

By dedicating ourselves to serving the photonics industry, we have become the largest photonics industry association in the world.

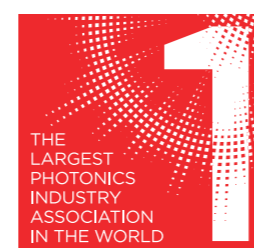
EPIC  
ACTIVITY REPORT  
2021

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## EPIC ANNUAL ACTIVITY REPORT HIGHLIGHTS:

- 4 Market Reports
- 59 Online Technology Meetings
- 57 Company Product Releases, Product Launches, and Virtual Company Tours
- 43 Interviews with leaders of the photonics industry
- 38 Invitations to present, chair, moderate events
- 69 Company visits
- 760 Members



## FOREWORD



I remain impressed at how dynamic the association is and how committed the staff is to relentlessly bringing value to its members. In 2021, EPIC released its first 4 market reports under the new format headed by Tracey Vanik, Head of Photonics Market Research, and Jose Pozo, supported by the technical team, organised 59 online technology meetings. The meetings have engaged over 3272 industry professionals from 1764 companies, with all of these events powered in the background by a solid events and marketing team that also deserves credit for the flawless organization and promotion.

To provide visibility to its members, in addition to the meetings, EPIC organised 55 online company product releases and virtual company tours, and published 43 interviews with leaders of the photonics industry, and awarded the annual CEO Award to Torsten Vahrenkamp from ficonTEC.

EPIC continues to be invited to present, chair, and moderate events, and was on stage and on the screen 36 times. When there was a window of opportunity, the staff likes to go out and meet its members at their facilities, and visited 69 companies.

Innovation is the engine driving our industry forward, and at EPIC we explore new ways to promote and raise the profile of our industry. The Solactive EPIC Core Photonics Index was launched in 2021, representing a basket of 69 Photonics publicly listed companies. Cirdan Capital in collaboration with C8 Technologies has launched a Certificate based on the Solactive EPIC Core Photonics Index enabling people to specifically target their investments to the photonics industry.

EPIC has not been immune to the Great Resignation phenomenon, you will notice that we welcome several new staff, and a new management structure has been put in place. I am personally grateful to all staff who have intensely committed to serve EPIC, its members, and the industry, bringing it from strength to strength. We wish you all the best in your new endeavours, and we welcome the new employees to embark on this fabulous journey!

Trust, diversity, and inclusiveness, are core values at EPIC that need to permeate throughout the entire organization. In 2022 we are pleased to welcome Nicoletta Casanova, CEO of FEMTOprint, to the EPIC Board of Directors, and excited that Ulrike Helfferich will be joining the EPIC management team as COO.

If your company is not yet a member of EPIC, now the largest photonics industry association in the world, I urge you to review the membership benefits, experience the activities outlined in this report, and be inspired by the testimonials. As we get ready for EPIC's 20th anniversary, we want to make sure to engage most of the European photonics industry on our mission of European competitiveness. EPIC members drive the photonics revolution, be part of it!

**Benno Oderkerk**  
EPIC President

**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



- |  |   |
|--|---|
| <b>Anna Trachtova</b> , MSc, Marketing Manager     | <b>Ivan Nikitski</b> , PhD, Program Manager             |
| <b>Antonio Raspa</b> , MSc, Senior Program Manager | <b>Jérémy Picot-Clemente</b> , PhD, Program Manager     |
| <b>Auri Ripoll</b> , MSc, Marketing Manager        | <b>Jose Pozo</b> , PhD, Director of Technology          |
| <b>Carlos Lee</b> , MBA, Director General          | <b>Neringa Noreikienė</b> , MSc, Events Manager         |
| <b>Elisenda Lara</b> , MSc, Marketing Manager      | <b>Panagiotis Vergyris</b> , PhD, Program Manager       |
| <b>Francesca Moglia</b> , PhD, Program Manager     | <b>Ulrike Helfferich</b> , Chief Operations Officer     |
| <b>Helena Jelinkova</b> , Events Manager           | <b>Tracey Vanik</b> , 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 510-2040
Technology Research Organization, University	EUR 2040
Cluster, Association	EUR 2040

