

PROGRAM

Wednesday, April 26th, 2017

Session 1 Introduction

- 09:00 **Welcome**
Matthias Petzold, Fraunhofer IMWS-CAM (DE)
- 09:20 **Keynote 1 The 3D Technology Landscape: Expected Reliability Issues, Failure Mechanisms and Available Analysis Techniques**
Ingrid De Wolf, IMEC (BE)
- 10:00 **Keynote 2 Failure Analysis Challenges of Multi-Chip Modules**
Jörg Krinke, Robert Bosch GmbH (DE)
- 10:40 **Material Understanding Combined with Failure Analysis – A Prerequisite for a Successful System in Package Integration**
Klaus Pressel, Infineon AG (DE)
- 11:00 **Magnetic Field Imaging in Current FA Landscape: 3D Fault Isolation, LIT and EOTPR Techniques Comparison**
Antonio Orozco, Neocera LLC (US)

11:20 **Lunch Break / Exhibition Opening**

Session 2 Defect Localization

- 13:00 **3D Thermal Defect Localization by Time-resolved Temperature Response Signal Processing**
Frank Altmann, Fraunhofer IMWS-CAM (DE)
- 13:20 **Light-Induced Capacitance Alteration for Non-Destructive Open Failure Localization in 3-D TSV Structures**
Kristof J.P. Jacobs, IMEC (BE)
- 13:40 **Scanning Photoacoustic GHz-Microscopy for the Application in Microelectronics Failure Analysis and Metrology**
Sebastian Brand, Fraunhofer IMWS-CAM (DE)
- 14:00 **Exploring the limits of Spatial OBIRCH & LIT Resolution in 28nm**
Pascal Limbecker, GLOBALFOUNDRIES Inc. (DE)
- 14:20 **Electrical Failure Analysis in SEM: Developments in Techniques and Applications**
Grigore Moldovan, point electronic GmbH (DE)

14:40 **Coffee Break / Exhibition**

Session 3 Sample Preparation

- 15:20 **A Pico-Second Laser Tool for Fast, Large Cross Section ROI' of Packages and Devices**
Mike Hassel Shearer, Gatan Inc. (US)
- 15:40 **Latest Results on Gas Injection System for Failure Analysis Applications**
Grégory Goupil, Orsay Physics-Tescan Orsay Holding (FR)
- 16:00 **Sample Preparation Tricks for Correlative FIB TOF-SIMS and Computed X-ray Nanotomography**
Guillaume Audoit, CEA-Leti (FR)
- 16:20 **Microwave Induced Plasma Decapsulation of System in Package Devices**
Jiaqi Tang, JIACO Instruments B.V. (NL)
- 16:40 **Circuit Edit on Package Level**
Christian Hollerith, Infineon AG (DE)
- 17:00 **Drinks Reception / Exhibition**
- 19:00 **Dinner "25 Year Anniversary of microelectronics research in Halle (Saale)", Steintor Variété, Am Steintor 10, 06112 Halle**

Thursday, April 27th, 2017

Session 4 Physical Failure Analysis

- 08:30 **Calibrated Capacitive Imaging for Dopant Type Determination**
Sören Hommel, Infineon AG (DE)
- 08:50 **Dopant Imaging for Wide Band Gap Materials (SiC, GaN)**
Maher Nafouti, Université de Tours (FR)
- 09:10 **High Resolution Cathodoluminescence for Characterization of Electronic Materials and Devices**
Marcin Zielinski, Attolight AG (CH)
- 09:30 **Chemical Imaging by Photo-induced Forces - Fundamentals and Applications of an Emerging Technology**
Derek Nowak, Molecular Vista (US)
- 09:50 **Non Invasive Lab Tool for Micron Level Trace Element Mapping & Contamination Analysis in FA & Process Control with Capabilities Comparable to Synchrotron Based microXRF**
S. H. Lau, Sigray Inc. (US)
- 10:10 **FIB TOF-SIMS Crater Wall Analysis and Tomography**
Felix Kollmer, Ion-Tof GmbH (DE)

10:30 [Coffee Break / Exhibition](#)

Session 5 Material Characterization and Mechanical Testing

- 11:10 **IR Transient Temperature Measurement and Thermo Reflectance Mapping on GaN HEMTs in 2,5D Package**
Dominique Carisetti, Thales Group (FR)
- 11:30 **Chip Package Interaction - BABS Test with Live Electrical Test Monitoring**
Holm Geisler, GLOBALFOUNDRIES Inc (DE)
- 11:50 **Gas Analysis in Closed MEMS Cavities using Confocal Micro Raman Spectroscopy**
Norbert Söllner, Infineon AG (DE)
- 12:10 **Polariscopy for Stress Measurements**
Martin Herms, PVA TePla AG (DE)
- 12:30 **Investigating Stress Measurement Capabilities of GHz Scanning Acoustic Microscopy for 3D Failure Analysis**
Ahmad Khaled, IMEC (BE)

12:50 [Lunch Break / Exhibition](#)

14:00 **Lab-Tours**