

Design for Micro & Nano Manufacture (DfMM) News



The NoE **Patent-DfMM** aims to establish a collaborative team to provide European industry with support in the field of "design for micro nano manufacture" to ensure that problems affecting the manufacture and reliability of products based on micro nanotechnologies (MNT) can be addressed before prototype and pre-production.

PATENT-DfMM is an initiative that builds on industrial needs, which have been defined by key commercial players and studied by the NEXUS "Design Modelling Simulation" workshops. PATENT-DfMM co-operates worldwide to coordinate research and services in DfMM. The network is supported by an educational programme addressing DfMM topics in industry and academia. This combines training courses and educational initiatives that already exist for DfMM, but also develops new ones that are needed to lower the barriers to commercialisation for the next generation of MNT based products.

Workshop on "Design for Micro & Nano Manufacture" in conjunction with DTIP, 30-31 May 2005, Montreux, Switzerland

Organised by the EC-funded Network of Excellence "Design for Micro & Nano Manufacture" (PATENT-DfMM). The network was launched in 2004 and aims to establish a collaborative team to

provide European industry with support in the field of "Design for Micro and Nano Manufacture (DfMM)" to ensure that problems affecting the manufacturing and reliability of products based on micro nano technologies (MNT) can be addressed before prototyping and production. More information : <http://www.patent-dfmm.org>

Monday 30 May

14:00 – 15:30	Workshop on "Latest Advances in MEMS Testing" Session organised by P. Nouet (E-Mail: nouet@lirmm.fr), LIRMM, France
15:30 – 15:50	Break
15:50 – 17:20	Tutorial "Techniques for Failure Analysis of MEMS and MEMS Packages" I. De Wolf (E-Mail: id.dewolf@imec.be), IMEC, Belgium

Tuesday 31 May

09:00 – 10:30	Tutorial "Thermal Characterisation of MEMS Structures and Packages" M. Rencz (E-Mail: rencz@eet.bme.hu), BUTE/MicReD, Hungary
10:30 – 10:50	Break
10:50 – 12:20	European Research Programmes in MEMS Packaging / Package Engineering Session organised by A. Brown (E-Mail: agbrown@QinetiQ.com), QinetiQ, UK
12:20 – 14:00	Lunch
14:00 – 17:20	NEXUS MWG-DMS and NoE PATENT-DfMM Workshop "Design Modelling Simulation of Microsystems" Chaired by P. Salomon (E-Mail: patric.salomon@4m2c.com), 4M2C PATRIC SALOMON GmbH, Germany

Objective of this workshop

This workshop will present European research activities in the areas of MEMS Testing and Packaging, discuss PATENT-DfMM objectives, and aims at getting feedback on industry needs in the Design for Micro and Nano Manufacture. It also includes two tutorials on topics that have been identified as being crucial for the MEMS industry, held by European experts:

- *Techniques for Failure Analysis of MEMS and MEMS Packages (IMEC)*
- *Thermal Characterisation of MEMS Structures and Packages (BUTE/MicReD)*

The Venue

Hôtel Eden au Lac, Montreux, Switzerland
Registration: €150 (including coffee breaks, lunch on 31 May and proceedings).

Please register for this 1.5 day Workshop on Design for Micro & Nano Manufacture through the DTIP registration form at <http://tima.imag.fr/conferences/dtip/DTIP2005/>. Hotel information is also available from the DTIP website.

The detailed programme of the workshop will be updated at: <http://www.patent-dfmm.org>. For additional information or if you are interested in presenting within this workshop, please contact: **Patric Salomon**, 4M2C PATRIC SALOMON GmbH, Germany, E-mail: patric.salomon@4m2c.com.

DTIP (1-3 June 2005)

DTIP is the symposium on Design, Test, Integration and Packaging of MEMS and MOEMS. The goal of DTIP 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. Within the DTIP Programme on 1 June, there will also be a PANEL on "Design for Micro & Nano Manufacture - Industry Needs and Research Status" to present and discuss key results from this workshop. <http://tima.imag.fr/conferences/dtip/DTIP2005/>.

DfMM Summer School organised by NoE PATENT-DfMM, Montpellier, France, 5-7 September 2005

Following the success of the 2004 DfMM Summer School in Livingston, Scotland, there are plans to run a similar event this year in Montpellier, France. This will be presented during 5-7 September 2005, and will include tutorials and technical presentations from the portfolio of training material which is currently being developed under the PATENT-DfMM Network of Excellence. Further details of the technical programme will be published on the www.patent-dfmm.org website over the coming weeks as details are confirmed. Meanwhile, please register your interest by sending an email message to: events@sl-i-institute.ac.uk with "DfMM Summer School" as the subject.

Contact: **George Bell**, ISLI, Scotland,
E-mail: events@sl-i-institute.ac.uk
www.patent-dfmm.org

DfMM SME Support and Business Development Projects launched

Being an FP6 Network of Excellence, PATENT-DfMM has a very flexible approach to distribute budgets within the project. In an annual (internal) review, which is supported by the Industry Advisory Board (IAB), priorities for the next period will be set. Internal calls for project proposals are launched throughout the year. The following internal projects have been launched recently:

- PATENT-DfMM Business Development Access Service for MNT based Sensors (Qinetiq, ULAN, 4M2C). This project will build a concept to extend the Europractice INTEGRAM service to DfMM and Packaging forming a core dissemination route for the PATENT-DfMM services portfolio.
- PATENT-DfMM SME Support
- Application of MEMS Test Strategies to MEMS for Detecting Faults in Aircraft Wiring (ULAN, BCF Designs, HWU).
- Integration of DfT and test know-how into a new MEMS device to be designed and commercialised by an SME. Success will result in investment in the NoE PATENT-DfMM.

More information is available on: www.patent-dfmm.org

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