

EPIC Activity Report 2015



EPIC Photonic Integrated Circuits workshop. Hosted by EVG, St. Florian am Inn, Austria.

▶▶ *“EPIC meetings differ from other events in that they are attended by senior industry experts and professionals. This condensed management experience and knowledge of lasers and photonics ensures high-level discussions on all relevant markets/applications and offers a great networking opportunity.”*

Dr. Thomas Renner, Executive Vice President Sales & Marketing, TOPTICA Photonics



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EPIC Activity Report 2015

» FOREWORD



Foreword by the President

I am very pleased to report that EPIC has seen another record year of very powerful growth in its membership which now counts more than 240 members across 28 countries. I commend EPIC on all of its achievements, for being the voice of the photonics industry in Europe, and for creating and organising a range of highly efficient and effective meetings and providing other extremely valuable activities that benefit the members of the association. We are proud to note that our membership survey confirms 85% of our members find access to EPIC's market reports of utmost benefit, and we are glad to continue providing access to a wide range of presentations, technology roadmaps, and industry reports. EPIC also attended and actively contributed to 39 events and exhibitions, and organized 16 workshop and networking events. This activity report highlights the successful outcome of all the hard work and effort put into establishing and maintaining a leading photonics community within Europe. ***We should all feel proud to count ourselves among the membership of this world-class organisation.***

A handwritten signature in blue ink that reads 'Drew Nelson'.

Drew Nelson, CEO, IQE

Fostering International Partnerships

EPIC member companies sell around the world, so we successfully created a new buyer delegation that met with members in Munich. Thanks to its success, we are replicating this idea in the United States and China in conjunction with major international events. This will help us maintain our focus on building networks around the globe. I am pleased to announce the organization of several new partnerships moving forward this year:



- EPIC is partnering with GDLIA (Guangdong Laser Industry Association) on the creation an EU-Asia Laser Industry Summit that will alternate locations between Shenzhen and Europe.
- EPIC has accepted the invitation to join the ISA association (International SSL Association).
- The LUX consortium from Singapore travelled to Europe to express its desire to actively engage EPIC members because they are recognized for developing leading-edge technologies.
- The 21st meeting of the IOA (International Optoelectronics Association) meeting will be hosted in Europe with the support of Swissphotonics.
- We continue to strive to support the photonics community with the organization of the European Photonics Venture Forum and help our members engage in funded research programs.

EPIC's business meetings successfully reached the next level with speaking invitations given by key market presenters. We greatly appreciate the contributions of experts such as Kunihiro Washio who shared his insight on the Japanese laser market, Allen Noguee who presented a report on ultrafast lasers, and Tom Pearsall who shared his views on the European photonics industry. *Speaking on behalf of EPIC and our members, I know we are all looking forward to the exciting new opportunities that lie ahead in the coming year.*



Carlos Lee
Director General
EPIC – European Photonics Industry Consortium
carlos.lee@epic-assoc.com

Facilitating Photonics Innovation

I was pleased to have joined the EPIC team and support the development of a strong photonics industry in Europe. EPIC will continue to actively promote the implementation of photonics in many new and exciting applications, and we look forward to hosting sessions at end-user and application events. You will hear from me in the coming months as I engage members in workshops, technology roadmaps development, article publication in leading industry media, and more. Together in 2016, we will harness the potential provided through the photonics PPP and build new technology-driven and application-driven consortia. Never hesitate to contact me if you think I may be of assistance with market data, introductions to companies, or brainstorming technical possibilities. *I have a real passion for photonics technologies and all of its amazing applications!*



Jose Pozo, PhD
Director of Technology and Innovation
EPIC – European Photonics Industry Consortium
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» EPIC — THE ASSOCIATION

WHAT IS EPIC?

EPIC – European Photonics Industry Consortium – is an industry association whose focus is to promote 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 publishes market and technology reports, organizes technical workshops and B2B roundtables, takes part in advocacy and lobbying, promotes education and training activities, sets standards and roadmaps, and hosts pavilions at exhibitions.

