

SURFACE CHARACTERIZATION OF SEMICONDUCTORS

An Overview, from Topography to Advanced Physical Properties

Wednesday, April 21st, 2021 | 14:00 - 16:00 (CEST)



Bruker is dedicated to providing a complete range of high-performance metrology techniques for the nanometer-scale surface characterization of semiconductor materials and devices.

Our automated metrology solutions enable the streamlining of nanomechanical property sampling, from nanoscale-to-microscale indentation to surface roughness measurement, chemical mechanical planarization (CMP), and etch-depth measurements on the most current technology nodes and wafers.

Bruker's proven industrial metrology solutions enable high-resolution, in-situ scanning probe microscopy (SPM) imaging and high-speed mechanical property mapping to provide a comprehensive understanding of material behavior at the nanoscale, ideal for R&D and the monitoring and improvement of manufacturing processes.

This lab session will include short demonstrations live from our laboratories, address common questions in this field and provide an insight into the new and existing characterization techniques available.

Program

14:00 Welcome & Introduction

An overview of Bruker's methods for characterizing the morphology and physical properties of Semiconductors

Dr Peter De Wolf, Worldwide Application Director

14:10 Semiconductor 3D Metrology Using Optical & Stylus Profiling

Talk and live demo

Dr Samuel Lesko, Sr. Manager, Optical Metrology Applications & Dr Mickael Febvre, Application Manager

14:45 CMP Tribology

Talk and live demo

Dr Udo Volz, Application Scientist

14:55 Break

15:00 Mechanical Characterization of Semiconductor Samples and Devices

Talk

Dr Ude Hangen, Nanoindentation Application Manager

15:20 Highest Resolution 3D Metrology & Advanced Physical Property Characterization of Semiconductor Samples and Devices

Talk and live demo

Dr Vishal Panchal, Application Scientist & Dr Hartmut Stadler, Application Scientist

15:55 Closing

Dr Peter De Wolf

Please don't hesitate to contact us at productinfo.emea@bruker.com if you have any questions.