



E-MRS Spring Meeting 2014 - Symposium H: ALTECH 2014 Analytical Techniques for Precise Characterization of Nano Materials

Metrology is a prerequisite for the development of novel materials on the nanoscale. It supports the correlation of material properties and functionalities. The expected contributions should demonstrate how analytical techniques enable a deep understanding of new materials. This symposium will be organized by major European National Metrology Institutes and Imec.

Hot topics

1. X-Ray diffraction, tomography, scattering and spectrometry based applications on advanced materials and in nanoscience
2. Recent developments of ion beam techniques for characterization of lateral and vertical thin films
3. New developments for optical spectroscopic measurements, large-area nanostructured high-refractive index materials measurement and modeling, optical scatterometry by coherent light
4. Techniques for thermal characterization of thin films
5. Methodologies for thin films, nanostructure, interfacial and nanostrain characterizations of semiconductor and advanced material systems
6. Scanning probe techniques for high resolution characterization of organic, hybrid and inorganic semiconductors
7. Analytical techniques for characterization of surface chemistry
8. Characterization of functionalized surfaces for e.g. biosensing and bioanalytics
9. Novel instrumentation for e.g. nanoanalysis, next generation of highest resolution microscopy including near-field methods, characterization of metallic and dielectric based superlenses
10. Ultra-trace analysis using complementary metrology
11. Reference and calibration samples for nanometrology

Invited speakers

- Wim Coene, ASML, The Netherlands
- Thierry Conard, IMEC, Belgium
- David Ginger, University of Washington, USA
- Séverine Gomes, CETHIL, France
- Jaime Gomez-Rivas, FOM, The Netherlands
- Poul-Erik Hansen, DFM, Denmark
- Ludger Koenders, PTB, Germany
- Jae Cheol Lee, Samsung Advanced Institute of Technology, South Korea
- Maria Luisa Polignano, ST Microelectronics, Italy
- Wolfgang Unger, BAM, Germany

[EMRS 2014 Spring Meeting - Symposium H](#)

Technical Sessions: May 26-30 2014
Venue: Congress Center Lille / France

Info: www.emrs-strasbourg.com

Organizers:

Burkhard Beckhoff, PTB, Germany
Fernando Araujo de Castro, NPL, U.K.
Omar El Gawhary, VSL, The Netherlands
Petr Klapetek, CMI, Czech Republic
Cor Claeys, Imec, Belgium