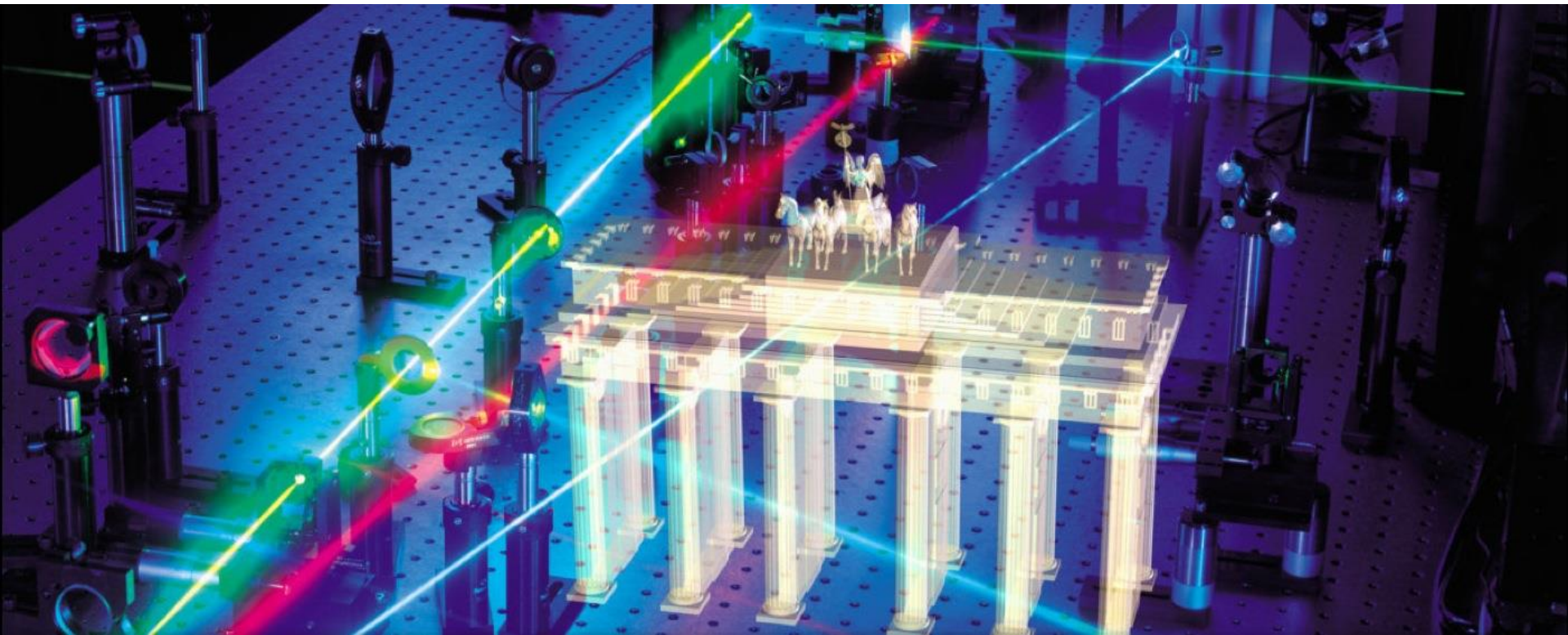


# Photonics in the German Capital Region

January 14th 2020

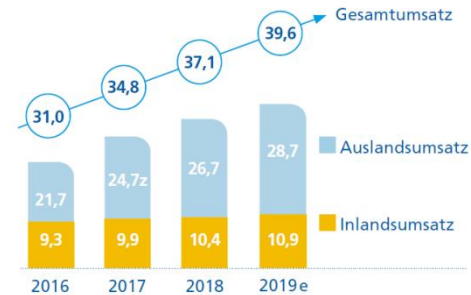
Dr. Frank Lerch (OpTecBB e.V.)



# Industry/market data photonics in Germany



Gesamtumsatz, In-/Ausland (Mrd. EUR)

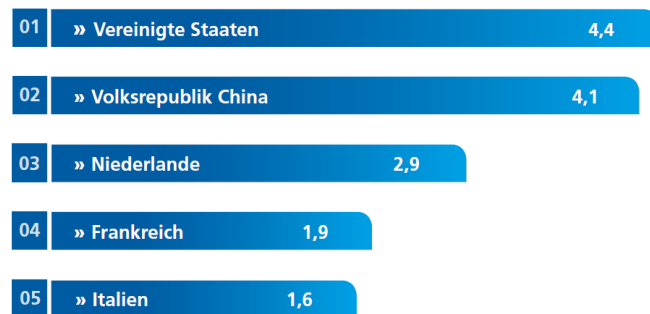


» Quelle: Optech Consulting (2016), SPECTARIS (2017 ff.)



