Kompetenzzentrum Ultrapräzise Oberflächenbearbeitung e.V.

4th High Level Expert Meeting - Asphere Metrology

Detailed Program

(as of 3rd March 2010)

Day 1: Wednesday 10th March / Morning

Chairman: Dr. H. Lauth; Fresnel Optics GmbH; Germany

10.00 **Opening;** Prof. Dr. F. Löffler; CC UPOB e.V.; Germany

10.10 **Accuracy aspects of absolute asphere metrology;** Dr. M. Schulz; PTB; Germany

10.40 **Aspheric testing without mechanical scanning;** C. Pruss; University Stuttgart ITO; Germany

11.10 **Coffee Break**

11.30 **3D- asphere measurement based on contour measuring machines;** Dr. A. Beutler; Mahr GmbH; Germany

12.15 **Nulling Fizeau interferometer for measuring aspheric surfaces;** Dr. P. Szwaykowski; ESDI; USA

13.00 **Lunch Break**

Day 1: Wednesday 10th March / Afternoon

Chairman: J.M. Asfour; Dioptic GmbH; Germany

14.00 **Asphere measurement by 3-D profilometer (UA3P);** A. Gebhardt / Dr. P. Kühmstedt; Fraunhofer Institute for Applied Optics and precision engineering; Germany

14.45 **Interferometry based on CGH for industrial manufacturing of aspheres;** Dr. S. Müller-Pfeiffer; JENOPTIK Laser, Optik, Systeme GmbH; Germany

15.30 **Coffee Break**

15.50 **Getting the most out of diffractive null lenses;** Dr. S. Aigner; DIOPTIC GmbH; Germany
Dr. R. Nasyrov; IA&E Novosibirsk; Russia

16.35 **Asphere and freeform metrology at IOM;** Dr. G. Böhm / Dr. T. Arnold; Leibniz-Institut f. Oberflächenmodifizierung (IOM); Germany

17.20 **Closing;** Prof. Dr. F. Löffler; CC UPOB e.V.; Germany

19.00 **Conference Dinner**

Day 2: Thursday 11th March / Morning

Chairman: G. Schneider; Schneider GmbH & Co. KG; Germany

9.00 **Calibration strategies for the interferometric testing of aspheres;** Dr. K. Mantel; Max Planck Institut Erlangen / University Erlangen-Nürnberg; Germany

9.30 **Subaperture stitching interferometry of aspheres using a variable optical null device;** Dr. A. Kulawiec; QED Technologies International; USA

10.15 **Coffee Break**

10.35 **Measurement of aspheres using a commercial Twyman-Green interferometer;** T. Blümel, R. Kafka; FISBA OPTIK Berlin / St. Gallen; Germany / Switzerland

11.20 **Measurement of aspheric surfaces using 3D- deflectometry;** W. van Amstel; TRIOPTICS GmbH; Germany

12.05 **Lunch Break**

Day 2: Thursday 11th March / Afternoon

Chairman: Dr. K.-F. Beckstette; Carl-Zeiss Jena GmbH; Germany

13.15 **Scanning Fizeau interferometry for low uncertainty asphere testing;** Dr. T. Dresel; ZygoLOT; Germany

14.00 **Tilted wave interferometry;** E. Garbusi; University Stuttgart ITO; Germany

14.45 **Coffee Break**

15.05 **Isara 400: an ultra-precision CMM for large volume free-form optics;** Dr. H.A.M. Spaan; IBS Precision Engineering BV; Netherlands

15.25 **Final Discussion / Outlook;** Dr. K.-F. Beckstette; Carl-Zeiss Jena GmbH; Germany

16.00 **Summary / Conference Closing;** Prof. Dr. F. Löffler; CC UPOB e.V.; Germany

16.15 **Conference Closing**