

INVITATION: APRIL 13TH - 14TH

8<sup>th</sup> EUROPEAN SEMINAR ON PRECISION OPTICS MANUFACTURING

**SPIE.**





WELCOME

8<sup>th</sup> European Seminar on Precision Optics Manufacturing

DEGGENDORF  
INSTITUTE OF  
TECHNOLOGY **DIT**



EUROPEAN UNION  
Investing in our Future  
European Regional  
Development Fund

**8<sup>th</sup> European Seminar on Precision Optics Manufacturing, APRIL 13th - 14th 2021**  
**Deggendorf Institute of Technology**  
**Technology Campus Teisnach Optics, Germany**

### Main topics

- **Manufacturing and measurement** of optics from sub millimeter to large and giant dimensions and optical systems:  
Processes for grinding, polishing, centering, assembly, handling, surface modification, cleaning and coating of optics. Standards in optics manufacturing. Design of optics, error budgeting, cost-planning...
- **Advanced and next generation (future) technologies** in high precision manufacturing:  
Ultraprecision machining, kinetic abrasive polishing, additive manufacturing, molding, new and special materials, next generation of giant optics manufacturing and testing...
- **Smart manufacturing, internet and internet of things** in the production of optics:  
Block chain and distributed-ledger-technology, Data, expert systems, optical designs and process parameters with regard to their integrity and security Process stability, data mining, handling and analysis, control of environment and media...

### Conference language:

English

We are looking forward to meeting you at the 8<sup>th</sup> European Seminar on Precision Optics Manufacturing.

Yours sincerely,

Prof. Dr. Peter Sperber  
President of Deggendorf  
Institute of Technology

Prof. Dr. Gerald Fütterer  
Head of Technology  
Campus Teisnach



## PROGRAM, 1<sup>ST</sup> DAY

8<sup>th</sup> European Seminar on Precision Optics Manufacturing

**Chair:** Prof. Dr. Gerald Fütterer, THD  
Dr. Oliver Föhnle, OST – Ostschweizer Fachhochschule, CH

**Committee:** Dr. Oliver Föhnle, OST – Ostschweizer Fachhochschule, CH  
Prof. Dr. Gerald Fütterer, THD  
Prof. Dr. Rolf Rascher, THD  
Dr. Christian Vogt, THD  
Prof. Dr. Christine Wünsche, THD

1<sup>st</sup> DAY, TUESDAY, April 13th 2021

9:30 SESSION 1 - Advanced Processes

1

**Glass-welding with USP-Lasers and long working distancess**

Martin Kahle, IFW-Jena, D

2

**Atmospheric plasma jet machining of an optical element made from borosilicate crown glass**

Heike Müller, Leibniz-Institut für Oberflächenmodifizierung e.V., D

3

**Silicone-on-glass (SOG) diffractive optical elements (DOE) for the correction of chromatic aberrations and lens shape**

Harald Ries, anamoc GmbH, D

10:30 BREAK (15 MIN)

4

**High-precision glass processing with innovative coordinate grinding technology**

Anett Jahn, ShapeFab GmbH & Co. KG

5

**Progressions in automated robot polishing**

Simon Killinger, Deggendorf Institute of Technology – IPH, D

6

**Removing optical coatings from coating equipment out of a PVD chamber, as well as from coated substrates**

Alan Popozoglo, NGL CLEANING GmbH, D

11:45 LUNCH

# PROGRAM, 1<sup>ST</sup> DAY

8<sup>th</sup> European Seminar on Precision Optics Manufacturing

13:00      SESSION 2 - Measurement 1

7

**Highly flexible free form optics measurement using a semi-automatic teach in approach**

Tobias Jörg Schröter, Mahr GmbH, D

8

**Acoustic measurements for optics**

Olga Kukso, Deggendorf Institute of Technology – IPH, D

9

**Design of a measuring machine for optical filters**

Michael Wagner, Deggendorf Institute of Technology – IPH, D

14:00      BREAK (15 MIN)

10

**Testing surface form of precision optics by a point diffraction interferometer with two beams**

Nikolay Voznesenskiy, Difrotec OÜ, EE

11

**Interferometrical profilometer for high precision 3D measurements of free-form optics topography with large local slopes**

Michael Kühnel, SIOS Messtechnik GmbH, D





## PROGRAM, 2<sup>ND</sup> DAY

8<sup>th</sup> European Seminar on Precision Optics Manufacturing

### 2<sup>nd</sup> DAY, WEDNESDAY, APRIL 14th 2021

9:00           SESSION 3 - Manufacturing Optics

12

**Autonomous fabrication of optics**

Kai Brückmann, OptoTech Optikmaschinen GmbH, D

13

**Balancing Optics Design with Optics fabrication: a case study**

Oliver Fähnle, OST – Ostschweizer Fachhochschule, CH

14

**Modelling of defects and control parameters in the cleaning process of optical surface**

Emilio Martin Zambrano, Deggendorf Institute of Technology, D

10:00           BREAK (15 MIN)

15

**Tolerances for surface form deviations**

Eckhard Langenbach, FISBA AG, CH

16

**Plasma-induced shaping of liquid-based polymer lenses**

Christoph Gerhard, HAWK - FH Hildesheim/Holzminde/Göttingen, D

11:00           SESSION 4 - Measurement 2

17

**Why white light interferometry for optics applications?**

Joe Armstrong, Polytec GmbH, D

18

**Advanced 3D profile measurement methods for optical devices by UA3P**

Reinhard Windemuth, Panasonic Industry Europe GmbH, D

11:40           LUNCH



# PROGRAM, 2<sup>ND</sup> DAY

8<sup>th</sup> European Seminar on Precision Optics Manufacturing

13:00      SESSION 5 - Smart Production

19

**Industry 4.0 in the fabrication of optical components - development, presence and requirements**

Stefan Anthuber, Deggendorf Institute of Technology – IPH, D

20

**In-process surface roughness measuring device for information-based real-time polishing process adjustment and optimization**

David Moszko, Deggendorf Institute of Technology – IPH, D

13:40      END OF THE SEMINAR



## INFORMATION

8<sup>th</sup> European Seminar on Precision Optics Manufacturing

### Registration

Please register before April 01<sup>st</sup> 2021.  
[pmit-ext.th-deg.de/iqw-seminare/dates/view/142](http://pmit-ext.th-deg.de/iqw-seminare/dates/view/142)

### Fee for

- Authors EUR 250, VAT included
- Access to POM proceedings EUR 150, VAT included
- Participation in the digital seminar, free

### Schedule

Seminar starts: April 13th 2021 at 09:30 am  
Seminar ends: April 14th 2021 at 02:20 pm

### Announcement

9<sup>th</sup> European Seminar on Precision Optics Manufacturing, 26th - April 27th 2022  
Papers will be accepted by December 17<sup>th</sup> 2021

### Organisation

THD -Technische Hochschule Deggendorf  
IPH - Institut für Präzisionsbearbeitung  
und Hochfrequenztechnik  
Technologecampus 1  
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Phone +49 9923 80108-400

### Seminar contact

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