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

- Benno Oderkerk, CEO, Avantes (The Netherlands)
- Bruno Mourey, CTO, CEA-Leti (France)
- Drew Nelson, President & CEO, IQE (United Kingdom)
- Heinz Seyringer, Head of Research Collaborations, Zumtobel Lighting (Austria)
- Kurt Weingarten, General Manager, Lumentum (Switzerland)
- Martin Schell, Director, Fraunhofer HHI (Germany)
- Petteri Uusimaa, President & CEO, Modulight (Finland)



Board of Directors meeting at EPIC office in Brussels, 28 October 2015

EPIC APPOINTS NEW BOARD MEMBER

Martin Schell studied physics at the Technical University Aachen and received his PhD on short pulse generation with semiconductor lasers from the Technical University of Berlin in 1993. In 1994, he began working for one year as visiting researcher at the University of Tokyo. From 1995 to 2000 he was Management Consultant at the Boston Consulting Group. From 2000 to 2002, he led the development and marketing for FTTH and components with Infineon Fiber Optics GmbH. From 2002 to 2005, he was head of manufacturing. In 2005, Martin Schell joined Fraunhofer Heinrich Hertz Institute, a worldwide leader in the development of 40 to 400 Gbit/sec optics. Since 2014, he co-heads HHI. Martin Schell is also Professor of Physics at the Technical University of Berlin.





In appreciation of Hans-Joachim Grallert, former Director at Fraunhofer HHI, for his extensive contribution to the EPIC Board of Directors

MEMBERSHIP FEE

- Company with annual revenue above 100 million EUR: 6000 EUR
- Company with annual revenue between 10-100 million EUR: 4000 EUR
- Company with annual revenue below 10 million EUR: 2000 EUR
- Start-up (company less than 2 years old): 500 EUR
- University or Research Organization: 2000 EUR
- Association or Cluster: 2000 EUR



EPIC has over 240 members in 28 countries. Scheduled well in advance, the members of the association get together every year at the EPIC AGM – Annual General Meeting. Paris in 2015, Zurich in 2016, Eindhoven in 2017, Berlin in 2018.

EPIC AGM (Annual General Meeting) in Paris on 9-10 April 2015.

» EPIC — ADVOCACY

EPIC's advocacy initiatives combine traditional advocacy – reaching out to the European institutions – with reaching out to society at large in order to increase understanding of photonic technologies and applications, and support of the photonics industry. Below you will find a list of activities that EPIC undertook to promote, advocate, and create grass-root understanding of our industry. In 2015, EPIC was present at the following events:

1. — EPIC attended and supported in Rome the 1st European Photonics Venture Forum
2. — EPIC attended in the Vatican a special event of Quanta System
3. — EPIC attended in Brussels "Strategic thinking and planning for trade associations: key drivers for value creation"
4. — EPIC attended in Brussels the European Commission workshop "Common Security and Defence Policy"
5. — EPIC attended in Brussels the Photonics21 Board of Stakeholders and Annual Meeting
6. — EPIC attended in Brussels the Tyndall National Institute lunchtime briefing session
7. — EPIC attended in Grenoble the 1^{ère} Pierre de la Plate-forme Photonique at Campus MINATEC
8. — EPIC attended in Paris the 3rd meeting for the organization of OPTRO
9. — EPIC attended in Paris the opening ceremony of the International Year of Light
10. — EPIC attended in Taiwan the 20th meeting of IOA (International Optoelectronics Association)
11. — EPIC participated in Brussels in a panel discussion "Is there really a shortage of KETs graduates and workers in Europe?"
12. — EPIC presented in Brussels a Keynote address at the Helmholtz Workshop Series



Common Security and Defence Policy Workshop.



Guest of Honour at Photonics Festival in Taiwan.



Celebrating the International Year of Light opening ceremony.



Quanta System Press Conference at the Vatican.

Discussing the shortage of graduates and workers in Key Enabling Technologies. SMEs in general currently do not comprehend the severity of the problem related to KETs skills. Showing the numbers and explaining to SMEs that large companies 'will do anything' to acquire required employees in a market with a supply deficit, is likely to mean that SMEs will have a major difficulty to fill their vacancies.

EPIC REWARDS INDUSTRY

The EPIC Phoenix Award is presented annually to a company that exemplifies the challenges and merits of entrepreneurship. The company may have faced difficult times in developing its technology, selling its products, or raising capital, but ultimately managed to position itself as a successful company. Through perseverance, learning from mistakes, engaging its staff, customers, and stakeholders, the company eventually achieved its rebound to success. The EPIC Phoenix Award is a symbol of the challenging realities that entrepreneurs face and the journey that it entails. The 2015 EPIC Phoenix Award was presented to Pim Kat, the founder of Technobis.



Pim Kat (left) CEO and founder of Technobis received the EPIC Phoenix Award 2015.



EPIC members Luxexcel and Seren Photonics received the European Photonics Venture Forum Award 2015.



EPIC won the PNO Photonics Award 2015.