TOP-5 Zielländer deutscher Photonikausfuhren (Mrd. EUR)

Die Daten beziehen sich auf das Jahr 2018

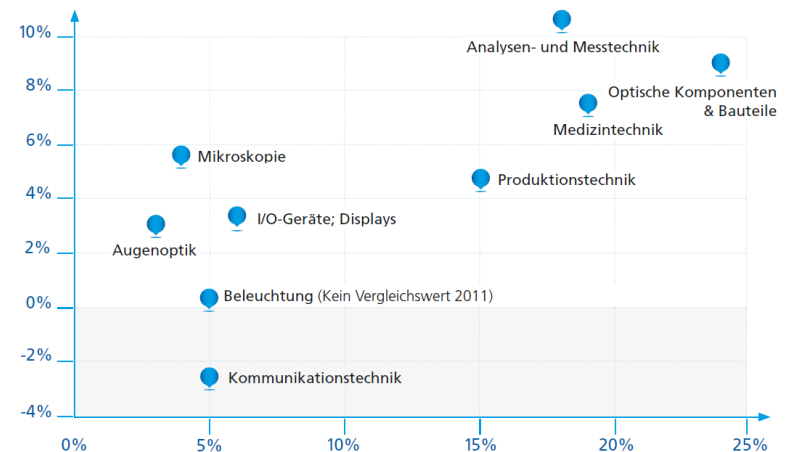


» Quelle: SPECTARIS, Statistisches Bundesamt



Inlandsproduktion Photonik nach Produktsegmenten

Durchschnittliche jährl. Wachstumsrate p.a. 2011-2018

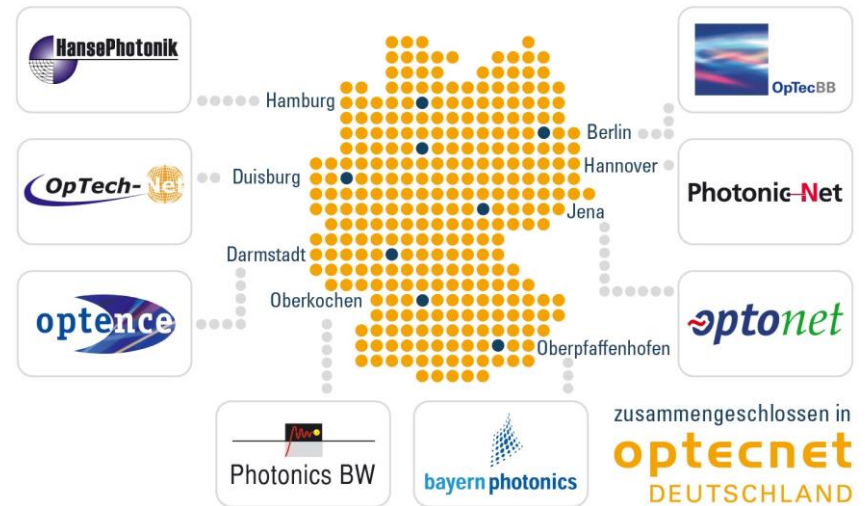


Anteil an der Inlandsproduktion Jahr 2018

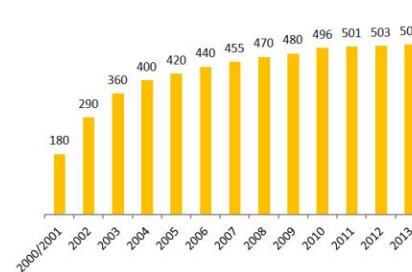
Source: Spectaris Trendreport Photonik 2019

## OptecNet Deutschland – An interregional national Meta-Network

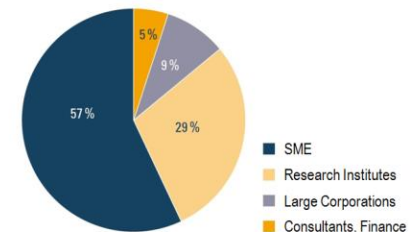
- More than 500 members in the eight regional networks
- Services of OptecNet Deutschland for its members
  - Annual conference
  - Workshops/further education (discounts for members)
  - Start-up Challenge
  - Photonik magazine Abo
  - Participation in EU projects (H2020 CSA)
  - Public Outreach, dissemination
  - Consultation at national level (BMBF, BMWi DPG, ...) and international (OSA, SPIE, IOA...)
  - Partnerships with events/congresses, trade fairs
  - Job board
  - Web and social media communities
  - ...



