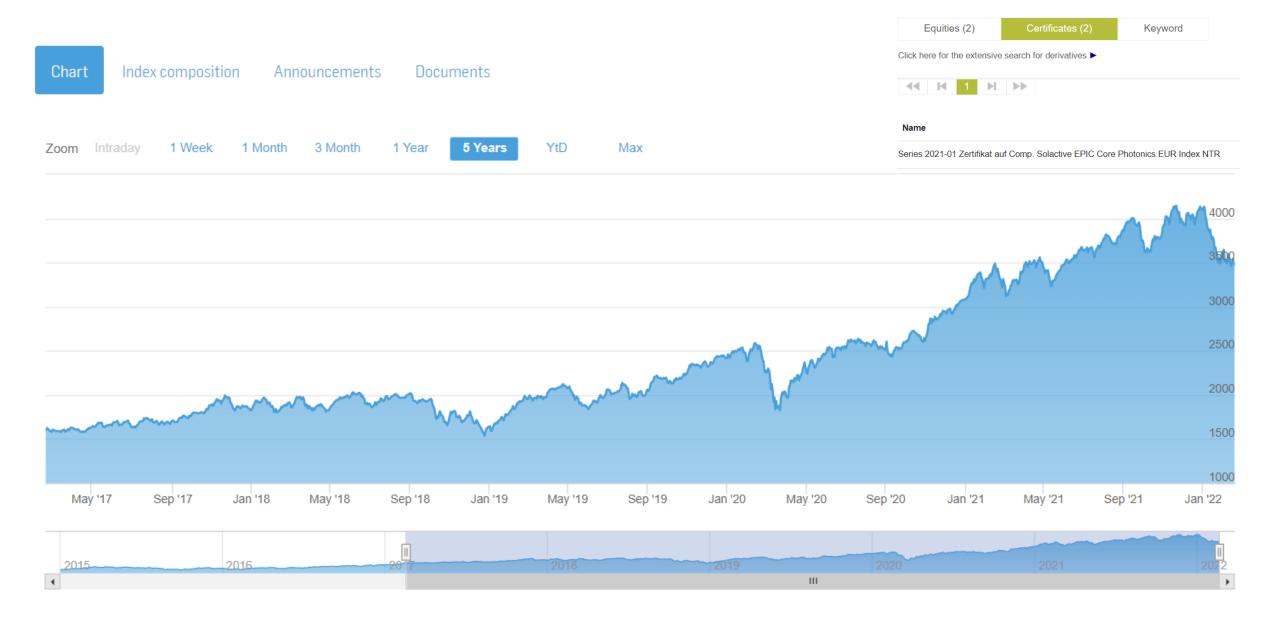








Solactive EPIC Core Photonics EUR Index NTR



BÖRSE

FRANKFURT





























EPIC – European Photonics Industry Consortium Founded in 2003 by Dr. Tom Pearsall Sustainable and Competitive European Photonics Industry



EPIC REVIEW 2021



THE ASSOCIATION



EPIC – European Photonics Industry Consortium – is an industry association that promotes the sustainable development of organisations working in the field of photonics. We foster a vibrant photonics ecosystem by maintaining a strong network and acting as a catalyst and facilitator for technological and commercial advancement.

EPIC IS OWNED BY ITS MEMBERS AND MANAGED BY ITS BOARD OF DIRECTORS

Adam Piotrowski, CEO, Vigo System (Poland)

Basil Garabet, President & CEO, NKT Photonics (Denmark).

Benno Oderkerk, President, EPIC (Netherlands)

Berthold Schmidt, Managing Director, TRUMPF Photonic Components (Germany)

Christian Bosshard, Managing Director Swissphotonics (Switzerland)

Jan Meise, CEO, AMS Technologies (Germany)

Samuel Bucourt, CEO, Imagine Optic (France)















EPIC Board of Directors meeting hosted by NKT Photonics in Denmark

EPIC publishes market and technology reports, organizes technical workshops and B2B round-tables, takes part in advocacy and lobbying, promotes education and training activities, supports standards and roadmaps, hosts pavilions at exhibitions, connects with investors, scouts companies, and helps recruit skilled talent.

EPIC IS SUPPORTED BY AN INTERNATIONAL TEAM OF HIGHLY SKILLED PROFESSIONALS



Anna Trachtova, MSc, Marketing Manager
Antonio Raspa, MSc, Senior Program Manager
Auri Ripoll, MSc, Marketing Manager
Carlos Lee, MBA, Director General
Elisenda Lara, MSc, Marketing Manager
Francesca Moglia, PhD, Program Manager
Helena Jelinkova, Events Manager

Ivan Nikitski, PhD, Program Manager
Jérémy Picot-Clemente, PhD, Program Manager
Jose Pozo, PhD, Director of Technology
Neringa Noreikiené, MSc, Events Manager
Panagiotis Vergyris, PhD, Program Manager
Ulrike Helfferich, Chief Operations Officer
Tracey Vanik, Head of Photonics Market Research

MEMBERSHIP FEE

Company with annual revenue above EUR 250 million	EUR 10200
Company with annual revenue between EUR 100-250 million	EUR 8160
Company with annual revenue between EUR 50-100 million	EUR 6120
Company with annual revenue between EUR 10-50 million	EUR 4080
Company with annual revenue below EUR 10 million	EUR 2040
Start-up (company less than 5 years)	EUR 510-204
Technology Research Organization, University	EUR 2040
Cluster, Association	EUR 2040

EPIC TECHNOLOGY MEETINGS



EPIC strengthens the connections among its members by creating fora to meet, discuss challenges and opportunities, and explore collaboration possibilities. During 2021, faceto-face events were limited, therefore EPIC continued its engaging and dynamic online technology meetings.

The EPIC Online Technology Meeting on Laser Micromachining was very valuable to attend and contribute. I've been able to make some valuable connections with EPIC suppliers to add to our company's portfolio of technology offerings. In addition to the cutting-edge technology, I have found that the EPIC community has a collaborative, thoughtful, and joyful mindset, which makes it a pleasure to work with.