**EPIC strengthens the connections among its members by creating fora to meet, discuss challenges and opportunities, and explore collaboration possibilities. During 2021, face-to-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 **”**

## ONLINE TECHNOLOGY MEETINGS

1. EPIC Online Technology Meeting on Exploring Emerging Applications for Photonic Integrated Circuits
2. 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
5. 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, Gravimeters, 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 Mid-IR Alliance)
30. EPIC Online Technology Meeting on Mini/Micro LED (in cooperation with ISA and PIDA)



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 Computing
58. EPIC Online Quantum Technology Meeting on Quantum is Key to More Effective, Affordable, Personalized (tele)Medicine
59. EPIC Online Quantum Technology Meeting on Atomic Clocks and Network Synchronization



**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.**

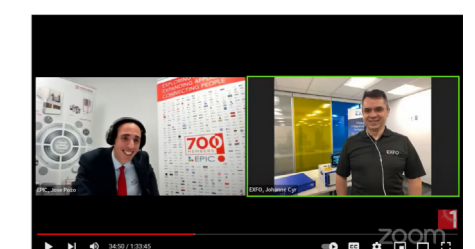
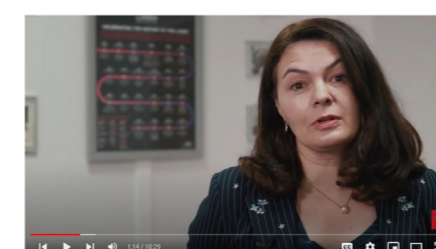
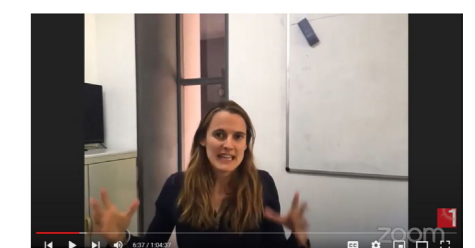
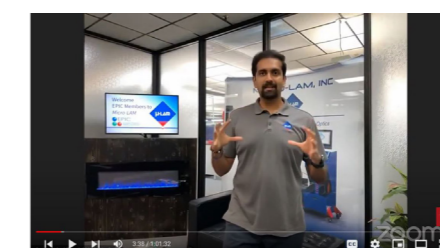
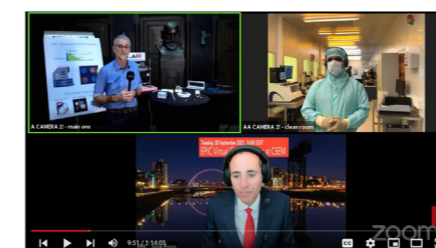
**“ EPIC has built an amazingly strong network of companies focused on collaboration to reach the synergy effect. A very valuable resource for our company and the Photonics industry.**

*Viacheslav Artyushenko, President at art photonics ”*

## EPIC MEMBERS PRODUCT RELEASES AND NEW PRODUCT LAUNCHES

- |                      |                              |                                 |
|----------------------|------------------------------|---------------------------------|
| 1. AEMtec            | 16. Imagine Optic            | 31. mirSense                    |
| 2. asphericon        | 17. Instrument Systems       | 32. MPS Micro Precision Systems |
| 3. Cailabs           | 18. Iridian                  | 33. nanoplus                    |
| 4. Chilas            | 19. Jabil Optics             | 34. Nireos                      |
| 5. Class 5 Photonics | 20. Laser Components         | 35. OCTLIGHT                    |
| 6. Demcon/DUI        | 21. LaVa-X                   | 36. OPTOMAN                     |
| 7. DIAMOND           | 22. Lidaris                  | 37. Optoprim                    |
| 8. Duma Optronics    | 23. LightTrans International | 38. PanDao                      |
| 9. Dynamic Optics    | 24. Lilit                    | 39. Phasics                     |
| 10. Edmund Optics    | 25. Luceda Photonics         | 40. SFC Energy                  |
| 11. Emberion         | 26. Luxinar                  | 41. Teraxion                    |
| 12. Femto Easy       | 27. Lyncée Tec               | 42. UniKLasers                  |
| 13. Femtum           | 28. Lytid                    | 43. VPIphotonics                |
| 14. Focuslight       | 29. Materion Balzers Optics  | 44. Xenics                      |
| 15. HiLASE           | 30. Miraex                   |                                 |