OptecNet Deutschland e.V.  
has the most members of all the Photonic  
associations in Germany



Membership development 2000 - 2013



Member structure: 57% SME

- Optec-Berlin-Brandenburg (**OpTecBB**) e.V. is ***the competence network*** for optical technologies and micro systems technologies in the federal states of Berlin and Brandenburg.
- **OpTecBB e.V. is an initiative of companies and research institutions in Berlin and Brandenburg that collaboratively explore and exploit the possibilities of these technologies**
- OpTecBB e.V. was **founded on September 14th 2000** by **companies, universities, research institutions and associations** and with the support of the **Berlin Senate** and the relevant **ministries in Brandenburg**
- **Today** the association has approx. **120 institutional members**.
- National collaboration in **OptecNet Deutschland** (more than 500 member organizations)
- Member of **go cluster** (former Kompetenznetze.de)
- Member of **European Photonics Industry Consortium (EPIC)** and engaged in **Photonics21**
- Awarded with the **SilverLabel of Cluster Management Excellence**

- Photonics has a **200 year tradition** in Berlin and Brandenburg.
- The innovative core of the cluster:
  - **390 technology oriented companies** (298 in Berlin and 92 in Brandenburg)
  - **10 universities and 26 non-university research organizations** (11 in Brandenburg and 25 in Berlin).
- **Approx. 16.600 employees** and approx. **2,8 bn. Euro revenues**
- Annual **growth (revenues)** on average **5 to 8%**, **export share 70 %**, **R&D share almost 10 %**.
- **Competences**
  - Lighting technology,
  - Laser technology,
  - Sensors, metrology and optical analytics,
  - Biomedical optics,
  - Ophthalmology,
  - Optical communication,
  - Microsystems technology,
  - Displays and components.
- **Support to Members**
  - recruitment,
  - qualification,
  - internationalization, market access,
  - start-up support, mentoring,
  - public relations, location marketing,
  - consultation to politics, lobbying,
  - cluster management.

- BIOPHOTONICS AND OPHTHALMIC OPTICS

- focus of photonic research lies on basic optical operating principles and innovative optical methods for prevention, diagnostics, therapy and analytics.
- laser-induced thermotherapy for tumor treatment,
- optical sensors for the application on biological tissue (e.g. hemoglobin and water content on skin),
- minimally invasive surgery via laser,
- developing fluorescence cameras for the visualization of metastases in lymphatic pathways,
- molecular imaging,
- flow cytometry,
- micro cameras for endoscopy,
- Microfluidics and bottle and ring resonators,
- POC diagnostics and telemedical methods – such as telemonitoring aiming to prevent acute cardiovascular disease
  
- Intraocular senses
- Ophthalmic optics
- Glasses
  
- AgriPhotonics

# Activities 2020

## Photonics Days Berlin Brandenburg 2020

7th and 8th October

WISTA Adlershof



**Photonics Days Berlin Brandenburg 2020**  
**7th & 8th October 2020 in Berlin-Adlershof**

**Preliminary Program:**

7th October	8th October
OIDA topical meeting QuantTech	Berlin Quantum Optics Symposium
Dutch German PIC Workshop	HighEnergyClassMidInfraRed (HECMIR) Laser Workshop
German Israeli AgriPhotonics symp.	Fiber optics
60 Years Laser Symposium by Laserverbund Berlin Brandenburg	Optics Design, Simulation, and Manufacturing
HZB Workshop nanophotonics/solar	HZB Workshop nanophotonics/solar

**Evening reception:** 7th October 2020 (WISTA Berlin-Adlershof)

**Workshop-participation fee** (includes excess to all Workshops):

One day	Two days
Member*: 250 Euro (excl. VAT)	Member*: 400 Euro (excl. VAT)
Non-member: 350 Euro (excl. VAT)	Non-member: 600 Euro (excl. VAT)

**Exhibition:** 55 exhibition slots á 2 x 2 m are available  
(includes one Workshop participation fee)

**Cost:** 600,00 (excl. VAT) members\*  
800,00 (excl. VAT) non-members

**Venue:** WISTA, Rudower Chaussee 17, 12489 Berlin-Adlershof

**Company and institute visits on 6th October** (esp. for foreign visitors)  
**B2b and Match-making on 7<sup>th</sup> and 8<sup>th</sup> October**

**Comments / questions are welcome:** Tel.: +49 30 6392 1720;  
E-Mail: [optecbb@optecbb.de](mailto:optecbb@optecbb.de)

\*) member of one of the innovation networks optical technologies (OptecNet Germany)

**Thanks!**

**Q & A ...**

# Contact details

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