EPIC SPONSORS INDUSTRY

1. — EPIC sponsored the International Year of Light 2015



2. — EPIC sponsored the Photonics21 Annual Meeting in Brussels



3. — EPIC sponsored ETOP (Education and Training in Optics and Photonics) in Bordeaux



4. — EPIC sponsored the OSA Advanced Solid State Lasers Conference and Exhibition in Berlin



5. — EPIC sponsored the publication of Rutger Schols' thesis "Innovative Optical Techniques for Intraoperative Anatomical Guidance – Surgical Navigation Beyond the Limits of the Human Eye."



▶▶ *"During my 3 months internship at EPIC, I learned about the photonics ecosystem and pro-active industry stewardship. I was able to visit companies, support at exhibition booths, meet industry experts and leaders, and experience the pleasure of interacting with satisfied members. Joining EPIC was the best decision I've made this year!"*

Louis Bonnefous, 2nd year student at IOGS - Institut d'Optique Graduate School, completed an internship at EPIC from June till August 2015.



In 2015, EPIC was awarded three H2020 projects as dissemination partner: PICS4ALL (Photonic Integrated Circuits), MIRPHAB (IR Sensors) and TERABOARD (High Bandwidth Communication for Datacenters).

Celebrating the successful completion of the EcoLaserFact project with a dinner at the Eiffel Tower.

▶ EPIC — EXTERNAL COMMUNICATIONS AND PUBLICATIONS

EPIC IN THE MEDIA

1. — EPIC published in EuroPhotonics **“Photonics in Cultural Heritage”**
2. — EPIC published in Electro Optics **“Driver assistance to represent €9bn market for photonics by 2020”**
3. — EPIC published in Novuslight **“European Commission to Finance Defence-Related R&D”**
4. — EPIC published in Optik & Photonik **“Photonic Integrated Circuits Standards”**
5. — EPIC published in Optik & Photonik **“The Challenge Is Now On Us – Feedback from the International Year of Light Opening Ceremony”**
6. — EPIC published in **“China Laser Manufacture News”**
7. — EPIC published in European Energy Innovation **“Lighting in Cultural Heritage”**
8. — EPIC published **“Photonics Market Analysis and Technology Reports”**
9. — EPIC published **“Photonics Drives the Autonomous Vehicle Revolution”**
10. — EPIC published **“Start-ups are needed to transform newly developed technologies into solutions”**
11. — EPIC published **“Interview with AMO GmbH”**
12. — EPIC was interviewed in Agent Majeur **“Humour et Communication Scientifique”**
13. — EPIC was video interviewed **“LED professional Symposium + Expo”**



▶▶ *“EPIC builds relationships with leading industry media partners so that these connections can be leveraged for our members’ benefit. I am pleased to have been invited to join the editorial board of Laser Manufacture News, the authoritative publication for the Chinese laser industry, run by Guangdong XingZhiQiu Laser Technology.”*

Carlos Lee, Director General, EPIC

EPIC PUBLISHES EVENTS SUMMARIES

Initiated by the founder of EPIC Dr. Thomas Pearsall in 2003, these reports are prepared by members of EPIC to the benefit of the wider community. If you did not have a chance to attend the event but would like to know some key highlights, this report is for you. Emphasis is placed on exploring technical and business opportunities for the members of EPIC.

- #42 LpS LED professional Symposium + Expo 2015 in Bregenz (A. Lagrange, CEA-LETI)
- #41 Microscience Microscopy Congress 2015 in Cambridge (C. Bouyé, TEMATYS)
- #40 Leti Days 2015 – Lighting Session in Grenoble (B. d’Humières, TEMATYS / EPIC)
- #39 EuroNanoForum 2015 in Riga (X. de Logivière, XL Strategy)
- #38 Taiwan Photonics Market Report 2015 in Taipei (T. Robin, TEMATYS / EPIC)
- #37 ITF Imec Technology Forum 2015 in Brussels (M.H Koelink, Advanced Packaging Center)
- #36 JNPLI 2015 – Journées Nationales des Procédés Laser pour L’Industrie in Nantes (Alphanov)
- #35 Laser Market Seminar in San Francisco (R. Salcedo, MW Technologies)



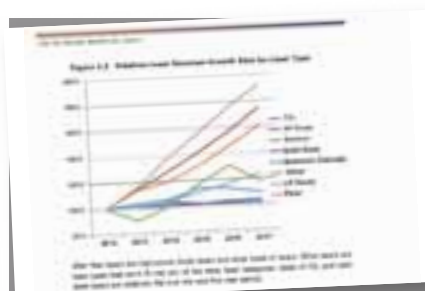
▶▶ ***“EPIC is a very useful association, it provides me and my colleagues with a lot of valuable information related to market and technology trends.”***