Mark Turner, CEO and Founder at Turner Laser Systems



06

ONLINE TECHNOLOGY MEETINGS

- 1. EPIC Online Technology Meeting on Exploring Emerging Applications for Photonic Integrated Circuits
- EPIC Online Technology Meeting on 3D Printed Optics: State of the Art and Applications
- 3. EPIC Online Technology Meeting on Advanced Laser Manufacturing for Automotive
- 4. EPIC Online Technology Meeting on Advanced Photonics in Urology
- EPIC Online Technology Meeting on Automated Packaging & Testing of Photonic Integrated Circuits
- 6. EPIC Online Technology Meeting on Challenges for Laser Optics
- 7. EPIC Online Technology Meeting on Challenges for LED/MiniLED/MicroLED
- 8. EPIC Online Technology Meeting on CMOS Imagers Applications (in cooperation with EMVA)
- 9. EPIC Online Technology Meeting on Commercial Challenges for Photonics as 5G Booms (in cooperation with COBO & EA)
- 10. EPIC Online Technology Meeting on Current and Future Challenges for Laser Cutting
- 11. EPIC Online Technology Meeting on Fake Drugs, Forensic Sciences and Anti-counterfeiting
- 12. EPIC Online Technology Meeting on Graphene Technology and Applications
- 13. EPIC Online Technology Meeting on Growing Markets for Metal 3D Printing
- 14. EPIC Online Technology Meeting on Growing Needs for Ultrafast, High Power Laser Applications
- 15. EPIC Online Technology Meeting on Head-Up Displays: from 2D to AR

- 16. EPIC Online Technology Meeting on Human-centric Lighting and Applications
- 17. EPIC Online Technology Meeting on Impact of Photonics on Sustainable Textiles, Wearables, Fashion and Design
- 18. EPIC Online Technology Meeting on Increasingly Important Role for Mid-Infrared Photonics
- 19. EPIC Online Technology Meeting on Ion Traps, Gravitometers, and other Quantum Sensors
- 20. EPIC Online Technology Meeting on Laser Ablation and Laser Cleaning
- 21. EPIC Online Technology Meeting on Laser Micromachining
- 22. EPIC Online Technology Meeting on Laser Vision Correction (LASIK, PRK, LASEK, RLE)
- 23. EPIC Online Technology Meeting on LiDAR 2.1 Applications for 2021
- 24. EPIC Online Technology Meeting on Low Light Cameras Technology and Applications
- 25. EPIC Online Technology Meeting on Market Expectations for Specialty Fiber and Fiber Sensors Applications
- 26. EPIC Online Technology Meeting on Medical Devices
- 27. EPIC Online Technology Meeting on Medical Devices for Surgical Procedures
- 28. EPIC Online Technology Meeting on Mid-IR Technologies for Industrial Manufacturing (in cooperation with Mid-IR Alliance)
- 29. EPIC Online Technology Meeting on Mid-IR Technologies for Security & Surveillance (in cooperation with
- 30. EPIC Online Technology Meeting on Mini/Micro LED (in cooperation with ISA and PIDA)



EPIC TECHNOLOGY MEETINGS



- 31. EPIC Online Technology Meeting on Moulded Optics
- 32. EPIC Online Technology Meeting on New Developments for Microwave Photonics
- 33. EPIC Online Technology Meeting on New Developments in FMCW LiDAR
- 34. EPIC Online Technology Meeting on New Medical Devices Making the Impossible Possible
- 35. EPIC Online Technology Meeting on Next Steps Fast Growing Freeform Optics Applications
- 36. EPIC Online Technology Meeting on Next Steps for Smart Glass in AR and Related Applications
- 37. EPIC Online Technology Meeting on Novel Photonic Solutions for Microscopy
- 38. EPIC Online Technology Meeting on Photonics for Cosmetic and Beauty Industry
- 39. EPIC Online Technology Meeting on Photonics for Robotics (in cooperation with EMVA)
- 40. EPIC Online Technology Meeting on Photonics for the Food & Beverage Industry
- 41. EPIC Online Technology Meeting on Photonics Impact on Green Energy Generation: Photovoltaics, Wind, Hydrogen, Wave
- 42. EPIC Online Technology Meeting on Photonics Robotics
- 43. EPIC Online Technology Meeting on Photonics Sensors for Safer and Intelligent Oil & Gas Producers
- 44. EPIC Online Technology Meeting on PIC Packaging
- 45. EPIC Online Technology Meeting on New Space Communications and Monitoring
- 46. EPIC Online Technology Meeting on Roadmap 2021 for Beyond 400G Ethernet Optics
- 47. EPIC Online Technology Meeting on Roadmap 2021 for Co-packaged Optics
- 48. EPIC Online Technology Meeting on Spectroscopy and Imaging for Process Monitoring
- 49. EPIC Online Technology Meeting on The Role of Photonic Sensors and Lighting in Advanced Agri-Photonics
- 50. EPIC Online Technology Meeting on VCSEL Manufacturing and Applications
- 51. EPIC Online Technology Meeting on White Lasers and Supercontinuum Generation



The EPIC Online Technology Meeting on VCSEL Manufacturing and Applications was amazing. It was a privilege to be able to introduce our company to such an amazing plethora of companies. It was a very useful portal to join together with technological developers and end-users, besides, the presentations were very dynamic and full of pragmatism.

Karthik Suresh Iyer, Product Manager at Instrument Systems



ONLINE QUANTUM TECHNOLOGY MEETINGS

- 52. EPIC Online Quantum Technology Meeting on Essential Key Strategies for Tomorrow's Security and Defence Sectors
- 53. EPIC Online Quantum Technology Meeting on Implementing Secure Strategies for Past, Present & Future Communications
- 54. EPIC Online Quantum Technology Meeting on Large Scale Qubit Generation
- 55. EPIC Online Quantum Technology Meeting on New Opportunities Now for the Quantum Photonics Supply Chain
- 56. EPIC Online Quantum Technology Meeting on Next-Generation Transport and eMobility
- 57. EPIC Online Quantum Technology Meeting on Photonics for Accelerating Qubit Generation and Quantum
- 58. EPIC Online Quantum Technology Meeting on Quantum is Key to More Effective, Affordable, Personalized
- 59. EPIC Online Quantum Technology Meeting on Atomic Clocks and Network Synchronization



EPIC MEMBERS IN THE SPOTLIGHT



EPIC systematically promotes the members of the association and continuously explores additional means to increase awareness of their products and services. With our thousands of social media followers and subscribers, the online environment has proven to be an effective platform for those engaging with us. Although these initiatives originated from the pandemic, given the positive feedback, EPIC will continue with online events on a weekly basis because they are efficient.

