

UPOB-WORKSHOP 2026 – High Tech Optics - Metrology and Manufacturing

Detailed Programme **V3**

Tuesday, March 17, 2026

- 10:30** **Set Up of Industrial Exhibition** in UPOB Workshop Area
- 11:15** **Arrival**
 Registration
 Welcome Coffee
 UPOB-Industrial Exhibition
- 12:00** **Welcome to Workshop High Tech Optics - Metrology and Manufacturing 2026 –
Opening, Overview and Outlook**
Harald Bosse, CC UPOB e.V., Germany

Tuesday, March 17, 2026

Session 1 – Adjustment and Application of Optical Components

Chair: Andreas Beutler, MAHR GmbH, Germany

- 12:15** **High-Precision Alignment of Large Aspherical Optics
under Production Conditions**
Patrik Langehanenberg, TRIOPTICS GmbH, Germany
- 12:45** **CGH-Based Testing of the IR Endoscopes for Wendelstein 7X**
Jean-Michel Asfour, DIOPTIC GmbH, Germany
- 13:15** **Reference Structures as the Key to Precise Positioning
of Free-Form Optics in Complex Systems**
Sebastian Kaldun, Asphericon GmbH, Germany
- 13:45** **Coffee Break and UPOB-Industrial Exhibition**
- 14:45** **Mid Spatial Frequency Structures and their Challenges**
Reinhard Windemuth, Panasonic Connect Europe GmbH, Germany

UPOB-WORKSHOP 2026 – High Tech Optics - Metrology and Manufacturing

Detailed Programme **V3**

Tuesday, March 17, 2026

Session 2 – Components and Metrology for Extreme Precision Applications and Smart Phone Applications

Chair: Andreas Beutler, MAHR GmbH, Germany

- 15:15** **Ångström at Scale – Manufacturing Ultra Precise Optics
for Highly Productive Lithography**
Benjamin Montavon, Carl Zeiss SMT GmbH, Germany
- 15:45** **Ultra-Precise X-ray Optics for Research with Synchrotron and FEL Light**
Frank Siewert, Helmholtz Zentrum Berlin BESSY II, Germany
- 16:15** **Group Photo with all Participants**
- 16:20** **Coffee Break and UPOB-Industrial Exhibition**
- 17:00** **Cell Phone Camera Technology Driving Ultra Precision Technologies**
Christian Wenzel, INNOLITE GmbH, Germany
- 17:30** **Metrology and its Challenges on Smartphone Optics**
Reinhard Windemuth, Panasonic Connect Europe GmbH, Germany
- 17:50** **Summary of the 1st Day and Closing Remarks**
Session Chair, CC UPOB e.V., Germany
- 18:00** **End of Presentations**
- 19:00** **Get Together in Steakhouse Bolero ([Details ONLINE](#))**
- 23:00** **End of Evening Event**

UPOB-WORKSHOP 2026 – High Tech Optics - Metrology and Manufacturing

Detailed Programme **V3**

Wednesday, March 18, 2026

Session 3 – Components for Space Applications

Chair: Jean-Michel Asfour, DIOPTIC GmbH, Germany

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

Wednesday, March 18, 2026

Free of charge for UPOB Workshop Participants

- 12:15** **Visit of W3+ FAIR Show** Exhibition in Buderus Arena
- 14:00** **Talks "Hessen in Space"** Speeches on the Stage of the W3+ Fair
- 17:00** **KI-Keynote &
After-Work Drink & Networking** In front of the W3+ Fair-Stage
- 18:30** **Good Bye W3+ Fair**