Dr. Oliver Dühr, Senior Sales Engineer, Ocean Optics



EPIC SHARES MARKET AND TECHNOLOGY REPORTS

1. — **2015 Sensors for Wearable Electronics and Mobile HealthCare.** Published by Yole.
(294 slides, non-member retail price 5990 EUR.)
2. — **2015 Ultrafast Lasers – Trends and Five Year Forecast.** Published by Strategies Unlimited. Forecasts are included by laser type, speed, and ultrafast application, as well as a discussion of some ultrafast emerging applications.
(95 pages, non-member retail price US\$ 4000.)
3. — **2015 Efficient Technology Architecture Data Center.** Published by Yole.
(217 slides, non-member retail price 5990 EUR.)
4. — **2015 Photonics Technologies for ADAS (Advanced Driver Assistance Systems) in Automotive.** Published by TEMATYS.
(204 slides, non-member retail price 4990 EUR.)
5. — **2015 Laser Market Report from a European Perspective.** Published by EPIC, not for sale.
6. — **2015 Photonics for Disaggregated Data Centers Report.** 29 pages written report prepared by OIDA.
7. — **2014 Silicon Photonics Report.** Published by Yole. Beyond all of the hype and tumult, market drivers and technological developments are converging to ensure a bright future for Silicon Photonics.
(268 slides, non-member retail price 5990 EUR.)
8. — **2014 Lasers Market Review and Forecast.** Published by Strategies Unlimited, the report analyses each application and provides forecasts for units, ASPs, and revenues by laser application through 2017.
(220 pages, non-member retail price US\$ 4950.)
9. — **2014 LED Front-End Manufacturing Trends Report.** Published by Yole, a comprehensive survey of LED Front-End manufacturing, covering the main process steps and technological trends.
(MS Excel spreadsheet and 314 slides, non-member retail price 5990 EUR.)
10. — **2014 Solid State Medical Imaging Report: X-Ray and Endoscopy.** Published by Yole.
(317 slides, non-member retail price 5990 EUR.)
11. — **ISPEC2014 Abstracts** - EPIC members granted free access to the technical digest (128 pages of valuable information) of the 4th International Symposium on Photonics and Electronics Convergence – Advanced Nanophotonics and Silicon Device Systems – held in Tokyo.



Year	2014	2015	2016	2017	2018	2019	2020
Revenue	1.2	1.5	1.8	2.2	2.8	3.5	4.5
Units	100,000	120,000	150,000	180,000	220,000	280,000	350,000
ASP (\$)	120	125	120	122	127	125	128
Revenue (\$Billion)	1.2	1.5	1.8	2.2	2.8	3.5	4.5
Units	100,000	120,000	150,000	180,000	220,000	280,000	350,000
ASP (\$)	120	125	120	122	127	125	128

EPIC ORGANIZES TECHNOLOGY WORKSHOPS

EPIC strengthens the connections among its members by creating fora to meet, to discuss challenges and opportunities, and to explore collaboration possibilities. EPIC events are typically by invitation to ensure a relevant audience, and limited in size to ensure effective networking. EPIC members drive the agenda and have registration priority at all association events.

1. — EPIC Workshop “Next Generation High Power Diodes and Direct Diode Lasers”
2. — EPIC Workshop “Biophotonics”
3. — EPIC Workshop “Lighting in Automotive”
4. — EPIC Workshop “Adverse Atmospheric Conditions on the Battlefield”
5. — EPIC Workshop “Photonic Integrated Circuits”
6. — EPIC Workshop “Freeform Optics”
7. — EPIC Executive Meeting “Ultrafast Lasers”
8. — EPIC Executive Breakfast
9. — EPIC Briefing “Industrial Laser Technologies and Market Trends in Japan”
10. — EPIC Briefing “LUX Consortium in Singapore”
11. — EPIC Networking Breakfast “Photonic Integrated Circuits”
12. — EPIC Training “Sales & Exhibition Professionals”
13. — EPIC Training “Semiconductor Manufacturing”
14. — EPIC Visit “Evangelische Elisabeth Klinik - Paul Gerhardt Diakonie”
15. — EPIC Closing Meeting of the Project EcoLaserFact
16. — EPIC AGM “Annual General Meeting”

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.

▶▶ *“EPIC workshops are very useful because the content is high-quality and the broad range of attendees covers the complete spectrum of researchers, technology experts and field specialists. The workshops are an excellent opportunity to scout new applications that are relevant in the development of our product and technology roadmap.”*

Dr. Ronald Dekker, CTO, XiO Photonics



EPIC ORGANIZES TECHNOLOGY WORKSHOPS



EPIC Workshop on Freeform Optics in Copenhagen on 24 February (hosted by DELTA OPTICAL THIN-FILM).



