

## **Exhibition 2019**

The popular exhibition of participating companies will take place again at our upcoming conference. Would you like to present your company? Then please register with us as soon as possible!

## **Key Dates**

### **Measurement Schedule:**

- Application for measurements is opened
- Start of measurements: 3 April 2018
- Deadline for submission of author and title
   29 October 2018
- Deadline for performing measurements
   15 December 2018
- Submit your measured data for comparison no later than 4 weeks after the end of your measurement period

#### **Deadlines for Non-Measurement Contributions:**

- Abstracts:
  - 15 October 2018
- Registration for Industrial Exhibition:1 February 2019

### **Participation Schedule:**

- Registration Start: Autumn 2018
- Registration Deadline: 5 March 2019

## **Organizational Details**

### **Date:** 19 – 20 March 2019

Language: English

**Registration:** Please register by letter, fax or e-mail using the registration form available at www. upob.de. You will receive a confirmation notice.

### Attendance fee

Lecturers: € 150 (1 person)

Members: € 150 Non-members: € 525

Please pay in advance after you have received the invoice.

**Accommodation:** For more information, please visit www.upob.de/ Veranstaltungen.

Get2gether: 18 March 2019

Conference Dinner: 19 March 2019

Further information can be found on our website.

**Conference Location:** For more information, please visit www.upob.de/ Veranstaltungen.

## Programme Committee

Jean-Michel Asfour; Dioptic GmbH, Andreas Beutler; Mahr GmbH Thomas Franz; NTG GmbH & Co. KG Frank Löffler; CC UPOB e.V. Rudolf Meeß; CC UPOB e.V. Oltmann Riemer; University of Bremen LFM Michael Schulz; PTB



### Contact

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# 10<sup>th</sup> High-Level Expert Meeting Asphere Metrology

19-20 March 2019

on Joint Investigations



19-20 March 2019 at Physikalisch-Technische Bundesanstalt Germany





10th High-Level Expert Meeting
Asphere Metrology
on Joint Investigations

SAVE THE DATES

SAVE THE DATES

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Promotion of Young Scientists within the Field of Ultra-Precise Surface Engineering



## **Background**

In order to manufacture ultra-precise and high-tech optical components and to be capable of further miniaturization, reliable and extremely precise measurement technology is required. Particularly in the field of asphere metrology, many new advancements were achieved, new measurement procedures were developed and precision was noticeably improved. Especially the measurement of optical elements with the highest accuracy is anything but trivial. Hence, only the best manufacturers of measurement technology manage to meet this high standard.

In addition to accuracy, the comparability of the measurement results of different systems and manufacturers is very important. Therefore, the participants will again measure selected aspheres and free-form surfaces, present the results and demonstrate the potential as well as the further development of their measurement devices during the conference.

The comparison of the results from all participants, contributions on complementary topics, awarding the 2<sup>nd</sup> Young Scientist Award and an exhibition of the participating companies round out the programme.

Would you like to participate in measurements or just give a lecture?

Would you like to present your institution at the company exhibition?

THEN PLEASE REGISTER NOW!

# Main Topic:

**Topics** 

Presentation of the results of the round robin

### **Additional Topis:**

- The effect of marks on the sample
- New developments in measuring techniques for aspherical, free-form and cylindrical lenses
- Clamping technologies for measurements in aspherical lens production
- Standardization in the description of aspheres and free-form surfaces
- In situ measurements in complex UP processing lines for aspherical or free-form surfaces
- Measurements of aspherical surfaces of moulding tools for glass and plastic lenses
- The influence of coatings on the measurement of aspheric and free-form lenses
- Other topics related to asphere and free-form metrology or production

Authors who intend to give a presentation should specify the title and the topic from the list above and send a 200-word abstract in English. Institutions interested in participating in the measurements should contact us soon to schedule a measurement time.

## Lenses

## Standard Asphere - new "with marker" -

HLEM 2018/19 Sample #3
Lens made possible by
asphericon GmbH, Germany;
Marker by NTG GmbH, Germany

## Precision Cylinder

HLEM 2018/19 Sample #5 Made possible by Berliner Glas, Germany

### **Convex Toroid**

– new "with marker" – HLEM 2018/19 Sample #6 Lens made possible by Physikalisch-Technische Bundesanstalt (PTB), Germany; Marker by NTG GmbH, Germany

#### Wild Freeform

HLEM 2018/19 Sample #7 Made possible by IOM Leibniz Institute of Surface Engineering, Germany



## **Invitation to Tender**

## Please Apply!

As a young scientist (up to age 30), you can present your work to an interested expert audience within the scope of this year's HLEM. Each selected participant will be invited to attend the HLEM (participation in the conference is free of charge). At the HLEM, you will present your work in the plenum during a poster session with a 5-minute slide presentation in front of international experts from science and industry.

The best work will be awarded with a prize of

**1000 euros** 

## Please Apply to Present on the Following Topics:

Precision procedures such as MRF, SPDT, IBF, etc.; approaches for additive manufacturing for optical products; cleaning and multiple-layer coating; metrology and data analysis in production lines for aspheres and freeforms; ultra-flatness; diffraction bases; nanostructures.

## Please Send Your Abstract in English (250 words),

including a passport picture, by 15 January 2019 to the CC UPOB office to Mr. Klawitter (info@upob.de). Legal action is excluded. You will receive a reply by February 2019.