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



**“ 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 ”*

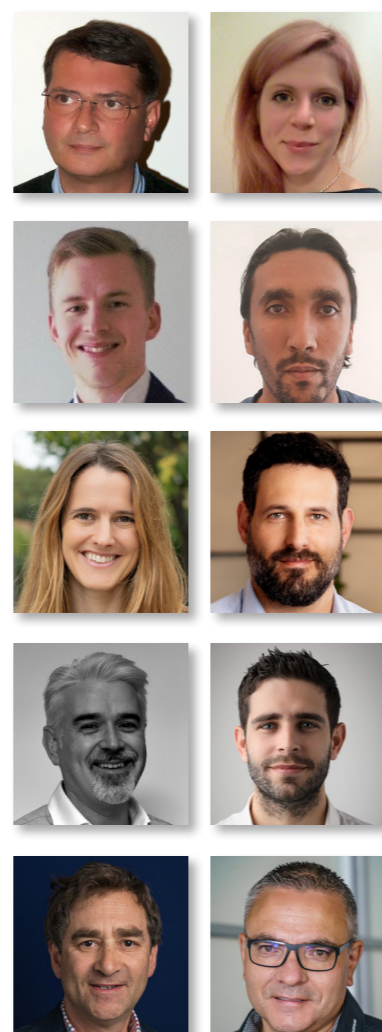
**“ I am very grateful for the support of EPIC for the Chilas New Product Launch. EPIC has been a true enabler in bringing our lasers to the world! I have greatly enjoyed working with the EPIC team, and cherish their dedication and professionalism that made the event a big success.**

*Sami Musa, CEO at Chilas ”*

**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 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.

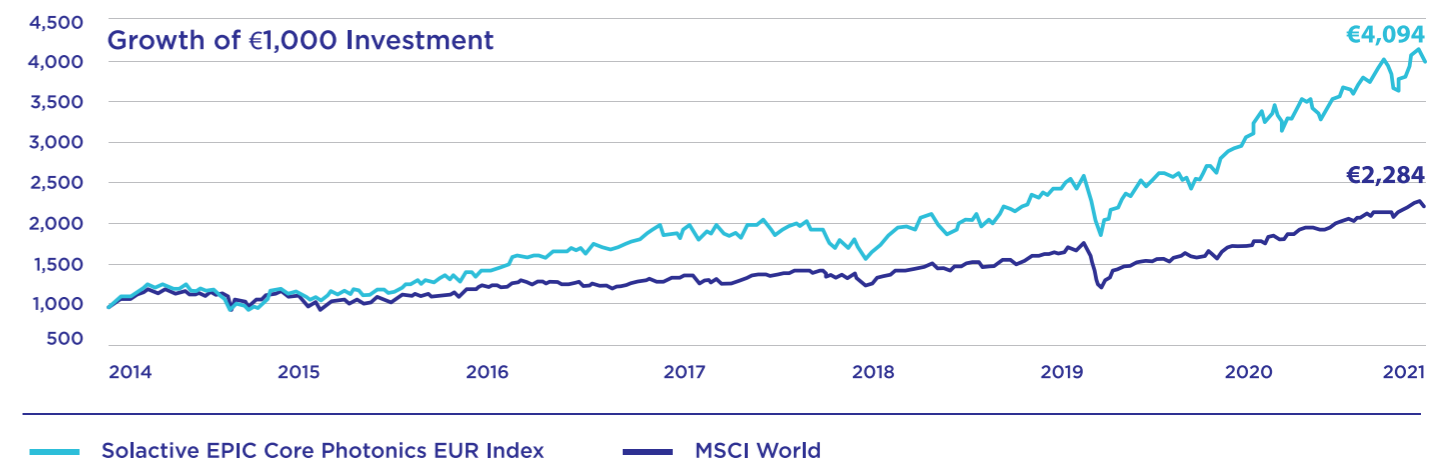


Scan this QR Code to watch the full interview.

