



## **Tutorial addressing “Package Engineering” for Micro Nano Technology (MNT)-based systems.**

**8 April 2008, Nice, Côte d'Azur, France (in conjunction with DTIP, 9-11 April)**

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### **14:00 - 17:00 Tutorial on Package Engineering**

This tutorial will introduce the various levels of packaging used within the Micro & Nano Systems world with examples. It will explore reliability issues including typical defects, parametric, evolving and hard physical manufacturing faults and the impact of the packaging process on micro & nano scale MEMS components. Failure modes often encountered in MEMS during packaging will be addressed with examples and illustrations and a taxonomy of failure modes will be discussed. Finally, available and emerging techniques for the characterisation of wafer-level packaging will be presented.

**Speakers:** Prof. Andrew Richardson (Lancaster University), Dr. Srikanth Lavu (Heriot-Watt University), Prof. Alain Bosseboeuf (University of Paris-Sud).

### **Tutorial Organisation**

The tutorial is organised by the EC-funded Network of Excellence "Design for Micro & Nano Manufacture" (PATENT-DfMM). A detailed programme will be updated at: [www.patent-dfmm.org](http://www.patent-dfmm.org). For additional information, please contact either:

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### **The Venue**

Hotel Boscolo in Nice, Côte d'Azur, France.

### **Registration fee**

€150

Please register through the DTIP registration <http://cmp.imag.fr/conferences/dtip2008/registration.php>

### **About PATENT-DfMM (The Network of Excellence in "Design for Micro & Nano Manufacture")**

The EC funded Patent-DfMM project was set up in 2004 and aimed to bring together researchers from the areas of design, test, reliability and package engineering to create multi-disciplinary teams better able to address key manufacturing challenges in the Micro & Nano Systems space. The intention was that the enhanced capability that could be delivered by this integration process would improve the teams' potential to attract research funding and stimulate sufficient interest from industry to justify rolling out the team's capability through commercial services. Over the past 18 months the PATENT-DfMM NoE has been assessing the potential of six key areas of activity for commercial roll out. Out of these, the following two clusters have been launched recently: Health and Usage Monitoring MicroSystems ( $\mu$ HUMS) and European Microsystems Reliability Service Cluster (EUMIREL). More information: [www.patent-dfmm.org](http://www.patent-dfmm.org).

### **About DTIP (Symposium on Design, Test, Integration & Packaging of MEMS/MOEMS)**

DTIP 2008 will be a follow-up to the very successful issues held in 1999 and 2000 in Paris and in 2001, 2002 and 2003 in Mandelieu-La Napoule, in 2004 and 2005 in Montreux, Switzerland and in 2006 and in 2007 in Stresa, Italy. This series of Symposia is a unique single-meeting event expressly planned to bring together participants interested in manufacturing microstructures and participants interested in design tools to facilitate the conception of these microstructures. Again, a special emphasis will be put on the very crucial needs of MEMS/MOEMS in terms of packaging solutions. The goal of the Symposium is to provide a forum for in-depth investigations and interdisciplinary discussions involving design, modelling, testing, micromachining, microfabrication, integration and packaging of structures, devices and systems. <http://cmp.imag.fr/conferences/dtip2008/>  
Conference Co-Chairs: Bernard Courtois (CMP), Jean Michel Karam (MEMSCAP)

### **Announcement for download (PDF)**