EPIC Executive Breakfast on Photonic Integrated Circuits in Los Angeles on 25 March (in conjunction with OFC).



EPIC Workshop on Next Generation High Power Diodes and Direct Diode Lasers in Torino on 8 May (hosted by Convergent Photonics).



Training for Sales & Exhibition Professionals in Brussels on 2 June.



EPIC Workshop on Photonic Integrated Circuits in St. Florian am Inn on 9-10 June (hosted by EVG).



EPIC Briefing on Japanese Industrial Laser Technologies and Market Trends in Munich on 24 June (**free, exclusive for members**) (hosted by DISCO).



EPIC Executive Breakfast in Munich on 24 June (in conjunction with LASER World of PHOTONICS).



EPIC Workshop on Lighting in Automotive in Bregenz on 24 September (in conjunction with LpS – LED professional Symposium + Expo).



Semiconductor Overview: Technology, Manufacturing, and Business in Caswell on 13 October (hosted by Oclaro).



EPIC Workshop on Adverse Atmospheric Conditions on the Battlefield in Veurey-Voroize on 22 October (hosted by Sofradir).



EPIC Briefing "LUX Consortium in Singapore" in Brussels on 27 October (free, exclusive for members).



EPIC workshop at Elisabeth Klinik in Berlin on 26 November (free, exclusive for members).



EPIC Biophotonics Symposium and Exhibition in Berlin on 26-27 November (in conjunction with micro photonics).



EPIC Executive Meeting on Laser and Ultrafast Laser Market in Bordeaux on 2-3 December (hosted by Amplitude Systemes).

▶▶ ***"EPIC events are very well organised to facilitate efficient networking with industry executives, every time I get to meet new influential individuals. Business opportunities will emerge from these new contacts."***

Jean-Claude Sanudo, Business Development Director - Photonics Business Unit, Acal BFi



» EPIC — PIVOTAL ROLE IN THE PHOTONICS COMMUNITY

EPIC EXHIBITS AT LEADING INDUSTRY EVENTS

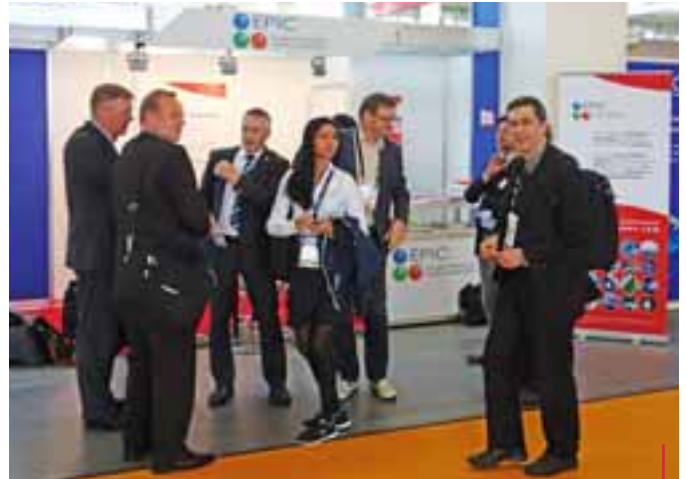
1. — **COVENTRY** — EPIC exhibited at Photonex UK
2. — **EINDHOVEN** — EPIC exhibited at Photonic Integration Conference
3. — **FRANKFURT** — EPIC exhibited at CS International
4. — **MUNICH** — EPIC exhibited and moderated at LASER World of PHOTONICS
5. — **NANTES** — EPIC exhibited at Journées Nationales des Procédés Laser pour l'Industrie (JNPLI)
6. — **NOTTINGHAM** — EPIC exhibited at Industrial Laser Applications Symposium (ILAS)
7. — **PARIS** — EPIC exhibited at ENOVA
8. — **SAN FRANCISCO** — EPIC exhibited at Photonics West
9. — **TORINO** — EPIC exhibited and made a presentation at Fotonica Event
10. — **VALENCIA** — EPIC exhibited at European Conference on Optical Communications (ECOC)
11. — **VELDHOVEN** — EPIC exhibited and made a presentation at Photonics Event
12. — **YOKOHAMA** — EPIC exhibited at InterOpto



*EPIC members benefit of a **FREE BOOTH** at the EPIC Biophotonics Symposium and Exhibition.*



EPIC members network at ECOC – European Conference on Optical Communications.