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



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](http://www.solactive.com)

**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 PITT - 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
15. EPIC presented as a panellist at Industry Insights: A Conversation 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
19. 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 inVision 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
7. Graphene Week EU Graphene Flagship Virtual Event
8. International Photonics & Electronics Committee/ China International Optoelectronic Exposition in Shenzhen
9. Medtec Live in Nuremberg
10. OptecNet Jahrestagung in Hannover
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
4. 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 **”**

## MORE THAN 1000 JOBS IN PHOTONICS!

The world's largest website for jobs in photonics

[www.jobs-in-photonics.com](http://www.jobs-in-photonics.com)



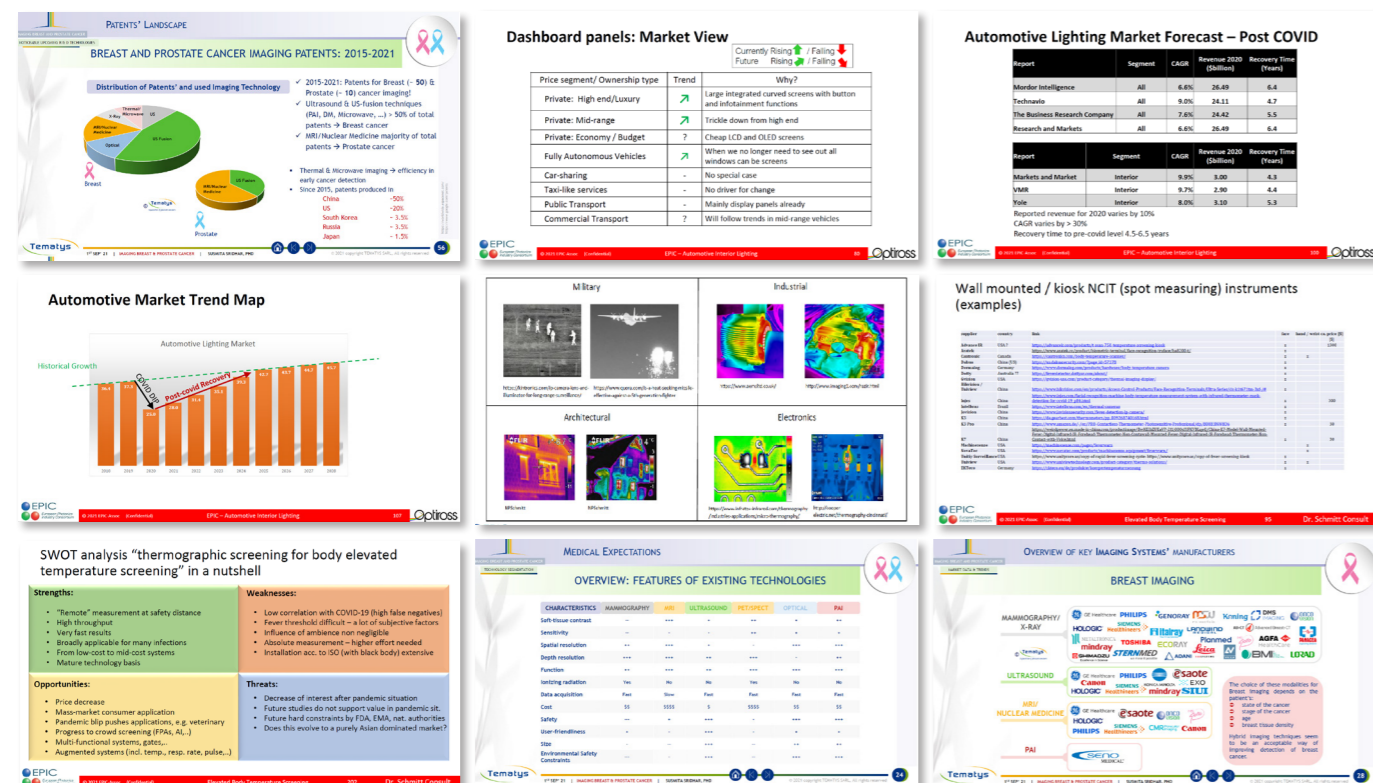
EPIC members are companies and organizations in the field of photonics covering optics, fibers, sensors, lasers, LEDs, detectors, displays. EPIC members are technology leading edge companies, covering the entire value chain from system integrator, components supplier, equipment, materials and service suppliers.