EPIC MEMBERS PRODUCT RELEASES AND NEW **PRODUCT LAUNCHES**

- 1. AEMtec
- 2. asphericon
- 3. Cailabs
- 4. Chilas
- 5. Class 5 Photonics
- Demcon/DUI
- 7. DIAMOND
- 8. Duma Optronics
- 9. Dynamic Optics
- 10. Edmund Optics
- 11. Emberion
- 12. Femto Easy
- 13. Femtum
- 14. Focuslight
- 15. HILASE

- 16. Imagine Optic
- 17. Instrument Systems
- 18. Iridian
- 19. Jabil Optics
- 20. Laser Components
- **21.** LaVa-X
- 22. Lidaris
- 23. LightTrans International
- 24. Litilit
- 25. Luceda Photonics
- 26. Luxinar
- 27. Lyncée Tec
- 28. Lytid
- 29. Materion Balzers Optics
- 30. Miraex

- 31. mirSense
 - 32. MPS Micro Precision Systems
 - 33. nanoplus
 - 34. Nireos
 - 35. OCTLIGHT
 - 36. OPTOMAN

 - 37. Optoprim
 - 38. PanDao
 - 39. Phasics
 - 40. SFC Energy
 - 41. Teraxion
 - 42. UniKLasers
 - 43. VPIphotonics
 - 44. Xenics

As a growing photonics start-up, our challenges are sometimes quite different from companies in other fields. Being a member of a network like EPIC allows us to connect with executives from young and established companies, as well as large industrial corporations. Those links with people who are facing or have faced similar challenges bring tremendous value to the community.

Robert Riedel, CEO at Class 5 Photonics



I am very grateful for the support of EPIC for the Chilas New Product Launch. EPIC has been a true enabler in bringing our lasers to the world! I have greatly enjoyed working with the EPIC team, and cherish their dedication and professionalism that made the event a big success.

Sami Musa, CEO at Chilas



EPIC has built an amazingly strong network of companies focused on collaboration to reach the synergy effect. A very valuable resource for our company and the Photonics industry.

Viacheslav Artyushenko, President at art photonics



EPIC VIRTUAL COMPANY TOURS

- 1. art photonics
- 2. Canadian Photonics Fabrication Centre
- 3. CMC Microsystemss
- 4. CSEM
- 5. EPIC Centre
- 6. EXFO
- 7. Fraunhofer FEP
- 8. University of Latvia Institute of Solid State Physics
- 9. MEETOPTICS
- 10. Micro-LAMs
- 11. Touchless Automation
- 12. UniKLasers



















EPIC MEMBERS IN THE SPOTLIGHT



In these series of interviews, we ask leaders of EPIC member companies to share with us their experience on the challenges and opportunities to run a company, the critical steps in the growth of the organisation, and to share tips to inspire future entrepreneurs.

C-LEVEL INTERVIEWS 2021

- 1. Alessandro Vannucchi, CTO, Cordon Electronics
- 2. Anja Roeding, Director, UK Metamaterials
- 3. Antti Penttinen, CEO, PicoPhotonics
- 4. Barbara Buades, CEO, MEETOPTICS
- 5. Badre Kerzabi, CEO, SOLNIL
- 6. Ben Rubovitch, CEO, DustPhotonics
- 7. Brendan Casey, CEO, Kelvin Nanotechnology
- 8. Carlos Abellan, CEO, Quside
- 9. Claude Florin, CEO, Fastree3D
- 10. Claudio Meli, CEO, WZW
- 11. Cosimi Corleto, CEO, STIL
- 12. David Mackey, CTO, Mbryonics
- 13. Dimitris Tsiokos, CEO, bialoom
- 14. Florent Thibault, CEO, QiOVA
- 15. Ying Lia Li, CEO, Zero Point Motion
- 16. Fokko Wieringa, Principal Scientist, imec
- 17. François Coursaget, CEO, NIT
- 18. Holger Berthelsen, Managing Director, IHB Consulting & Trading
- 19. Hugues Tariel, CEO, Diafir
- 20. Jan Stensborg, CEO, Stensborg
- 21. Javier Marti, CEO, DAS Photonics
- 22. Jean-François Morizur, CEO, Cailabs
- 23. Jean-Louis Gentner, CEO, Almae Technologies
- 24. Jimena García-Romeu, CEO, Alcyon Photonics
- 25. Jonas Zeuner and Chiara Greganti, Managing Directors, VitreaLab
- 26. Karsten Droegemueller, CEO, IX-CAD
- 27. Koichiro Ikeda, CEO, Isuzu Glass
- 28. Maik Müller, CEO, Nynomic
- 29. Maria Chiara Ubaldi, CEO, CareGlance
- 30. Martina Mueller, CEO, 3D AG

















- 31 Michael Gutmann, CEO, LIOP-TEC
- 32. Mike Richardson, Managing Director, Photonics Insights
- 33. Nicoletta Casanova, CEO, FEMTOprint
- 34. Peter Geiser, CTO, NEO Monitors
- 35. Petr Tůma, CEO, 4isp
- 36. Philippe Bolle, CEO, Skylane Optics
- 37. Philippe Raisin, CEO, 8photonics
- 38. Rob Voorkamp, General Manager, SCIL Nanoimprint Solutions at Philips
- 39. Sami Musa, CEO, Chilas
- 40. Shahida Imani, CEO, Chromacity
- 41. Thomas Klein, CEO, Optores
- 42. Tim Hellwig and Maximillian Brinkmann, CEOs, Refined Lasers Systems
- 43. Vladimir Kozlov, CEO, LightCounting



























































EPIC MEMBERS IN THE SPOTLIGHT

EPIC CEO AWARD

The EPIC CEO Award 2021 was presented to Torsten Vahrenkamp, CEO and co-founder of ficonTEC. Scan the QR code to watch the video interview in which Torsten describes why ficonTEC was originally positioned in the middle of the photonic device value chain focusing mainly on the machines that were going to make the packaging. During the conversation, Torsten reveals when he encountered Photonics Integrated Circuits for the first time and provides some unique insights on this and other significant historical milestones in the growth of ficonTEC.





Scan this QR Code to watch the full interview.

Torsten Vahrenkamp, CEO of ficonTEC (right) is honored with the EPIC CEO Award 2021 by Jose Pozo, CTO of EPIC (left).



SOLACTIVE EPIC CORE PHOTONICS CERTIFICATE

Solactive EPIC Core Photonics Index Historical Performance



Solactive EPIC Core Photonics EUR Index — MSCI World

Source: Solactive AG. The Solactive EPIC Core Photonics Index went live on 28 May, 2021. All performance shown prior to the live date has been retrospectively calculated by applying the Index Methodology. Past performance is not indicative of future results.

The Certificate

listed On the Frankfurt Stock Exchange, tracks the performance of the Solactive EPIC Core Photonics Index and is available for Retail and Institutional Investors with the ISIN code XS2412871902. Contact your investment advisor or broker for advice.

