



# Scaling Free-Space Optical Assemblies

 Friday, 29.05.2026

Zürichstrasse 130  
8600 Dübendorf



Christian Bosshard, Managing Director Swissphotonics

# SWISS PHOTONICS : Mission



Mission: Improve competitiveness of our members by strengthening the innovation forces to secure and grow industrial workplaces

## Swissphotonics Events

Tue, 19.05.2026	Lunch Chat: Manufacturing in Switzerland, online
Tue, 26.05.2026	Lunch Chat: Information Security, online
Fri, 29.05.2026	Scaling From Small Scale Optical Assemblies, Merano, Italy, Stettbach
Tue, 09.06.2026	Lunch Chat: no chat Photonics21 Meeting and Technology Fair 2026 at OST, online
Tue, 16.06.2026	Lunch Chat: Presentation by Swisens, online
Thu, 18.06.2026	Photonics 4 Masterpieces: Colors, PALEXPO, Geneva

Thu, 01.01. – Thu, 31.12.2026	EPIC Events 2026, Europe and beyond
Thu, 31.12.2026	Photonics Booster Events 2026
Thu, 21.05.2026	INDUSTRY DAY 2026 Exploring Quality and Assurance in Photovoltaics, Campus SUPSI Mendrisio
Wed, 03.06. – Fri, 05.06.2026	TERS10 Conference, ETH Zürich
Tue, 09.06. – Wed, 10.06.2026	Photonics Annual Partnership Meeting, DoubleTree by Hilton City Hotel
Mon, 15.06. – Wed, 17.06.2026	27th edition of European Photonics Integrated Optics, ETH Zürich
Mon. 15.06. – Wed. 17.06.2026	European Conference on Integrated Optics

>210 members

# Events, networking aperos and lunch chats



## 2025 / 2026 physical events

- Photonics 4 Quantum, Arlesheim
- Photonics 4 Masterpieces, Geneva
- Photonics 4 Datacenters, Lausanne
- Vision systems for robots, Chur
- Photonic Integration and Packaging, Villigen
- Swiss Photonics Apero at Photonics West 2026

Lunch chats: Tuesdays at noon

Support of several partner events

# Supporting Initiatives: Photonics Brochure(s)

- Highlights the strength of Switzerland CH in photonics.
- Details the Swiss photonics activities and Swiss companies across the world.
- Promotes the Swiss photonics activities in Switzerland, Europe and worldwide.
- **Printed version**
- **Digital version**
- **Video: [Swissphotonics 2025](#)**



# Supporting Initiatives: Swiss PIC

- **Mission: Bridging photonic innovation to market-ready modules – from prototype to scalable production**
- **Core services:**
  - PIC packaging
  - Quantum packaging
  - Micro-optical assembly
  - Design for Manufacturability
  - EO/RF characterization up to 145 GHz
- **Infrastructure:**
  - ISO 6 cleanroom
  - ESD-protected
  - Industrial-grade packaging & test
- **Funding partners:**
  - ETH AM/TTC, Kanton Aargau, SERI, Horizon Europe, SNF Bridge, SQI

## Industry Traction

*KPI snapshot*

**30+**

companies engaged

**70+**

commercial opportunities

**19 / 19**

deliveries on time

**1+ / week**

on-site customer visits

# Goal of Workshop

- **Switzerland's companies with free-space optics have common challenges**
  - Operation stability over long times and in rough environment
  - Hermetic sealing for condensing environment
  - Scaling up production of assembly with robots
  - Supply of components, etc...
- **The [Sensor Innovation Hub \(SIH\)](#) in Buchs and [Swiss PIC](#) in Villigen offer**
  - Micromechanical assembly processes, robots, high speed test equipment, environmental testing,...
- **Goal of workshop**
  - Identify equipment and processes beyond competition
    - Topics of open information exchange, innovation and production
    - Of course, no information exchange on trade secrets must be provided
  - SIH and Swiss PIC to evaluate what common service could be offered to community
    - Issue report to attendees later on with plans on what services and equipment will be offered

# Program of today

Time	Program	Speaker/Moderator
10:00	Registration & Coffee	
10:30	Welcome & Introduction	Christian Bosshard, Swissphotonics and Florian Emaury, Menhir Photonics
10:45	Automation & Robotic Assembly	Christian Bosshard, Swissphotonics
10:45	Towards automated manufacturing of fiberized Butterfly	Marcus Duetk, Exalos / indie
10:55	Scaling Ultrafast Laser Manufacturing: Automation, Integration, and Data-Driven Production	Paola La Marca, Lumentum
11:05	From Lab to Volume: Enabling 10k Laser Modules per Year	Benjamin Rudin, Menhir Photonics
11:15	Applications and challenges with high power diode laser fast axis collimation	Martin Forrer, Fisba
11:30	Panel I	<u>Anna Pogrebna, Menhir Photonics</u> ; Isabella Jung Ewert, NKT Photonics; Yves Pelletier, Ciposa; Karlheinz Gulden, Coherent; Andreas Walser, esp Engineering; Philippe Bolle, estel
12:15	Conclusions	
12:30	Lunch/Labtour Menhir Photonics	
14:00	Hermetic Sealing & Reliability	Christoph Harder, Swissphotonics
14:00	Hermetic High Frequency Package Technologies	Christian Maerke, Kyocera
14:10	Ruggedized Photonic Packaging of High-Power Quantum Cascade Lasers	Arunkrishnan Radhakrishnan, Alpes Lasers
14:20	Putting a bunch of lasers in a box - Why is this so hard?	John Jost, Enlightra
14:30	Advanced Thermal and Vibration Testing for Optical Packaging Systems	Julien Rouvinet, CSEM
14:45	Panel II	<u>Selina Casutt, Photonics Booster</u> ; Andreas Hugi, Swiss PIC; Tobias Lamprecht, FH OST; Benjamin Rudin, Menhir Photonics; Hektor Meier, Albis Optoelectronics
15:30	Conclusions	
15:45	Workshop wrap up	
15:45	Conclusions and concrete actions	
16:15	Networking Aperó	
18:00	Close	

**Further information**

# Opportunities for collaborations

- **Mini DARPA Switzerland**

- Launch: July 1, 2026
- 20 MCHF
- One topic: Photonics



- **2026 Quantum Voucher**

- Launch: June 1, 2026
- Up to 50 kCHF per voucher



# Next events

- **Photonics 4 Masterpieces: Colors**, Thursday, 18.06.2026, PALEXPO, Geneva



- **Photonics4MedTech – Manufacturing & Smart Assembly**, Thursday, 10.09.2026, FHGR Chur



- **20 years of Swissphotonics**, Wednesday, 21.10.2026, Rolex Center, EPFL