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

**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.**

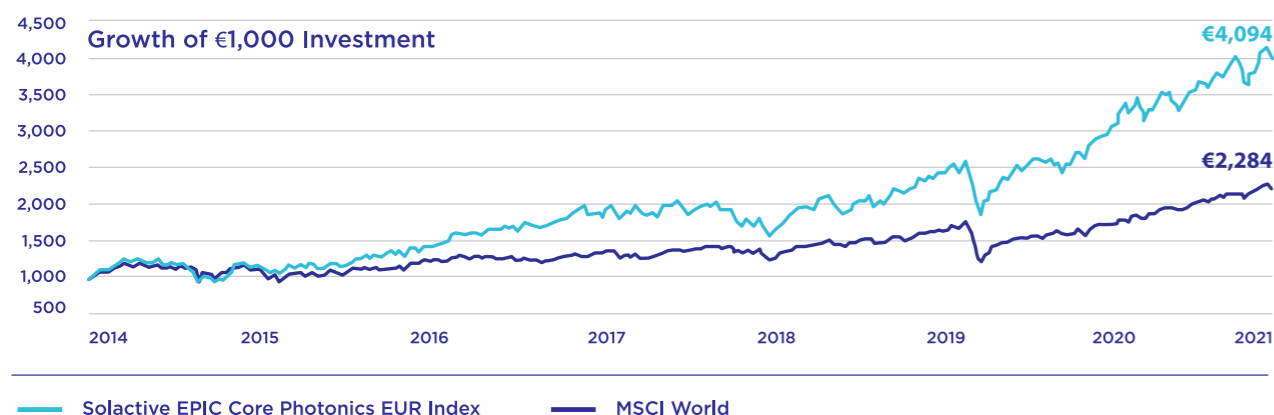
## FINANCE AND INVESTMENT

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](http://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](http://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:](#)