The Solactive EPIC

Core Photonics Index is the first of its kind to represent a global cross-section of the world's largest and most liquid public photonics companies and includes all companies with at least 50 percent of their revenues sourced from photonics manufacturing activities. This means that for the first time, investors will be able to specifically target their investments to the photonics industry through a single investment product.



www.solactive.com

EPIC ON STAGE



EPIC was invited to moderate panel discussions, chair conferences, open exhibitions, present awards and speak at 36 events. It was our pleasure to be welcomed on stage at the following events.

- 1. EPIC moderated at 5th European Space Generation Workshop: Panel Space and Quantum Technology
- 2. EPIC moderated at Aachen Polymer Days
- 3. EPIC moderated at Design Manufacturable AWGs with IPKISS and the Ligentec PDK Training
- 4. EPIC moderated at EXFO TEST Talk 2 on Photonics Integrated Circuits: Disruptive Innovation Play
- 5. EPIC moderated at IEEE Photonics Society Conference Entrepreneurship Panel
- 6. EPIC moderated at Laser Components Week
- 7. EPIC moderated at PIC International AngelTech Virtual LIVE III
- 8. EPIC moderated at Pilot Line Day organised by AngelTech
- 9. EPIC moderated at PITC Photonic Integration Technology Center
- 10. EPIC moderated at the Innovation and Photonics Technologies: now you can! during the EU Industry Days
- 11. EPIC moderated at Webinar with PhotonDelta and Fotónica21
- 12. EPIC presented a keynote at Laser Focus World Photonics Next Summer Summit
- 13. EPIC presented a keynote at SPIE Photonex in Glasgow: Accelerating the industrial take-up of photonic integration
- 14. EPIC presented as a panellist at Graphene Week by EU Graphene Flagship on the panel Graphene for Optoelectronics & Photonics Industry
- EPIC presented as a panellist at Industry Insights: A Conversion with EPIC Director of Technology and Innovation, Jose Pozo and Zemax CTO, Sanjay Gangadhara
- 16. EPIC presented as a panellist at Zemax forum on Optics for Automotive
- 17. EPIC presented as a panellist at Zemax Webinar: Industry Insights: The future of cell phone camera lens manufacturing panel
- 18. EPIC presented at Digital Business Disruptors Photonics for Business Webinar
- EPIC presented at ECOC in Bordeaux: Emerging Industrial Manufacturing Requirements Including Private 5G Communications, IIoT Sensors, and Security
- 20. EPIC presented at ECOC's Optical Connections Webinar: Replacing the copper infrastructure
- 21. EPIC presented at European Machine Vision Association (EMVA)
- 22. EPIC presented at Global Advanced Optoelectronic Technology and Industry Development Seminar (IPEC/CIOE)
- 23. EPIC presented at IEEE Group IV Photonics Conference: Photonic Developments Utilizing Group IV Materials
- 24. EPIC presented at IEEE IPC Photonics Industry Days Conference: 5G in Industrial Manufacturing
- 25. EPIC presented at InP-based Photonic Integrated Circuits workshop in Madrid
- 26. EPIC presented at Industrial VISION Days
- 27. EPIC presented at IEEE International Workshop on Fiber Optics in Access Network: Advantages of Photonics in 5G Networks: Base Station to Backbone & the Importance of Synchronization
- 28. EPIC presented at in Vision TechTalks: 7 Technology Trends in Photonic Sensors and Cameras 2022
- 29. EPIC presented at ISB University, Kampala, Uganda: International Symposium on Optoelectronics and Photonics
- 30. EPIC presented at ISOP-2021 Uganda Conference: Opportunities in Photonics Post-COVID
- 31. EPIC presented at Online Findings on 5G Requirements Driving Photonics Opportunities

- 32. EPIC presented at Photonics Day Berlin Brandenburg
- 33. EPIC presented at RAPDASA Annual Conference organised by CSIR
- 34. EPIC presented at Sensors International in Brussels: New Trends on Photonics Sensors and Cameras
- 35. EPIC presented at several company internal strategy meeting
- 36. EPIC presented at Wiley Industry Days: Photonic Industrial Applications
- 37. EPIC presented Welcome Address at IPEC in partnership with CIOE in China
- 38. EPIC presented Welcome Address at PIC International in Brussels



EPIC attends most as we consider these valuable tools to stay connected with the photonics community. It was our pleasure to be present at the following events.

- 1. AngelTech Virtual Summit
- 2. COMPAMED Trade Fair in Düsseldorf
- 3. ECOC in Bordeaux
- 4. EMO in Milan
- 5. EU Industry Days in Brussels
- 6. Formnext trade show in Frankfurt
- Graphene Week EU Graphene Flagship Virtual Event
- International Photonics & Electronics Committee/ China International Optoelectronic Exposition in Shenzhen

- 9. Medtec Live in Nuremberg
- 10. OptecNet Jahrestagung in Hannover

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- 11. Photonics Days in Berlin
- 12. PIC International in Brussels
- 13. SPIE Photonex in Glasgow
- 14. VISION in Stuttgart
- 15. W3+Fair in Wetzlar

NETWORKING EVENTS

EPIC builds a trusted photonics community by creating many networking opportunities among its members and their customers, and VIPs from the photonics industry. In this way, companies get to know each other better and people build a long-lasting trustful relationship.

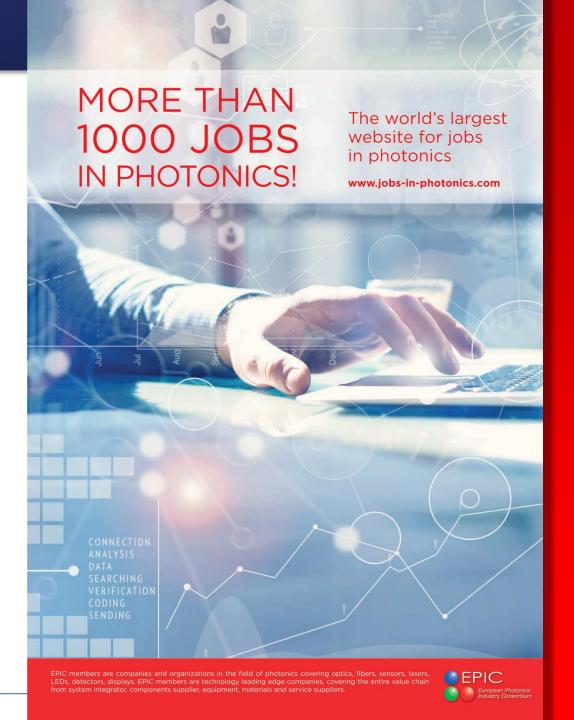
- 1. EPIC Annual General Meeting
- 2. EPIC Members Dinner in Copenhagen
- 3. EPIC Members Dinner in Munich
- EPIC VIP Networking Breakfast W3+Fair Rheintal in Dornbirn
- 5. EPIC VIP Party at ECOC in Bordeaux
- 6. PHOTONICS+ Virtual Exhibition and Conference
- 7. Day of Light Open Networking
- 8. DAY OF PHOTONICS



I would like to congratulate the EPIC team for the way they run their meetings, always very refreshing, interesting, and motivating, ending with a great result. I look forward to attending upcoming EPIC meetings.