EPIC members network at LASER World of PHOTONICS.

▶▶ *“EPIC systematically promotes the technological leadership of its members, and through its extensive network helps us engage with key suppliers and customers in the Photonics industry.”*

Dr. Matthias Schulze, Segment Marketing Director, Coherent



EPIC LISTENS TO INDUSTRY

EPIC is committed to know each of its members personally, and to listen to industry’s challenges and identify opportunities. This year we reached out to 46 companies across 10 countries. Anteryon, AWL-Techniek, Cambridge Consultants, Cambridge University, CERN, Coherent, Convergent Photonics, DAS Photonics, Finisar, Hamamatsu, High-Tech Campus Eindhoven, Hittech Multin, ICN2, ISMB, ixFiber, Keopsys, LioniX, Luceda, LUXeXcel, Modulight, Monocrom, Nanofoot, Nanovation, nLight, Noxant, Oclaro, Oxsius, Philips, Phoenix Software, Photonics Bretagne, PPPLab, Radiantis, Sensofar, Shenzhen Sunshine Laser, Sirris, Sofradir, Stanford University, Technobis, TEMATYS, TU Tampere / ORC, University of California Santa Barbara, University of Roma Sapienza, UPC CD6, Vaden, VTT, XiO Photonics, Yenista.



Advanced Fibreoptic Engineering



AMO



Anteryon



AWL-Techniek



Cambridge Consultants



CERN



Convergent Photonics



DAS Photonics



Delta Optical Thin Film



DISCO



Gill Jennings & Every



Hamamatsu



ICN2



ixFiber



Keopsys



Luceda



Luxexcel



Modulight



Nanofoot



NKT



nLIGHT



Noxant



OPI



Philips City Farm



Phoenix Software



PPP Lab



Sapienza University of Rome



Sensofar



SIRRIS



Tampere University of Technology



Technobis



University of Cambridge



UPC CD6



VI Systems



VTT



XiO Photonics

EPIC IS ON STAGE



LANNION: EPIC spoke at the Photonics Bretagne Annual Meeting



PARIS: EPIC presented at Journée Opticsvalley – Lumière et Innovation



VELDHOVEN: EPIC presented at Photonics Event



BRUSSELS: EPIC spoke at a panel on “Vision and Sectoral Pilot on Skills for Key Enabling Technologies”



RIGA: EPIC presented at FOTONIKA-LV Conference



MUNICH: EPIC moderated a special demo at LASER World of PHOTONICS “Photonics Applications in the Automotive Sector”



CAMBRIDGE: EPIC presented at CAPE - Centre for Advanced Photonics and Electronics



PALISEAU: EPIC presented at the IOGS – Institut d’Optique Graduate School



TAMPERE: EPIC presented at Science and Technology Day at Optoelectronics Research Centre (TUT)



SHENZHEN: EPIC chaired a session during SSL China



BERLIN: EPIC moderated the Micro Photonics closing panel discussion on “Future Trends in Biophotonics”



TORINO: EPIC presented on “Recent Advances in Lasers for Manufacturing, Sensing, and Bio-Medicine”



TAIPEI: EPIC presented at Opto Taiwan on “The European Photonics Ecosystem”



THE HAGUE: EPIC presented at the EVG Photonics Workshop in conjunction with MNE - Micro and Nano Engineering

EPIC GLOBAL NETWORK

While EPIC is a European oriented association, we have members in Australia, Canada, China, Japan, Russia, USA. EPIC systematically seeks to build global bridges that facilitate to make connections around the world for our members. EPIC is member of the IOA (International Optoelectronics Association), the ISA (International SSL Association) headquartered in Shenzhen, board member of Laser Manufacture News magazine headquartered in Hong-Kong, and a supporter of the LUX Consortium in Singapore. All EPIC members sell globally, therefore it is important to maintain a thriving and reliable global network.



EPIC members meet Chinese buyers delegation at LASER World of PHOTONICS in Munich.



LUX Consortium from Singapore meets EPIC members in Europe.



Outreach to EPIC member Coherent at their headquarters in Santa Clara.



Enjoying the scenery after a visit to UCSB – University of California in Santa Barbara.



EPIC has dinner in Shenzhen with Ruohong Hou, General Manager of Sunshine Laser, and President of GDLIA – Guangdong Laser Industry Association.