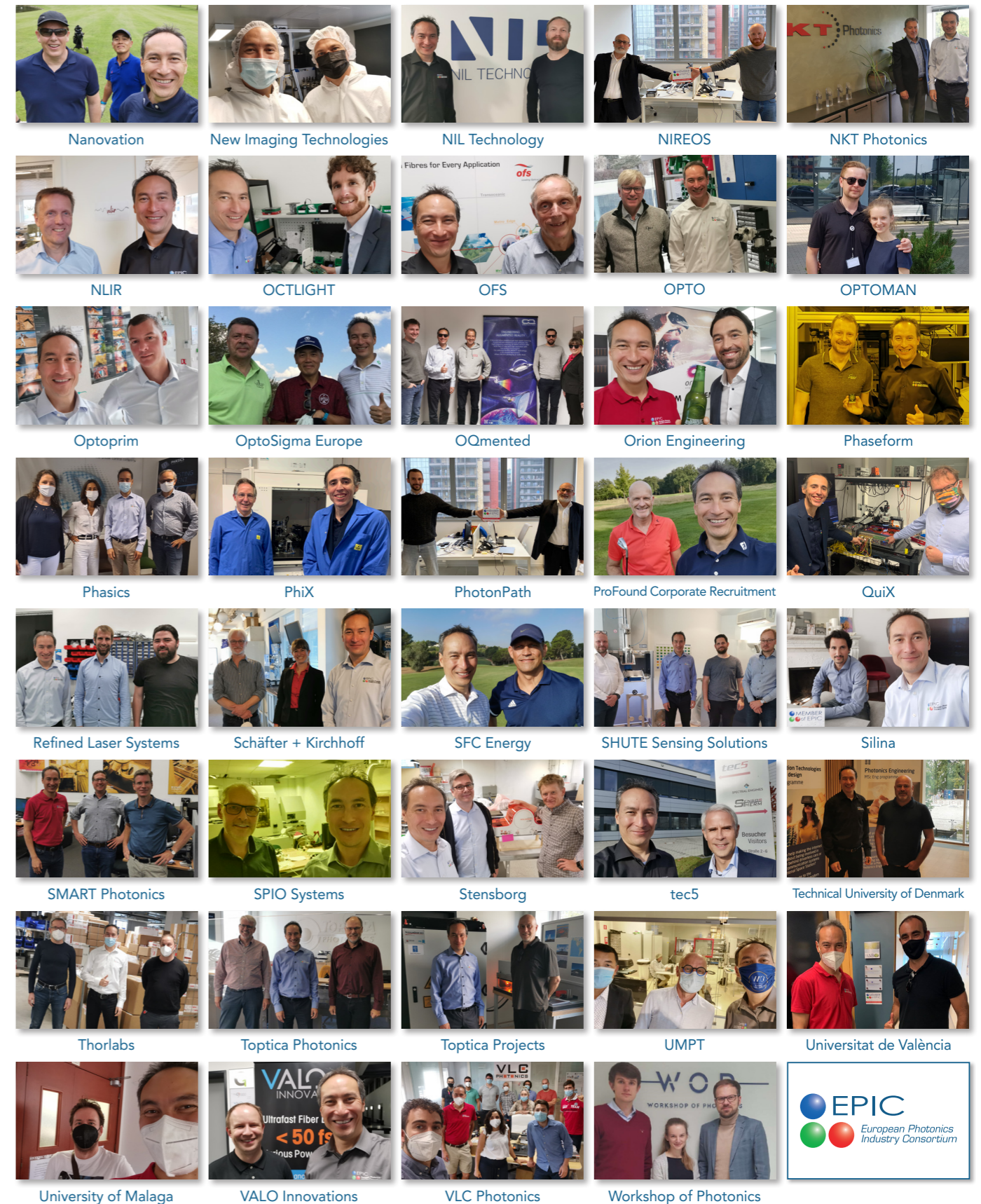
Published in 2021, the brochure "Photonics Technology for a Greener Future" describes in non-technical terms for a general audience how photonics is making a positive contribution in numerous fields including environmental, industrial manufacturing, consumer products, industrial lasers, healthcare, communication,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

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!