Christian Schröter, Sales Director at Optoprim Germany





MARKET REPORTS



Every employee of a company member of EPIC has free access to the EPIC library on the extranet. The extranet is simple to use, and you can conveniently download hundreds of technology presentations and numerous market reports. In 2021 EPIC has started to create specially curated market reports targeting emerging technologies and trends to better address the needs of the members.

https://extranet.epic-assoc.com

2021 EPIC Market Report on 5G X-Haul Photonics by fibeReality

2021 EPIC Market Report on Imaging Breast and Prostate Cancer by Tematys

2021 EPIC Market Report on Automotive Interior Lighting by Optiross

2021 EPIC Market Report on Elevated Body Temperature Screening by Dr. Schmitt Consult



The talk that Tracey Vanik, EPIC's Head of Photonics Market Research, gave at the 9th International workshop on Fiber Optics in Access Networks, on Advantages of Photonics in 5G Networks, was excellent! I have been involved with optical fiber communications and photonics or over 25 years and I truly enjoyed her presentation.

Gerd Keiser, Research Professor at Boston University



PAST MARKET REPORTS INCLUDE:

- 3D Sensors Market
- Automotive Advanced Driver Assistance System Market
- CMOS Image Sensors Market
- Blue Laser Diode Market Report
- · Commercial Drones Market
- Fiber Laser Market
- · Fiber Optics Market
- · High-End Inertial Sensors for Defense, Aerospace & Industrial Applications Market Report
- · Laser Technology Market Global Forecast
- Machine Vision Camera Market
- Mask Inspection Equipment Market
- · Metal Additive Manufacturing Global Market
- · Fiber Optics Market Report
- Infrared Sensors Market Report
- InP Wafer and Epiwafer Market
- · Photonics and RF Market Report
- · Light Therapy Global Market
- · Medical Sensors Market Report
- · Sapphire Glass Market
- · Vision Processing Unit Market
- Semiconductor Process Control Equipment Market Report
- · Silicon Photonics and Photonic Integrated Circuits Market Report
- · Smart Glass Market Report
- · Status of Camera Module Industry Focus on Wafer Level Optics Market Report
- Two Photon Laser Scanning Confocal Microscope Market Report

EPIC ADVOCACY



As the voice of the Photonics industry, EPIC represents member interests throughout the year, working with policymakers, industries, associations, and other stakeholders who are shaping the business and regulatory environment. Our collective voice is strong thanks to the active and direct involvement of our members. EPIC has regular engagements with governmental bodies including the European Commission, European Parliament, and European Investment Bank. EPIC continuously advocates to ensure photonics is being recognised as a key enabling technology. Our industry's success is reflected in the European Commission's "New Industrial Strategy for Europe" where photonics is specifically mentioned.

FINANCE AND INVESTMENT

Photonics is a key pervasive technology that enables innovative and revolutionary solutions and products in diverse markets. To support potential investors find their way in this dynamic market. EPIC organises activities including special lunches, meetings, and visits to show investors the potential of photonics. Additionally, EPIC is a member of the advisory board of Innorate, bringing innovation to finance and finance to innovation. As a member of the Tech Tour Photonics 2021 selection panel, we encourage EPIC members to actively participate and reach out to the investor community.

www.epic-assoc.com/advocacy/venture-finance

EPIC permanently maintains a list of investments and M&A that is available on www.photonics-index.org

Solactive EPIC Core Photonics Index Historical Performance

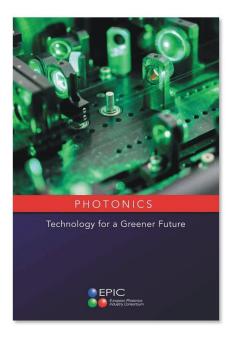


Source: Solactive AG. The Solactive EPIC Core Photonics Index went live on 28 May, 2021. All performance shown prior to the live date has been retrospectively calculated by applying the Index Methodology. Past performance is not indicative of future results.

Released in 2021, the Solactive EPIC Core Photonics Index is the first of its kind to represent a global cross-section of the world's largest and most liquid public photonics companies and includes all companies with at least 50 percent of their revenues sourced from photonics manufacturing activities.



Scan the QR code to link to the Solactive EPIC Core Photonics EUR Index NTR



Published in 2021, the brochure "Photonics Technology for a Greener Future" describes in non-technical terms for a general audience how photonics is making a positive contribution in numerous fields including environmental, industrial manufacturing, consumer products, industrial lasers, healthcare, communication, and transportation.

You can download the brochure from this QR code:



EPIC is an advocate for the photonic industry with both the investment community and public authorities throughout the year. Recognition of Photonics as a key enabling technology helps members with funding grants, investment, and a generally positive regulatory environment.

21 22

OUTREACH



EPIC continues to build a global network of decision-makers and experts. By interacting with the industry, we learn about the latest technology developments, understand manufacturing challenges and explore business and collaboration opportunities for our members. In 2021, due to pandemic travel constraints, we didn't travel as much as in previous years, and couldn't travel to Asia nor America. But we are grateful for the 69 companies that we were able to visit in Europe!





TALENT ACQUISITION SUPPORT

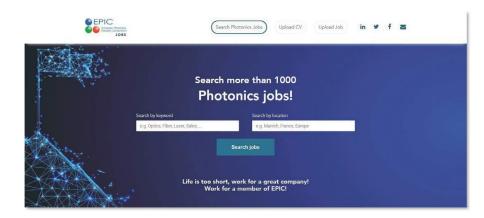


EPIC knows the photonics market is booming as we see an increasing number of job opportunities. To support our members in finding qualified talent, EPIC offers several services for its members.

THE BIGGEST WEBSITE ABOUT PHOTONICS JOBS IN THE WORLD

EPIC currently has 223 EPIC members across 53 countries that are hiring. Collectively, there are more than 1260 open positions that can be found on the biggest database of jobs in Photonics.

www.jobs-in-photonics.com



RECRUITMENT SUPPORT

At the industry level, we need to ensure there is sufficient qualified talent for a stable work force. EPIC members EO, Insight Technology Search, Houmault.com, Orion Engineering, Profound Resources, and VISION MARKETS are partners committed to attract talent from other fields, retain talent in the photonics industry, and motivate potential candidates to join our exciting community.

