



Testing of MEMS components at different stages of fabrication and before packaging is an increasingly important challenge for achieving high yield and reliability and low production cost. Different techniques are necessary to achieve this goal. Obtain comprehensive information in this **free** workshop about solutions for testing MEMS at wafer-level.

**Experiences with wafer-level testing will be presented via talks including:**

- Reliability challenges of MEMS
- Pressure Sensor characterization
- Probe stations at platforms for early MEMS testing
- Challenges of the right test stimuli
- 3D Motion characterization
- Identification of failure mechanisms



**An additional visit of the “Microsystems Characterisation and Reliability Laboratory (LCFM)” will give you the possibility to get access to one of the most modern MEMS facilities around.**

The workshop is organized by MEMUNITY, an open community of companies and industries operating in the field of microsystems technology.



# Invitation



## 6<sup>th</sup> MEMUNITY - Workshop

The Mems Test Community

Tuesday, March 6<sup>th</sup> 2007

 **CEA-LETI Grenoble, France**  
**Minatec Center**  
**House of Micro and Nanotechnologies (MMNT)**



**Please be aware of registration deadlines!**

CEA-LETI is located in 17 Rue des Martyrs, 38054 Grenoble.

Visit [www.minatec.com](http://www.minatec.com) for direction descriptions.





## Registration Form

Please forward the completed form to Estelle Brague via email or fax (Estelle.brague@cea.fr, +33 4 38 78 51 40).

**Please register me for the workshop on March 6, 2007:**

Name(s): \_\_\_\_\_  
\_\_\_\_\_

Organisation: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Telephone/Fax: \_\_\_\_\_

Email: \_\_\_\_\_

**Security clearances for CEA-LETI laboratory visit:**



Security clearances are required for entrance to the CEA-LETI site for the planned laboratory visit in the afternoon. Therefore please forward a copy of your personal ID card with your registration above!

As a result, please note the **registration deadlines** for:

**Non-EU citizens → Feb. 9<sup>th</sup> 2007**

**EU citizens → Feb. 16<sup>th</sup> 2007**

For further questions, please call Aline Parnitzke at +49 35240 73 350.



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|-------|---|
| 9.00  | <b>Coffee and Registration</b>  |
| 9.30  | <b>Welcome</b>  |
| 9.45  | Reliability Challenges: Understanding More than Moore, <i>Ingrid De Wolf, IMEC</i><br><br>Advanced MEMS Characterization using State of the Art Optical Measurement Techniques, <i>Jens Klattenhoff, Polytec</i><br><br>Dynamic Mechanical Testing of Polymer Microstructures, <i>Silvan Schmidt, ETH</i>   |
| 10.45 | <b>Coffee Break</b>   |
| 11.45 | Wafer Prober - Platform for Wafer-level MEMS Test, <i>Frank-Michael Werner, SUSS</i><br><br>Parameter Identification of Membrane Structures at Wafer-level, <i>Steffen Michael, Melexis</i><br><br>Caractérisation Electromécanique de Structures MEMS: application au cas des cMUT, <i>Edgard Jeanne, STMicroelectronics</i>   |
| 12.15 | <b>Lunch Break</b>  |
| 13.00 | Performance and Reliability Tests of MEMS Optical Scanners, <i>Dr. Steffen Kurth, FhG IZM</i><br><br>Design for Test of MNT-based Systems: Alternative Test Solutions for reduced Test Costs, <i>Pascal Nouet, LIRMM</i><br><br>Status of the MEMS Industry 2007: Business Trends for 2007 and on the long Term, <i>Jean-Christophe Eloy, Yole</i><br><br><b>Round Table Discussion: Further Requirements</b> |
| 14.30 | <b>Visit of the CEA "Microsystems Characterisation and Reliability Laboratory" including 200 mm MEMS Fabrication Line</b>   |
| 16.00 | <b>End of Workshop</b>  |