Design for Micro & Nano Manufacture (DfMM) News

web page: http://www.patent-dfmm.org

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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 nano technologies (MNT) can be addressed before prototype and pre-production.

Workshop on Design for Reliability and Manufacturability in MNT, 25 April 2006, Stresa, Lago Maggiore, Italy

Co-organised by the EC-funded Network of Excellence "Design for Micro & Nano Manufacture" (PATENT-DfMM) and the NEXUS Methodology Working Groups "Reliability & Test" and "Design Modelling Simulation". PATENT-DfMM 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: **www.patent-dfmm.org**

PATENT-DfMM co-operates worldwide to coordinate research and services in DfMM related topics. 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.

Objective of this workshop

This workshop builds on industry experience in microsystems manufacturing as discussed recently within the MEMS Industry Group METRIC workshops and NEXUS Methodology Working Group meetings. Main emphasis will be on reliability and test problems, where design methodologies can lead to significant improvements. Industry's design and reliability needs will be discussed and latest research results and new approaches will be proposed by the research community.

Workshop programme – outline

Morning session: Industry needs and current research in Reliability and Test for MNT

- How do industrial microsystems manufacturers deal with reliability and test?
- What is specific for reliability and test in high volume production?
- What are the main challenges for research?
- Presentation of current research initiatives and projects in reliability and test

Afternoon session: Building Reliability and Test into the MNT design flow

- How are reliability and test issues currently built into an industrial design flow?
- What do Design, Modelling and Simulation Tools offer to support reliability and test?
- How can methodologies, tools and databases be combined?
- Presentation of current research initiatives and projects to build reliability and test issues into tools
- How can researchers help industry (especially SMEs) to optimise reliability and test?

PATENT-DfMM is also organising a panel discussion at DTIP (27 Apr) on "Design for Reliability and Test of Microsystems" with key industry panelists.

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Technology Roadmapping for Packaging of MOEMS and RF MEMS

The first roadmapping **PATENT-DfMM** event, hosted by HWU (16 Feb 06, Edinburgh), was a great success. With more than half of the 30 participants coming from industry, technological trends, bottlenecks and investment opportunities in packaging of MOEMS and RF MEMS were collected and discussed in small working groups. The workshop was viewed as innovative and very useful by all participants and a lot of progress was made during this meeting. The transcription process into a roadmap format through the project team has begun. The second meeting will be held at the Fraunhofer IZM Berlin in Germany on 8 June 2006 – further active contributors are welcome to attend. For more information please visit our website.

For more information please visit **http://www.patent-dfmm.org**.

iMEMS 2006 International MEMS Conference,9-12 May 06, Biopolis, Singapore

It aims to provide an opportunity for academicians, professionals & industrialists in various related fields from all over the world to come together and learn from each other. An additional goal of the conference is to provide a place for academicians, professionals, industrialists with cross-disciplinary interests related to MEMS to meet and interact with members inside and outside their own particular disciplines. For topic areas please visit the conference website **http://nanomicro.org/imems06/**.

Call for Papers: COMS2006, Florida, 27-31 Aug 2006
Abstract Submission Deadline: 21 Apr 2006

The 11th International Conference on the Commercialization of Micro and Nano Systems (COMS 2006) will be held in St Petersburg, Florida, USA, 27-31 Aug 2006. COMS fosters the commercialization of micro and nanotechnologies and addresses commercialization issues unique to these emerging and disruptive technologies. COMS 2006 will bring together key personnel from all over the world and from every sector of the supply chain, including government representatives, top researchers in the field, educators, relevant publication sources, equipment suppliers, end users, and financial experts. The small tech community gathers at COMS conferences to learn from others, share their own knowledge, discuss and argue points of view - all of which contribute to the advancement of this emerging field. COMS 2006 addresses the issues related to building successful MNT firms, regions and educational programs. An exhibition of equipment suppliers, service providers, product suppliers and consultants will be held in conjunction with COMS 2006. More information: **www.mancef-coms2006.org**

Call for Papers: EUROSENSORS XX,17 - 20 Sep 06, Göteborg, Sweden
Submission Deadline: 28 April 2006

Since its establishment in 1987, the Eurosensors series of conferences is the only European forum to cover the entire field of Microsystem technology. The Eurosensors conference provides an excellent opportunity to bring together European scientists and engineers from academy, research institutes and companies to present and discuss the latest results in the general field of solid-state sensors, actuators, microsystems and nanosystems. The conference goals are to stimulate interaction and knowledge exchange between the delegates in a friendly atmosphere.

Subjects for papers and further details:
www.EUROSENSORS2006.com

MSc in Micro and Nanotechnology at Lancaster University, UK

The Micro and Nanotechnology Masters course is a unique and timely opportunity for engineering or physics graduate to enter an interdisciplinary research or commercial R&D career in MNT. A good balance between technical, management and social science content makes this course directly applicable to entrepreneurs in existing, as well as new businesses in the MNT area. This course is organised in a modular structure that allows part time intensive learning. List of modules and further information:
http://www.engineering.lancs.ac.uk/postgraduate/nano

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