This year, EPIC organised two online meetings, specifically dedicated to this field:

- 1. EPIC Online Meeting on Successful Recruitment in Photonics: Orion Engineering
- 2. EPIC Webinar on Optimizing R&D Taxation





Thanks to the Jobs in Photonics website, we've just hired a great young PhD scientist, with a diverse background to train as a patent attorney.

Robert Harrison, Managing Partner at SONNENBERG HARRISON



EPIC MENTORS IN PHOTONICS

The EPIC website includes a section on Mentors in Photonics. Here, EPIC members can find inspiring leaders in photonics who are willing to share their expertise and knowledge with colleagues in the industry exploring new applications or perhaps looking to expand their territories. This is a unique platform to connect and learn from industry experts.

www.mentors-in-photonics.com

There aren't many networks who are so active and helpful as EPIC and its team. It is really a pleasure to be a member of EPIC!

Anne-Julie Maurer, Head of Marketing and Communications at Fraunhofer IPMS



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EPIC IN THE MEDIA



EPIC published editorials, articles, interviews, webinars, podcasts, published in partnership with leading media. During 2021, EPIC has published 20 technology articles in several publications with our preferred media partners:

- 1. Additive Manufacturing Ecosystem Continues to Adapt to Industry Demands Published in Europhotonics
- 2. Brave New World (Wearable biosensors) Published in Medical Device Developments
- 3. CMOS Sensors Drive Low-Light Imaging Applications Published in Europhotonics
- 4. EPIC grows membership, delivers new services amidst pandemic headwinds Published in PIC Magazine
- 5. Exploring Emerging Applications for Photonic Integrated Circuits Published in PIC Magazine
- 6. Industrialization of quantum communication technologies Published in Photonics Views
- 7. Laser cleaning offers versatility for a broad range of applications Published in Laser Focus World
- 8. Laser for naval applications Published in Applicazioni Laser
- 9. Laser Micromachining Published in Applicazioni Laser
- 10. Looking to the future of quantum cascade lasers Published in Laser Focus World
- 11. Nanophotonics for Data Centres, 5G and Quantum computing Published in Europhotonics
- 12. New challenges for the laser micromachining community Published in Photonics Views
- 13. Photonic components set course for autonomous driving Published in Europhotonics
- 14. Photonic challenges in the next generation of Ethernet Published in PIC Magazine
- 15. Photonics in Germany Published in Photoniques
- 16. Spectroscopy for food Published in Photonics Views
- 17. The Future Beyond 400 Gigabit Ethernet Published in PIC Magazine
- 18. Towards the industrialization of metal additive manufacturing Published in PhotonicsViews
- 19. The photonics index Published in Applicazioni Laser

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20. European manufacturing capabilities for photonics Published in PhotonicsViews





MEDIA PARTNERS



















DAY OF PHOTONICS

DAY OF PHOTONICS is an annual event that specifically promotes the word "photonics" towards the general public. Companies, research organisations, and organisations involved in photonics reach out to their communities to raise awareness about what is photonics why it is important and promote the role of their organisation in the photonics ecosystem and value chain. In 2021, the campaign was hosted by Photonics superhero Stella who raised the #GooglePhotonics challenge with the goal of increasing the number of searches of the term "Photonics" on Google Search worldwide. And also, the recently created character appeared in a music video for the song "Stand by your Girl", that was released on 21 October, the Day of Photonics. A Reddit AMA "Ask Me Anything" was also organized on the occasion. www.day-of-photonics.org



















EPIC ACTIVITY REPORT 2021

EUROPEAN INITIATIVES & PILOT LINES IN PHOTONICS



EPIC participates in 9 European funded initiatives and pilot lines to support the European Ecosystem for photonics.



JePPIX Pilot Line. Manufacturing pilot line for Indium Phosphide PICs offering design, manufacturing and testing services.

www.jeppix.eu



LAMpAS. Pilot line dedicated to manufacturing, testing, validating and upscaling new photonics technologies for medical diagnostics.

www.lampas.eu



MedPhab Pilot Line. Pilot line dedicated to manufacturing, testing, validating and upscaling new photonics technologies for medical diagnostics.

www.medphab.eu



MIRPHAB Pilot Line. A single-access point and all-service integrated Pilot Line for the development of MID-IR photonics sensors in Europe.

www.mirphab.eu



MULTIPLE. Project to develop cost-effective multi-modal monitoring solutions with a breakthrough impact on production quality and efficiency.

www.multipleproject.eu



PHABULOUS Pilot Line. European Pilot Line for the manufacturing of free-form micro-optics offering accelerated innovation & production cycles from prototypes to piloting and large volume production.

www.phabulous.eu





PIXAPP Pilot Line. First open access Photonic Integrated Circuit (PIC) assembly & packaging Pilot Line offering standardised, cost-effective, off the shelf photonic packaging solutions for fast integration.

PhotonHub Europe. Single pan-EU Photonics Innovation

Hub offering a comprehensive range of supports to industry for the accelerated uptake and deployment of photonics.

www.pixapp.eu

www.photonhub.eu



PULSATE. The PAN-European network for empowering SMEs digital competences in laser-based advance and additive manufacturing (LBAAM).

www.pulsate.eu

These projects have received funding from the European Union's Horizon 2020 research and innovation programme. Visit the website for more information and the grant agreements.





www.photonics21.org

FREE ACCESS TO AMIPLEXUS FOR ALL EPIC MEMBERS TO HELP YOU IDENTIFY PARTNERS IN EU FUNDED PROJECTS

As an EPIC member you have full access to AMIplexus to help you identify partners in EU funded projects. Search for new technologies and observe your competitors! AMIplexus is a useful practical online search tool for helping you identify partners in EU funded projects. See what projects your suppliers, customers and competitors are involved in and who are their other partners. See which technologies are in the companies pipelines. You can search by keywords, and refine search results to specific countries, companies, etc. EPIC has acquired a license that allows all employees of all EPIC member companies to freely access.

www.amiplexus.eu



PARTNERSHIPS



EPIC values strong partnerships to connect our members to the industry. Whether this is through partner events, business partners or association partners, EPIC is always looking for meaningful partnerships to support its members.

