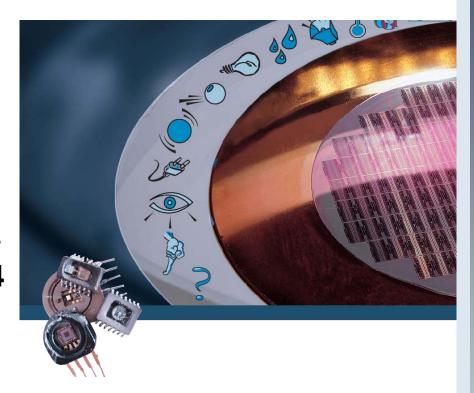


# **MEMS Testing and Metrology**

# International Workshop at

SEMICON<sup>®</sup>
Europa 2014

Grenoble, France October 7-8, 2014



In cooperation with SEMI, MEMUNITY organizes the **2014 MEMS Testing and Metrology Workshop** at SEMICON Europa in Grenoble.

Discuss needs, challenges, and trends in MEMS development, testing, and metrology at a high level expert event.

Learn about recent advancements in measurement technology for characterizing mechanical and electrical properties of next generation MEMS devices and discuss about wafer level test strategies and standardization issues. Experience technical talks presented by industry experts from leading MEMS manufacturers, research institutes, universities, and equipment manufacturers.

#### Who should attend?

Technical professionals and executives involved in MEMS development, manufacturing and testing, from device manufacturers, MEMS integrators, research institutes, and equipment and technology suppliers.

Register now at:

www.semiconeuropa.org/node/2111

Early Bird Registration ends September 3, 2014

Organized by:













# **MEMS Testing and Metrology**

## **International Workshop at**



## Grenoble, France – October 7-8, 2014

### **Program**

- Fast measurement of dimensions and material parameters of MEMS using SLDV
- Capabilities of white-light interference microscopy with respect to micro- and nanostructure measurement
- Optical metrology sheds light on shaping surface acoustic waves with phononic crystals in microfluidics
- Optical and interferometry measurement in industrial MEMS application
- Exploring the Spatial and Temporal Limits of Homodyne Interferometry on NEMS Resonators
- Characterization of packaged MEMS and Sensor Assemblies in the High-Frequency Range
- Wafer-Level Electro-Mechanical MEMS Testing and Calibration
- MEMS characterization assisted by robots for microscopes
- Measuring the impedance spectrum of a piezo actuator in the time domain
- Improved RF Design through precise 3D Near Field Scanning Measurement Techniques
- Response shaping and scale transition in dynamic systems with arrays of attachments
- Advanced Mechanical Stress Assessment on MEMS Components to Meet Reliability Demands
- **■** Functionality Tests of 2D MEMS Scanners
- MEMS testing with interferometric techniques employing Smart Pixel Camera

M. Meinig, Fraunhofer ENAS, Chemnitz, Germany

P. Lehmann, Kassel University, Germany

J. Reboud, University of Glasgow, United Kingdom

M. Del Sarto, STMicroelectronics, Cornaredo, Italy

J. Gorman, National Institute of Standards and Technology, Gaithersburg, USA

M. Bruck, SPEKTRA Schwingungstechnik und Akustik GmbH, Dresden, Germany

S. Muntwyler, FemtoTools AG, Buchs, Switzerland

V. Faivre, Imina Technologies SA, Lausanne, Switzerland

P. Brandts, OCE Technologies B.V., Venlo, The Netherlands

C. Hedayat, Fraunhofer ENAS, Paderborn, Germany

J. Vignola, Catholic University of America, Washington DC, USA

D. Vogel, Fraunhofer ENAS, Chemnitz, Germany

J. Janes, Fraunhofer ISIT, Itzehoe, Germany

Adam Styk, Warsaw University of Technology, Poland

### **Date and Location**

October 7, 2:00 pm – 6:15 pm and October 8, 9:00 am – 1:00 pm

Alpexpo, Grenoble, France

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