



Industrial Exhibition **Your Participation Options** **Key Information**

Become an Exhibitor

As one of the most interesting events in the special niche of the optics industry, the Workshop is the showcase for current developments and international industrial change year after year. Don't miss the chance to be an exhibitor in the accompanying industrial exhibition!

Good Reasons for your Participation

- **Purpose**
Inspire with your contribution to the future of the industry.
- **Thought Leadership**
Set the trend and exchange ideas with other pioneers.
- **Attention**
Generate attention for yourself and your innovations.
- **New Business**
Generate project business for the future order backlog.
- **Collaboration**
Forge alliances for the future.
- **Community**
Benefit from a good environment of market companions, partners and customers.
- **International Business**
Meet new international customers and expand your business contacts.

Register now for Industrial Exhibition 2026!

Be part of this interesting event!

- As our visitor and guest
- As an exhibitor in our industry exhibition
- As a visitor of the accompanying W3+ Fair



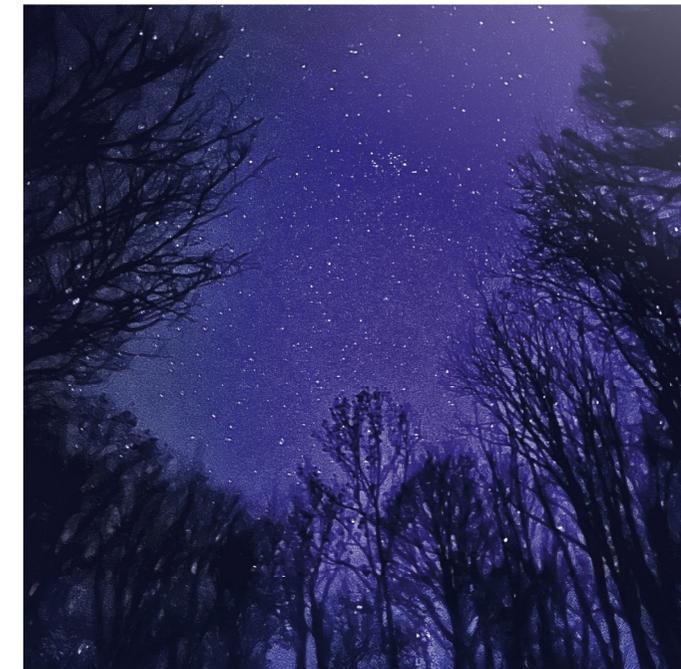
Key Information

Participation Schedule	
Workshop Dates	March 17-18, 2026
Get Together	March 17, 2026
Registration Deadline	March 5, 2026
Organizational Details	
Conference Language:	English
Conference Registration fees:	
Members:	€ 150
Lecturer:	€ 150 (1st person)
Students:	€ 150
Non-members / others:	€ 300
W3+ Exhibitors:	€ 250
Wetzlar Network Partner:	€ 250
Submission Details	
Abstract Content:	100 Words
Documents Required:	short Abstract, short CV
Presentation Duration:	25 + 5 Minutes discussion
Final Submission Author & Title	February 27, 2026
Final CV Submission:	March 5, 2026
Final Abstract Submission:	March 12, 2026
Final Submission Slides-pdf:	March 12, 2026
Submission Email:	info@upob.de

Contact

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**13th Workshop 2026
High-Tech Optics –
Manufacturing and Metrology**



**March 17-18, 2026
Buderus Arena Wetzlar
Germany**



Motivation

Modern High-Tech Optics are central elements for innovations in research and industry as well as in everyday life. Our Workshop High-Tech Optics - Metrology and Manufacturing brings together experts from industry and R&D and provides a platform for discussing current technologies, challenges and future trends. The individual sessions cover the topics: High-precision alignment and application of optical systems, ultra-precise manufacturing and measurement technologies as well as optical systems for use in space.

During the Meeting the precise alignment of large aspherical optics under real production conditions, CGH-based testing of IR-endoscopes and reference structures for the exact positioning of free-form optics systems will be discussed. The first session is completed by details on mid-spatial frequency structures and the associated metrological challenges.

The focus in second session is on manufacturing of ultra-high-precision optics for lithography, ultra-precision X-ray optics and the influence of modern smartphone camera technologies as a driver for new precision standards. Also metrological challenges of smartphone optics will be highlighted.