EPIC PARTNER EVENTS

- 1. 4 Hours Global Space Innovation
- 2. 6th PIC International Conference
- 3. CIOE
- 4. Digital Aachen Polymer Optics Days
- 5. ECOC
- 6. Forum Photonique
- 7. ImagineNano
- 8. MEDICA
- 9. NGON & DCI World
- 10. Photonics Applications Week
- 11. Photonics Days Berlin Brandenburg
- 12. W3+ FAIR Rheintal

EPIC ASSOCIATION PARTNERS

- 1. AILU Association of Laser Industrial Users
- 2. AIM Photonics American Institute for Manufacturing Integrated Photonics
- 3. AIPH International Association of Horticultural Producers
- 4. AVF Association for Vertical Farming
- 5. CECIMO European Association of the Machine Tool Industries
- 6. Clean Rivers HUB
- 7. COBO Consortium for On-Board Optics
- 8. CSA China SSL Association
- 9. DVN Driving Vision News
- 10. DIGITALEUROPE
- 11. EMVA European Machine Vision Association
- 12. EA Ethernet Alliance
- 13. FTTH Council Europe Fiber To The Home
- 14. GDLIA Guangdong Laser Industry Association
- 15. Greenlight for Girls

- 16. IAESI Israel Association of Electronics & Software Industries
- 17. IUVA International Ultraviolet Association
- 18. Joint Forces for Solar
- 19. LAS Russian Laser Association
- 20. LightingEurope
- 21. LUX Consortium in Singapore
- 22. Nanophotonics Europe Association
- 23. OES Organic Electronics Saxony
- 24. OIF Optical Internetworking Forum
- 25. PETRA Photonics Electronics Technology Research Association
- 26. SEAFOM Fiber Optic Monitoring Group
- 27. SEMI Semiconductor Equipment and Materials International
- 28. VR/AR Association
- 29. Wuhan Laser Industry Association

In 2021, EPIC signed 7 new Memorandum of Understanding with:















EPIC MEMBERS



EPIC is a growing organization already representing more than 760 companies, it is the



EPIC MEMBERS





EPIC MEMBERS





EPIC MEMBERS DRIVE THE PHOTONICS REVOLUTION





BE PART OF IT!

www.epic-assoc.com



EPIC FUTURE PLANS





EPIC FUTURE PLANS









Monday, 16 May 2022, 15:00 - 17:00 CEST
EPIC Online Technology Meeting on Micro and
Nano-satellites in the New Space



Monday, 27 June 2022, 15:00 - 17:00 CEST EPIC Online Technology Meeting on Quantum Communication and QKD



Monday, 11 April 2022, 15:00 - 17:00 CEST EPIC Online Technology Meeting on Medical Fiber Sensing



Monday, 20 June 2022, 15:00 - 17:00 CEST

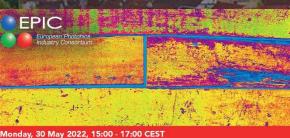
EPIC Online Technology Meeting on Plastic Sorting,
Recycling and Waste Management



Monday, 23 May 2022, 15:00 - 17:00 CEST

EPIC Online Technology Meeting on Co-packaged

Optics for Hyperscale Datacenters



Monday, 30 May 2022, 15:00 - 17:00 CEST
EPIC Online Technology Meeting on Photonics for
Woodworking



EPIC FUTURE PLANS



Stuttgart, Germany
EPIC Meeting on Beam Shaping for Industrial Applications at LASYS





Karlsruhe, Germany
EPIC Meeting on Advanced Microoptics: Simulation, Fabrication &
Characterization at Nanoscribe



8-9 June 2022 – Finspong, SwedenEPIC Meeting on 3D Printing of Metal at Siemens



7 - 8 September 2022
Leuven, Belgium
EPIC Meeting on CMOS Compatible Integrated Photonics at Imec
EPIC Industrial Quantum Photonics Technology Summit at the
University of Glasgow



Basel, Switzerland
EPIC VIP Networking Reception at ECOC





Please share ideas of what EPIC could do...

- Education and training (increase number of employees)
- International Delegation Trips
- Investors Network
- Surveys, Market Data Collection
- Create working groups, task forces, advisory board...
 - Supply Chain Management
 - Marketing

 Please suggest ideas: anything that is legal, in line with the purpose of the association, that benefits a significant number of members...



EPIC FINANCIALS APPROVAL – BENNO ODERKERK

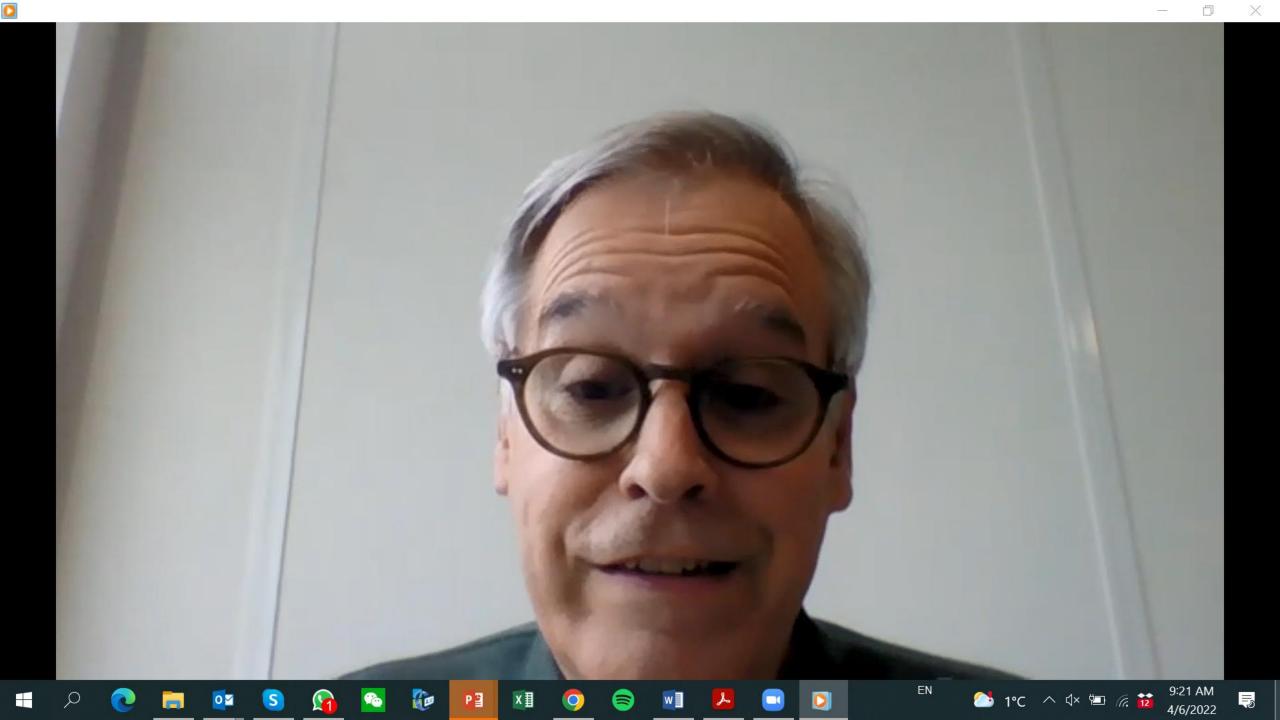


EPIC members, please scan the QR code and vote:

