

Background - Joint Investigation

Two selected aspheres were investigated by fifteen institutes. Theoretical papers introduce in asphere metrology and free from surfaces.

The following institutions participate with measurements or theoretical contributions:

Organizational details

Date:	March 6 th and 7 th 2012
Language:	English
Registration:	Please register by letter or fax using the attached form. Following this you will receive a confirmation.
Registration deadline:	February 25 th 2012
Attendance fee:	Lecturers: 135,- € (1 st person) Members: 135,- € Non-members: 500,- € Please pay the fee in advance after receiving the invoice.
Accommodation:	Recommended accommodation www.upob.de/ → Veranstaltungen → HLEM 2012
Get2gether:	March 5 th 2012
Conference Dinner:	March 6 th 2012
Location:	PTB-Braunschweig; Conference Center Directions: www.upob.de/ → Kontakt
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

HLEM

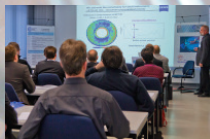
March 6th and 7th 2012



5th High Level Expert
Meeting 2012

Expert Meeting
"Asphere Metrology on
Joint Investigations"





5th High Level Expert Meeting 2012

Agenda Day 1: Tuesday March 6th

Agenda Day 2: Wednesday March 7th

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

Aspheres - whether as an aid for poor eyesight, in mobile phones or large optics - are in use all around us. As widespread their applications are, as difficult it is to produce or to measure them precisely. This is revealed by today's practice, where sometimes large measurement uncertainties emerge.

- But how can measurement uncertainties be minimized?
- Which procedures have which advantages?
- Which technical innovation will improve existing techniques significantly?
- Could a calibrated reference asphere be the key?

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

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

Contributions on the measurement of free-form surfaces, discussions on the specific presentations as well as discussions on future steps in general will complete the conference. This meeting take place on

March 6th & 7th 2012 at PTB, Braunschweig,
Germany's National Metrology Institute

- **Measurement of the aspheres with the Isara 400;**
Dr. H. A. M. Spaan; IBS Precision Engineering BV; Netherlands
- **Test measurements on the Tilted Wave Interferometer;** G. Boer;
University Stuttgart ITO; Germany
- **3D tactile scanning on aspheric lenses;** Dr. A. Beutler;
Mahr GmbH; Germany
- **Interferometric Measurements of Aspheric and Freeform Surfaces ;** Dr. P. Szwajkowski; ESDI; USA
- **Asphere and Freeform Measurement by 3 D Profilometer for Ultra-precision Manufacturing;**
S. Scheiding / A. Gebhardt; Fraunhofer Institute for Applied Optics And Precision Engineering IOF; Germany
- **CGH Design and applications in optical testing;**
Dr. R. Schreiner;
JENOPTIK Laser, Optik, Systeme GmbH; Germany
- **Analysis of CGH adjustment errors and their minimization;**
Dr. T. Ottenstein; DIOPTIC GmbH; Germany
- **Specular freeform surfaces measured by Deflectometry;** E. Olesch;
University of Erlangen-Nuremberg; Germany
- **Aspheric Testing in Null Configuration with a Twyman-Green-Interferometer;** Dr. K. Mantel;
Max Planck Institut Erlangen; Germany
- **Asphere and Freeform Metrology at Carl Zeiss;**
Dr. T. Köhler; Carl Zeiss Jena GmbH; Germany

Programme Committee

Prof. Dr.-Ing. Frank Löffler; UPOB e.V.
Dipl.-Ing. Gunter Schneider; Schneider GmbH + Co. KG
Dipl.-Phys. Jean-Michel Astour; Dioptric GmbH
Prof. Dr.-Ing. Ekkard Brinksmeier; University of Bremen IFM
Dr. Hans Lauth; Fresnel Optics GmbH
Dr. Rudolf Meeß; UPOB e.V.
Dr. Michael Schulz; PTB

- **Licensing opportunities and patenting policy of PTB;**
Dr. B. Smandek;
Technology Transfer Commissioner; PTB; Germany
- **An alternative solution to non-contact asphere metrology based on MWL technology;** Dr. G. Berger;
Luphas GmbH; Germany
- **Recent Advances in Aspheric Stitching Interferometry**
J. P. Lormeau; QED Technologies International; USA
- **Chances and limits of optical in-situ measurements;**
I. Hollenbach / Dr. M. Lehndorff; Kugler GmbH; Germany
- **Asphere Metrology round robin result of UA3P ;**
K. Kubo; Panasonic Production Technology Co., Ltd;
UA3P Development Team; Japan
- **Freeform optics and scanning deflectometric testing of aspheres;** S. Stürwald;
Fraunhofer IPT; Germany
- **Orthogonal Polynomial Representations for Aspheres and Freeforms;** Dr. A. Kulawiec;
QED Technologies International; USA
- **Potentials and Limits of Deflectometry;**
Prof. Dr. G. Häusler;
University of Erlangen-Nuremberg; Germany
- **Discussion on Comparability;** Dr. S. Quabis;
PTB; Germany

In the lectures of 25 minutes each, the manufacturers will present their measurement procedures and the results of their investigations on the test aspheres. Following there will be a chance for discussions. Before the start of the meeting, we will send you the final agenda and also publish it on: www.upob.de

Attendance may be cancelled by the participant up to 14 days before the meeting starts at 50 % of the attendance fees. Following that date or if the participant does not attend the meeting, we will charge the full amount. Cancellations must be made in writing. We would be glad to accept another participant as attendance fees are transferable.

- ☐ I am interested in this meeting. Please send me more information
☐ I hereby register for HLEM 2012 - Asphere Metrology
☐ Yes I will attend the GetTogether on March 5th evening
☐ Yes I will attend the Conference Dinner on March 6th evening

Firm, Institution:

Title, Family Name, First Name:

Address:

Postal Code, City:

Tel., Fax:

E-Mail:

Signature: