





## Technology Roadmapping Event

### Packaging of MOEMS and RF MEMS, 16 February 2006

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### *What is Patent-DfMM?*

An EU-funded Network of Excellence, which aims to provide European industry with support in the field of "Design for Micro and Nano Manufacture (DfMM)". The Network is organised around 7 Work Packages including "Packaging" and "Business Development".

More information: [www.patent-dfmm.org](http://www.patent-dfmm.org)

### *Workshop objectives*

- Producing a document identifying present and future development trends in **packaging of MOEMS and RF MEMS** and presenting them in a clear and diagrammatic format. This identification has already started and will continue until the workshop on February 16, 2006. During the workshop, experts will discuss, expand and organise the list. The analysis will continue after the workshop until delivery of the roadmap,
- Applying technology roadmapping and technology viability analysis techniques with a view to short select packaging investment opportunities in function of industrial needs and the Network's objectives and capability,
- Constituting the first step towards developing a full roadmap of packaging of MEMS. Another event will take place later in the year at Fraunhofer IZM in Berlin to complete the field of packaging of MEMS,
- Contributing towards solving packaging issues, thereby fostering industrial take up of MEMS,
- Enhancing Patent-DfMM capability and services offer to industry.

### *What you will gain out of the day*

- Advanced knowledge of the latest packaging trends in MOEMS and RF MEMS
- An opportunity to network with EU academics and industrialists
- The roadmap report resulting from this workshop
- A chance to influence decision makers in MEMS through the resulting roadmap
- The opportunity to continue collaboration with the Patent-DfMM Network of Excellence within projects to be defined as a result of the roadmapping exercise.

### Agenda

Timing	Activity	Notes
9.30	Reception and registration	
10.00	Welcome and Introduction	Paul Palmer, Loughborough University
10.15	Objectives for the day	- Start to build a technology roadmapping for packaging of MOEMS & RF MEMS – show some examples of output that will be generated. - Methodology to be used
10.30	1 <sup>st</sup> Structured activity	Collect and define keywords, issues and quantifiable indicators to rank technologies
11.15	2 <sup>nd</sup> Structured activity	Knowledge capture: Validation/extension of R&D project list. - Personal opinions - External sources
12.30	LUNCH	During lunch, the information collected will be electronically collated
13.30	3 <sup>rd</sup> Structured activity	Knowledge capture: first project ranking session. Selection criteria will be used to analyse the viability of the technologies. Selection criteria could be: - Number of applications / business pull for a given R&D project. - Position of the Network regarding the technology - Time scale for maturity of the technology - Opportunities / Threats - ...
14.30	4 <sup>th</sup> Structured activity	Knowledge capture: second project ranking session.
15.30	BREAK	
15.45	Facilitated discussion	Live discussion around the results.
16.15	Wrap-up session and depart	

### Participants

Are invited:

- All Patent-DfMM members with expertise in packaging. This includes primarily Work Package 4 (Packaging) partners as well as other members who are willing to contribute actively to the workshop,
- All members of the Patent-DfMM Industrial Advisory Board (IAB). A list can be found at [http://www.patent-dfmm.org/site/publications/56DfMM\\_News\\_in\\_MST\\_News\\_2005-06\\_June.pdf](http://www.patent-dfmm.org/site/publications/56DfMM_News_in_MST_News_2005-06_June.pdf),
- Members of AMICOM ([www.amicom.info](http://www.amicom.info)) an EU FP6 Network of Excellence in RF MEMS, and
- Selected industrialists and researcher who are willing to share their knowledge on packaging needs.

### Travel directions

Heriot-Watt University is located in Edinburgh in Scotland, UK. All travel directions can be found at: <http://www.hw.ac.uk/welcome/html/maps/edinburgh.htm>