The third session introduce the production of astronomical telescopes by using selected laser etching and laser beam finishing, the ultra-precise production of metal-optical aspheres and free forms for space applications and the precision machining of optical components for solar observation.

A accompanying table-top exhibition invites participants to exchange in a relaxed atmosphere. We are looking forward to bringing together academics, users and leading manufacturers of high-quality measuring systems for a constructive exchange.

Detailed Program

Tuesday, March 17, 2026	
11:15	Registration, Welcome Coffee and UPOB-Industrial Exhibition
12:00	Welcome to Workshop High Tech Optics - Metrology and Manufacturing 2026 – Opening, Overview and Outlook <i>Harald Bosse, CC UPOB e.V., Germany</i>
Session 1 – Adjustment and Application of Optical Components <i>Chair: Andreas Beutler, MAHR GmbH, Germany</i>	
12:15	High-Precision Alignment of Large Aspherical Optics under Production Conditions <i>Patrik Langehanenberg TRIOPTICS GmbH, Germany</i>
12:45	CGH-Based Testing of the IR Endoscopes for Wendelstein 7X <i>Jean-Michel Asfour, DIOPTIC GmbH, Germany</i>
13:15	Reference Structures as the Key to Precise Positioning of Free-Form Optics in Complex Systems <i>Sebastian Kaldun, Asphericon GmbH, Germany</i>
13:45 Coffee Break and UPOB-Industrial Exhibition	
14:45	Mid Spatial Frequency Structures and their Challenges <i>Reinhard Windemuth, Panasonic Connect Europe GmbH, Germany</i>

Session 2 – Components and Metrology for Extreme Precision Applications and Smart Phone Applications <i>Chair: Andreas Beutler, MAHR GmbH, Germany</i>	
15:15	Ångström at Scale – Manufacturing Ultra Precise Optics for Highly Productive Lithography <i>Benjamin Montavon, Carl Zeiss SMT GmbH, Germany</i>
15:45	Ultra-Precise X-ray Optics for Research with Synchrotron and FEL Light <i>Frank Siewert, Helmholtz Zentrum Berlin BESSY II, Germany</i>
16:20 Coffee Break and UPOB-Industrial Exhibition	
17:00	Cell Phone Camera Technology Driving Ultra Precision Technologies <i>Christian Wenzel, INNOLITE GmbH, Germany</i>
17:30	Metrology and its Challenges on Smartphone Optics <i>Panasonic Connect Europe GmbH, Germany</i>
17:50	Summary of the 1st Day and Closing Remarks <i>Session Chair, CC UPOB e.V., Germany</i>
18:00 End of Presentations	
19:00 Get together in Restaurant	

Programme Committee

Jean-Michel Asfour;	Dioptic GmbH
Andreas Beutler;	Mahr GmbH
Harald Bosse;	CC UPOB e.V.
Ines Fortmeier;	PTB
Thomas Franz;	NTG GmbH & Co. KG
Rudolf Meeß;	CC UPOB e.V.
Oltmann Riemer;	Leibniz-Institut IWT

Wednesday, March 18, 2026	
Session 3 – Components for Space Applications <i>Chair: Jean-Michel Asfour, DIOPTIC GmbH, Germany</i>	
9:00	Welcome Coffee and UPOB-Industrial Exhibition
9:45	Opening and Short Overview on Second Day <i>Session Chair, CC UPOB e.V., Germany</i>
9:50	Production of a Monolithic Cassegrain Telescope by Selected Laser Etching & Laser Beam Finishing <i>Markus Rollinger, DIOPTIC GmbH and Christian Wenzel INNOLITE GmbH, Germany</i>
10:20	Ultra-Precise Production of Metal-Optical Aspheres and Free-Forms for Space Applications - From Component to System <i>Melanie Ulitschka, Fraunhofer IOF, Germany</i>
10:50	Precision Machining and Production-Related Measurement Technology for Optical Components for Solar Observation <i>Thomas Liebrich, RhySearch, Switzerland</i>
11:10	Closing Remarks and Outlook <i>Harald Bosse, CC UPOB e.V., Germany</i>
11:20 End of Event	
11:30 Light Lunch and Coffee to Go	

Free of charge for UPOB Workshop Participants

12:15	Visit of W3+ Fair Show in Buderus Arena
14:00	Hessen in Space - Speeches on W3+ Fair
17:00	KI-Keynote & After-Work Drink & Networking
18:30	Good Bye W3+ Fair