▶▶ *“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.”*

Dr. Viacheslav Artyushenko, President, art photonics



EPIC EUROPEAN AND INTERNATIONAL NETWORKS

EPIC is involved in numerous European and international networks. By pursuing our shared interest and fostering growth in the photonics industry, EPIC serves its members and society as a whole. These networks involve many different areas of the industry:

1. — Invest in Photonics
2. — European Defence Agency CapTech 3 Optical Sensors
3. — International Symposium on Optronics in Defence and Security
4. — EuroNanoForum International Advisory Group
5. — EMLC – European Mask and Lithography Committee
6. — REACH Stakeholder (Registration, Evaluation, Authorisation and restriction of Chemicals)
7. — Photonics21 Board of Stakeholder
8. — European Commission Transparency Registry
9. — Laser Manufacture News Editorial Board



EPIC is a member of several committees and also manages its own network. The EPIC Biophotonics Committee is pictured here.



▶▶ *“EPIC’s meetings on medical photonics have clearly demonstrated the value of bringing together medical doctors, scientists, engineers and commercial business partners to discuss what novel products should be brought to the market. By engaging world-leading experts and facilitating an honest dialogue, these EPIC meetings improve the chance to develop solutions that meet actually existing customer needs.”*

Dr. Fokko Pieter Wieringa, Senior Scientist Medical Equipment within the Van ‘t Hoff Shared Innovation Program for Medical Photonics of TNO.

EPIC VENTURE AND FINANCE WORKING GROUP

The EPIC Venture and Finance Working Group is dedicated to the promotion of venture and finance activities among the association's members. EPIC's mission has always been to maximise the business development opportunities of its members through networking, information and partnering. The Venture and Finance Working Group takes this a step further through a series of focused activities aimed at attracting investors to photonics, promoting trade investment among members, fostering SME development and cooperating with the public funding sector on the continuous improvement of financing conditions for photonics entrepreneurs.

EPIC Venture and Finance Working Group Members

- Chairman: Kurt Weingarten, CEO & Founder, Time-Bandwidth Products (Switzerland)
- Vice-Chairman: Giorgio Anania, CEO & President, ALEDIA (France)
- Andreas Umbach, Vice President and General Manager, u2t / Finisar (Germany)
- Christian Neumeyr, CEO & Founder, Vertilas (Germany)
- Christian Velez, CEO, EXALOS (Switzerland)
- Drew Nelson, CEO & Founder, IQE (United Kingdom)
- Eric Mottay, CEO & Founder, Amplitude Systèmes (France)
- Graeme Malcolm, CEO, M Squared Lasers (United Kingdom)
- Hans van den Vlekkert, CEO & Founder, LioniX (The Netherlands)
- Hugues Tariel, CEO & Founder, DIAFIR (France)
- Jan Meise, CEO & Founder, AMS Technologies (Germany)
- Joerg Muchametow, CEO & Founder, eagleyard Photonics (Germany)
- Maria Titova, CEO, Technospark Nanocenter (Russia)
- Michael Lebbby, Chair of Optoelectronics, Glyndwr University (United Kingdom)
- Miguel Melo, Managing Director, MW Technologies (Portugal)
- Nick Martin, Managing Director, Advanced Fibreoptic Engineering (AFE) (United Kingdom)
- Petteri Uusimaa, CEO & Founder, Modulight (Finland)
- Pim Kat, CEO & Founder, Technobis (The Netherlands)
- Ruth Houbertz, CEO & Founder, Multiphoton Optics (Germany)
- Thierry Gonthiez, CEO & Founder, Resolution Spectra Systems (France)
- Wolfgang Gries, CEO & Founder, DirectPhotonics (Germany)
- Young Kwon, Managing Director, Powerlase (United Kingdom)

▶▶ ***“EPIC's membership is mainly composed of small and young innovative companies, access to finance is crucial for scaling up their businesses and I am glad to be part of this initiative for taking concrete actions to truly help.”***

Kurt Weingarten, General Manager, Lumentum (Switzerland). Member of the EPIC Board of Directors.



The inaugural European Photonics Venture Forum took place on 16 April 2015 in Rome, part of the project LightJumps funded by the European Union's Seventh Framework Programme. Future editions of the European Photonics Venture Forum are scheduled in 2016 in Eindhoven, 2017 in Berlin and 2018 in Dublin.

EPIC ASSOCIATION PARTNERS



▶▶ *“EPIC continues to expand its relations with leading industry associations around the world so that these extended networks can then be leveraged for our members’ benefit. This year, I am pleased to have been invited to become an executive member of ISA - International SSL Alliance.”*

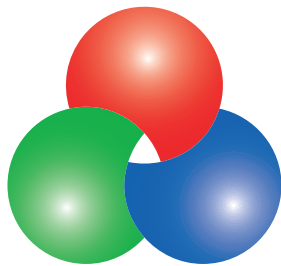
Carlos Lee, Director General, EPIC



EPIC signed a Memorandum of Understanding with GDLIA – Guangdong Laser Industry Association.