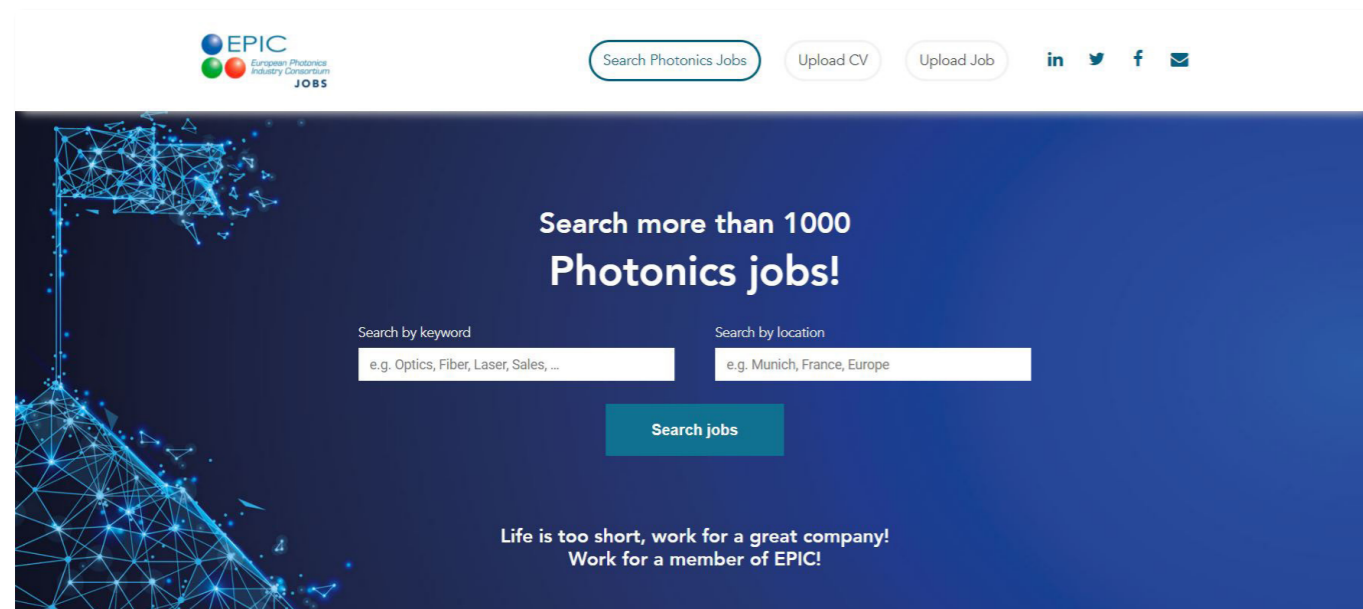


**EPIC knows the photonics market is booming as we see an increasing number of job opportunities. To support our members in finding qualified talent, EPIC offers several services for its members.**

## 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](http://www.jobs-in-photonics.com)

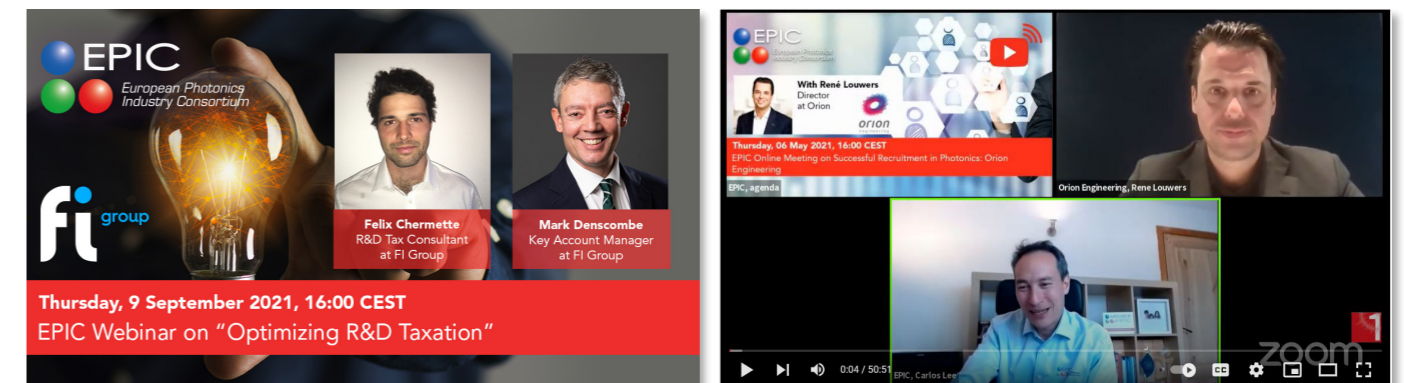


## RECRUITMENT SUPPORT

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](http://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 ”

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
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](http://www.day-of-photonics.org)



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](http://www.jeppix.eu)



**LAMpAS.** Pilot line dedicated to manufacturing, testing, validating and upscaling new photonics technologies for medical diagnostics.  
[www.lampas.eu](http://www.lampas.eu)



**MedPhab Pilot Line.** Pilot line dedicated to manufacturing, testing, validating and upscaling new photonics technologies for medical diagnostics.  
[www.medphab.eu](http://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](http://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](http://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](http://www.phabulous.eu)



**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.photonhub.eu](http://www.photonhub.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.  
[www.pixapp.eu](http://www.pixapp.eu)



**PULSATE.** The PAN-European network for empowering SMEs digital competences in laser-based advance and additive manufacturing (LBAAM).  
[www.pulsate.eu](http://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](http://www.photonics21.org)



PHOTONICS PUBLIC PRIVATE PARTNERSHIP

## 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.amiplus.eu](http://www.amiplus.eu)



**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 MEMBERS



EPIC MEMBERS DRIVE  
THE PHOTONICS REVOLUTION

700  
MEMBERS

EPIC

BE PART OF IT!

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[www.epic-assoc.com](http://www.epic-assoc.com)