



Kompetenzzentrum
Ultrapräzise
Oberflächen-
bearbeitung e.V.

Participating Institutions



Organizational Details

Date:	March 17 th - 18 th , 2015
Language:	English
Registration:	Please register by letter or fax using the attached form. Following this you will receive a confirmation.
Attendance fee:	Lecturers: € 150 (1 st person) Members: € 150 Non-members: € 525 Please pay in advance after receiving the invoice.
Accommodation:	For more information, please visit www.upob.de/ → Veranstaltungen
Get2gether:	March 16 th , 2015; Start at 19.00 Further information can be found on our website
Conference Dinner:	March 17 th , 2015; Evening Further information can be found on our website
Conference Location:	For more information, please visit www.upob.de/ → Veranstaltungen
Contact:	CC UPOB e. V. c/o PTB Heiko Klawitter Bundesallee 100 38116 Braunschweig Tel.: +49 531 - 592 - 5131 Fax: +49 531 - 592 - 695131 info@upob.de; www.upob.de

HILEM

March 17th- 18th, 2015



7th High Level Expert
Meeting 2015

Sponsors



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CC UPOB e.V.; c/o PTB

Heiko Klawitter
Bundesallee 100
38116 Braunschweig

Germany



Please fax your registration to
+49 531-592-69 5131

Registration

- I hereby register for 7th HLEM – Asphere Metrology
- YES, I will attend the Get2gether on March 16th, 2015
- YES, I will attend the Conference dinner on March 17th, 2015

Affiliation, Institution: _____

Title, Family Name: _____

First Name: _____

Address: _____

Postal Code, City: _____

Country: _____

Phone, Fax: _____

E-Mail: _____

Signature: _____

Date: _____

We would like to know how to deal with photos on which you can be seen. Please tick (explanation below).

- YES, photos may be published by UPOB
- NO, photos may NOT BE PUBLISHED by UPOB

The photos taken during this event will be shown only on our website or in our own publications of and reports on this event. These photos are not used commercially. Names will not be mentioned in connection with the images.

Cancellation up to 14 days prior the meeting will be charged 50% of the attendance fee.

Following that date or if the participant does not attend the meeting, the total amount is due. Cancellations must be made in writing.

We would be glad to accept another participant as attendance fees are transferable.

7th High Level Expert Meeting 2015

Agenda Day 1: Tuesday March 17th 2015

Due to the continuously increasing demands for high-precision measurement technology, technology providers and users are faced with new challenges.

This is especially true in the field of asphere metrology. The applications of the aspheres are widespread. However, it is difficult to produce and measure them precisely.

This is revealed by today's practice, where sometimes large measurement uncertainties emerge.

- How can measurement uncertainties be minimized?
- Which procedures can be applied?
- What surface shapes can be measured by which instrument?
- What exactly are the latest developments?

Questions like the ones above can only be addressed by experts. The High-Level Expert Meeting, organised by the CC UPOB e.V., i.e. the competence centre for ultra-precise surface figuring, aims to bring together these experts from industrial and research fields, as well as developers and users to continue the dialogue started in 2010.

During our upcoming meeting, the international actors will present their measurement devices, methods and last but not least, their results of the four newly produced samples which have been compared among the community.

Contributions on calibration methods for cylindrical optics, the measurement of free-form surfaces, simulations for optical metrology, discussions on the specific presentations as well as discussions on future steps in general will complete the conference.

This interesting meeting takes place on
March 17th & 18th 2015 at PTB, Braunschweig,
Germany's National Metrology Institute

- **9:00 Registration**
- **Conference Opening and Overview**
Frank Löffler; CC UPOB e.V.; Germany
- **Review of Measurement Methods and Results**
Michael Schulz; PTB; Germany
- **Asphere/Freeform Metrology and Round Robin Result by UA3P;**
Keishi Kubo; Panasonic Production Engineering Co., Ltd.; Japan
- **Asphere Measurements Using the Isara 400 CMM;**
Ivo Widdershoven; IBS Precision Engineering; The Netherlands
- **Non-Contact 3D Form Measurement of Aspheres Including Decenter and Wedge Error Determination**
Gernot Berger; Lufos GmbH; Germany
- **Non-Contact and Contact 3D Profilometry and Tilted Wave Interferometry in Direct Comparison**
Andreas Beutler; Mahr GmbH; Germany
- **Measurement and Calibration Methods for Cylindrical Optics**
Jan-Peter Richters; Berliner Glas KGaA; Germany
- **Simulations for Optical Metrology at PTB**
Ines Fortmeier; PTB; Germany
- **Measuring Position and Figure Deviation with Computer Generated Holograms;**
Matthias Beier; Fraunhofer IOF; Germany
- **16:50 Closing of First Day**

After each lecture there will be the opportunity for a short discussion. For more detailed information please visit www.upob.de, you will receive more information about each session as well as additional information relating this event. The present programme is preliminary. You'll receive last minute information by visiting our website.

Agenda Day 2: Wednesday March 18th 2015

- **9:00 Opening**
- **HLEM Round Robin Asphere Test 2015 at the Deggendorf Institute of Technology**
Johannes Liebl; Deggendorf Institute of Technology - Technologicampus Teisnach; Germany
- **Measurement Results of the Tilted-Wave-Interferometer**
Goran Baer; Institut für Technische Optik, University of Stuttgart; Germany
- **Results of Measurements - Title Requested;**
N.N.; ZygoLOT; United States of America
- **Measurement of Aspheric Surface Profiles Using Scanning Deflectometry;**
Iris Erichsen; Trioptics GmbH; Germany
- **Evaluation and Discussion of the Intercomparison**
Gernot Blobel; PTB; Germany
- **Discussion and Outlook**
Michael Schulz; PTB and Frank Löffler; CC UPOB e.V.; Germany
- **14:45 Conference Closing**

Programme Committee

Frank Löffler; CC UPOB e.V.
Gunter Schneider; Schneider GmbH + Co. KG
Jean-Michel Asfour; Dioptric GmbH
Andreas Beutler; Mahr GmbH
Oltmann Riemer; University of Bremen LFM
Rudolf Meeß; CC UPOB e.V.
Michael Schulz; PTB