▶▶ *“We need to be out there pushing to attract finance to the photonics sector and improving business conditions for the entrepreneurs among EPIC’s members. Photonics technologies are at the heart of the next industrial revolution and we can accelerate the pace of innovation by bringing more funds into the sector.”*

James Cogan, Coordinator of the EPIC Venture and Finance Working Group



DAY OF PHOTONICS

21 OCTOBER 2016

GET READY FOR THE NEXT EDITION OF DAY OF PHOTONICS – 21 OCTOBER 2016

DAY OF PHOTONICS, initiated by EPIC, is a biennial global event that promotes “photonics” to the general public. Hundreds of companies, research organizations, and organizations involved in photonics reach out to their communities to raise awareness about what photonics is and why it is important.

On 21 October 1983, the General Conference of Weights And Measures adopted the value of 299,792.458 km/s for the speed of light. At the occasion of the anniversary, activities are organized around the world. Every company, research organization, university, school, student chapter, is invited to organize an activity, demonstration, or discussion on the impact of photonics in our day-to-day life. www.day-of-photonics.org

www.day-of-photonics.org



AFE welcomes students from Wood Green School in Witney, United Kingdom



Ghulam Ishaq Khan Institute of Engineering Sciences and Technology, Pakistan



Amplitude Systemes, Pessac, France



COBOLT, Solna, Sweden



Center for Young Scientists, Pudak Scientific, Indonesia



Australia National University, Canberra, Australia



University of Latvia, Riga



Warsaw University of Technology, Poland



Visit of 4th grade school children at National Technical University of Athens



Institute of Chemistry (UNESP) in Brazil



UCSB, California, USA



DELTA Photonics team, Denmark



ROFIN Asia Sales Meeting in Singapore



GEOCACHING PHOTONICS, Optics Balzers, Germany



EVG, St. Florian am Inn, Austria



IR Photonique - Sofradir, France



Modulight Family Day, Tampere, Finland



OSA SPIE Student Chapter in Ukraine (ILTPE NASU)



Laser show for the Day of Photonics, Lithuania



Universidade de Aveiro, Portugal



International Laser Centre, Bratislava, Slovak Republic



Tartu University, Estonia



TOSA - Things On Silicon Alliance, Taiwan



University of Limerick, Ireland (Students learn about photonics principles and optical instrumentation in hands-on practical sessions)



IREC - Catalonia Institute for Energy Research, Barcelona, Spain



Bethlehem University in Palestine (video conference)



FiconTEC, Achim, Germany



CMC Microsystems, Canada



Technospark, Troisk, Russia



Scuola Superiore Sant'Anna, Pisa, Italy

EPIC BUSINESS PARTNERS



OptoIndex exists since 2001 and is published every year. 15000 copies of this Photonics Buyers Guide directory are printed, of which 7000 copies are directly mailed and 8000 copies distributed at exhibitions. Check that your company is listed on www.opto-index.de/ot and increase your visibility by taking an advertisement/logo, possibilities starting at 660 EUR. EPIC members benefit 15% discount.

Contact: Constanze Classen at constanze.classen@opto-index.de



RP Photonics Consulting offers technical consulting and simulation software in the area of photonics. On its website, it hosts the famous Encyclopedia of Laser Physics and Technology and the RP Photonics Buyer's Guide, listing many suppliers worldwide for many hundreds of products in photonics. EPIC members benefit from a 20% discount on enhanced product and company entries, giving them substantially increased visibility. For example, product descriptions and product images can be published.

Contact: Dr. Rüdiger Paschotta at Paschotta@rp-photonics.com



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- facilitate the resale of your unused materials;
- offer you the best buying opportunities in relation to your needs;
- dissemination of used optical equipment on the web;
- search of specific devices on product specifications. www.photonics-marketplace.com



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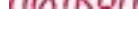
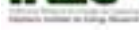
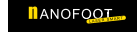
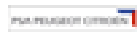




CHALMERS



EPIC members drive the photonics revolution...



Be part of it!



EPIC is the industry association that promotes the sustainable development of organisations working in the field of photonics in Europe. We foster a vibrant photonics ecosystem by maintaining a strong network and acting as a catalyst and facilitator for technological and commercial advancement. EPIC publishes market and technology reports, organizes technical workshops and B2B roundtables, engages in advocacy and lobbying, education and training activities, standards and roadmaps, pavilions at exhibitions. www.epic-assoc.com