



# Agenda, 1<sup>st</sup> Day

Monday, 27<sup>th</sup> of September

- from 12:00 Registration, PTB lecture hall
- 13:00 Welcome and Introduction  
Presidential Board, PTB
- 13:20 Multi-probe and multi-orientation strategies for universal and flexible 3D micro-feature characterisation: The Nano-CMM Approach  
O. Lazaro, Innovalia, Spain
- 13:50 Nanometrology for 3D structures: international requirements, roadmapping and open questions  
R. Leach, NPL, United Kingdom
- 14:20 Development of micro/nano-CMMs in Asia  
K.C. Fan, NTU, Taiwan; Hefei University of Technology, China and Q. Huang, Hefei University of Technology, China
- 15:00 Different approaches to overcome existing limits in optical micro- and nanometrology  
W. Osten, Stuttgart University, Germany
- 15:30 Coffee break
- 16:00 International and national standardization activities in micro and nano coordinate metrology  
F. Härtig, T. Dziomba, PTB, Germany
- 16:30 Nanopositioning and Nanomeasuring Machine NMM used as test bench in Nano CMM project  
D. Dontsov, W. Pöschel, E. Langlotz, W. Schott, SIOS Messtechnik GmbH, Germany
- 16:50 ISARA 400: realization and first test results  
D. Brouns, R. Donker, I. Widdershoven, H.A.M. Spaan, IBS Precision Engineering, The Netherlands
- 17:10 Realisation of triplanar symmetry concepts for 3D micro measurement machines  
A. Morquecho, A. San Vicente, T. Ventura, Trimek, Spain
- 17:30 Possibility for PTB lab visits  
- different tours offered, each about 1 h
- 20:00 Get Together...

# Agenda, 2<sup>nd</sup> Day

Tuesday, 28<sup>th</sup> of September

- from 8:30 Registration, PTB lecture hall
- 9:00 True 3D metrology of micro/nano structures: from AFM to micro/nano CMM  
G. Dai, H.U. Danzebrink, PTB, Germany
- 9:30 Traceable measurement of microparts applying micro CMMs and micro CT  
U. Neuschaefer-Rube, M. Neugebauer, M. Bartscher, PTB, Germany
- 10:15 Basics of uncertainty analysis  
M. Krystek, PTB, Germany
- 11:00 Coffee break
- 11:30 The Metas  $\mu$ CMM: Probing aspect and practical determination of the measurement uncertainty  
A. Küng, F. Meli, R. Thalmann, METAS, Switzerland
- 12:00 Measurement uncertainty in 3D reconstructions of micro-objects  
L. Carli, L. De Chiffre, DTU, Denmark
- 12:20 Calibration and verification methods for Nano Measuring Machines  
F. Pereda, Unimetrik, Spain
- 12:40 Lunch break
- 14:00 Dimensional metrology microprobe and scanning system research initiatives in the U.S.  
S. Smith, UNC Charlotte, U.S.A.
- 14:40 Resolution limitation and enhancement in optical areal measurements using interference micro-copy  
P. Lehmann, Kassel University / Mahr, Germany
- 15:00 Nanopositioning and nanomeasuring technology - the merge of technologies over scales and do-mains from macro to nano  
E. Manske, R. Theska, T. Hausotte, R. Füll, Ilmenau University, Germany
- 15:20 Coffee break

# Agenda, 2<sup>nd</sup> Day

Tuesday, 28<sup>th</sup> of September

- 16:00 Development of a 3D precision positioner for nanometrology of microparts  
E. Gomez-Acedo, Tekniker, Spain
- 16:20 Flexible multisensor and multiplatform I++ metrology software for low uncertainty micro- and nano-scale measurements  
T. Ventura, B. de la Maza, Datapixel, Spain
- 16:40 Novel calibration artefacts and tactile probes for micro/nano-CMMs  
S. Bütefsch, PTB, Germany and V. Zelený, CMI, Czech Republic
- 17:00 Concluding remarks