- Approve
- Disapprove
- Abstain



(all results in €)	2021	2020	2019		
Revenue	2,049,535	2,077,245	2,044,461		
Memberships	1,416,089	1,173,628	946,271		
Registrations	-935	117,016	298,151		
European Projects	460,399	608,001	724,467		
Other (sponsorships, etc.)	173,982	178,600	75,572		
Costs of Sale + Expenses	2,043,687	2,068,421	1,998,761		
European Project Costs: Travel + Consumables	112,230	218,808	363,263		
Events	10,301	209,170	335,959		
Marketing	145,855	164,870	129,999		
Market Reports	82,292	40,928	75,671		
Outreach	16,481	13,627	40,713		
Salaries & Wage Costs	1,301,592	1,049,078	648,941		
Overheads	373,727	372,575	404,215		
Tax	1,209	2,446	15,724		
Net Profit After Tax	5,848	6,378	29,976		





NETWORKING COFFEE BREAK















PRESENTATION OF THE EPIC CEO AWARD 2022













- Ronny Timmreck, CEO, Senorics
- Daan Kersten, CEO, PhotonFirst
- Stefan Weber, CEO, Phaseform
- Titas Gertus, CEO at Femtika
- Robert van Tankeren, CEO at InPhocal
- Viacheslav Artyushenko, CEO, art Photonics
- Thor Ersted Ansbæk, CEO, OCTLIGHT
- Peter Tøttrup, CEO, NLIR

- Nikolajus Gavrilinas, CEO, LITILIT
- Evaldas Stralkus, CBDO, Optonas
- Jan Kischkat, CEO, Quantune Technologies
- Carlos Viana, CEO, ICON Photonics
- Jean Berney, COO, Deeplight
- Michael Bailly, CEO, Silina
- Rob Voorkamp, General Manager at SCIL Nanoimprint Solutions
- Dave Rogers, CTO at Nanovation





SALARY SURVEY PRELIMINARY RESULTS PRESENTATION



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	А	В	С	Е	F	G	Н	1	J	K	L	М	N	0	Р	Q	_
106			Number of	Gross annu	ual salary o	of Sales i	Gross ann	ual salary	of Busine	Gross annu	ual salary	of Applic	Gross ann	ual salary	of Engine C	Gross annu	а
107	Job Title		Response		•			•							11-15 yea0		
108	CEO		11-20 employees	20000	35000	45000	20000	35000	45000	24000	38000	50000		38000	•	15000	
109	Managing Direct	tor	11-20 employees	30000	48000	48000	30000	35000	35000	36000	43000	43000	43200	60000	60000		
110	CEO		11-20 employees	30000	45000	55000	30000	45000	55000	30000	45000	55000	30000	45000	55000		
111	CEO		11-20 employees	35000	40000	55000	35000	40000	55000	31500	37000	45000	31500	37000	45000	25500	
112	CEO		51-100 employees	35000	56000	75000	32000	50000	68000	35000	51000	62000	32000	47000	58000	30000	
113	Ceo		11-20 employees	35000	45000	60000	35000	60000	85000	20000	40000	65000	20000	35000	45000	18000	
114	Board director		51-100 employees	36000	44000	60000	60000	80000	100000	28000	36000	42000	26000	34000	40000	22000	
115	CEO		0-5 employees	50000			60000					66000	60000	70000			
116	HR Manager		21-50 employees	50000			58800			58000	69000	76000		62500		44000	
	CEO		21-50 employees	55000	75000	90000	60000	80000	100000								
118	CEO		11-20 employees	55000	60000	65000	55000	60000	65000	55000	60000	65000	55000	60000	65000	50000	
119	HR manager		11-20 employees	56000		61000	62000		78000	52000		55000	38000		43000		
	CEO		21-50 employees	60000	75000	85000	65000	80000	95000	50000	65000	75000	50000	65000	75000	40000	
121	Managing Direct	tor	101-250 employees	60000	65000	72000	60000	70000	75000	45000	55000	65000	45000	55000	65000	33000	e
_	Managing Direct		251+ employees	60000	80000	100000	50000	70000	90000	50000	65000	85000	50000	65000	80000	35000	
	CEO		251+ employees	60000	80000	90000	60000	80000	90000	60000	80000	90000	60000	80000	90000	40000	
124	CEO		21-50 employees	65000	75000	80000	55000	65000	75000	60000	70000	75000	65000	70000	80000	45000	
125	CFO		11-20 employees	70000	80000	100000	70000	80000	100000	70000	80000	100000	80000	90000	100000	85000	
126	CFO		6-10 employees	72000	90000	100000	70000	80000	90000	72000	84000	96000	70000	84000	90000	54000	
127	CEO		6-10 employees	75000			75000			75000			75000			60000	
128	CEO		51-100 employees	80000	100000	130000	90000	110000	140000	80000	100000	120000	80000	100000	120000		
129	CEO		21-50 employees	80000	120000	160000	80000	100000	120000	80000	100000	120000	80000	100000	120000	70000	
130	Managing direct	or	Comments	80000	80000	80000	80000	80000	80000	80000	80000	80000	80000	80000	80000	80000	
131	CEO		0-5 employees	85000			85000			85000			85000			65000	
132	VP HR		101-250 employees	85000	120000	140000	85000	120000	140000	85000	115000	130000	85000	115000	130000	60000	
133	CEO		6-10 employees	90000	100000	110000	80000	90000	100000	70000	80000	90000	70000	80000	90000	50000	
134	CEO		101-250 employees	100000	120000	140000	80000	140000	150000	80000	110000	140000	80000	110000	140000	55000	
135	CEO		11-20 employees	100000				120000		100000	110000			115000			
36	president & CTO)	51-100 employees	30000-4004	0000-600	0000-850	00		80000	25000-300	45000	60000-700	25000-300	45000	60000-700	3000	0
137	CEO		0-5 employees	NA						90000			90000			75000	
38	CEO		0-5 employees		80000			80000									
	CEO		11-20 amplayees			ممممه	47000				67000			40000		30000	
4	Sheet	+															



ANNOUNCEMENT OF NEXT EPIC AGM









NETWORKING LUNCH

