

3 September 2007

Dear Reader,



The Network of Excellence (NoE) Patent-DfMM aims to establish a collaborative team to provide

European industry with support in the field of "Design for Micro & 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. For more information: <http://www.patent-dfmm.org/>

Welcome to the new edition of our bi-monthly E-Newsletter, which will keep you updated on project related activities, but also on other DfMM activities that run outside of the project.

We apologise in case you have been added to our database in error: if so, please reply by e-mail with "UNSUBSCRIBE" in the subject field.

**NoE Patent-DfMM Co-ordinator:**

Andrew Richardson, University of Lancaster, UK

E-mail: [A.Richardson@Lancaster.ac.uk](mailto:A.Richardson@Lancaster.ac.uk)

**NoE Patent-DfMM News Editor:**

Patric Salomon, 4M2C PATRIC SALOMON GmbH

E-mail: [DfMM-news@4m2c.com](mailto:DfMM-news@4m2c.com)

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

We welcome your comments and contributions.

Happy reading!

Patric Salomon  
*NoE Patent-DfMM News Editor*

**In this edition:**

**News from the NoE Patent-DfMM**

**DfMM - Micro & Nano Systems event, 1-4 Oct 07, Lancaster, UK**

**News from DfMM Community**

**Call for nominations - EDAA Outstanding Dissertations Award 2007**  
**CEMMNT delivers new calibration capability for industry**  
**New Consortium Group is launched in Scotland**

**Event Announcements**

**3rd MINOS-EURONET Strategy Forum, 6-7 Sep 07, Krakow, Poland**  
**International Semiconductor Conference (CAS 2007), 15-17 Oct 07, Sinaia, Romania**  
**INTEGRAMplus CAS Workshop "Silicon / Polymer Microsystems for Life Sciences", 17 Oct 07, Sinaia, Romania**  
**MEMS Executive Congress, 4-5 Nov 07, Del Mar, CA, USA**

**Other Events**

**Abstract Deadlines for Conferences**

**Call for Tutorials: SMT/HYBRID/PACKAGING 2008 Conference, 3-5 Jun 08, Nuremberg, Germany**

## News from the NoE Patent-DfMM

### **DfMM - Micro & Nano Systems event, 1-4 Oct 07, Lancaster, UK**

The EU Network of Excellence in Design for Micro & Nano Manufacture (PATENT-DfMM) has over the past 3 years responded to industrial requirements for developing and providing access to expertise and infrastructure in the areas of multi-level modelling, Design for Testability, Design for Reliability and Packaging Technology. Within this project, resource is now being targeted towards application driven clusters of expertise that will offer manufacturing related design services to industry, with a special emphasis on helping small and medium enterprises (SMEs).

Together with the Europractice Technology Access Initiative INTEGRAMplus that provides industrial design, prototyping and manufacturing services based on specific silicon and polymer technologies, together with multi-domain integration platforms, PATENT-DfMM is organising a major event. The event aims to provide delegates with:

- A forum to assess advances in the microsystems field and opportunities for uptake.
- An opportunity to gain awareness of new funding opportunities within the UK and EU FP7 programmes.
- Solutions for accessing technologies, engineering services and business support; on both the academic and the industrial level.

The first day is an outreach event "A New Technology for a New Industrial Era". This meeting will be of specific interest to companies who are either users or suppliers of Micro & Nano Systems or interested in engaging with this technology.

Day 2 will focus on Business Development in the Micro & Nano Systems area. New intellectual property development and methodologies associated with design and manufacture will be showcased. The day will also feature a tutorial specifically targeting Market entry, business practice and supply chain management.

The third and fourth days will address "Technical Advances in the Micro & Nano Systems field" and will focus on state-of-the-art in design and manufacturing technologies for Micro & Nano Systems. Key advances in Reliability & Test Engineering, Packaging Technologies and System Integration will be presented together with contributions from the Design Automation, Simulation and Modelling communities.

*For more information and registration:* [www.engineering.lancs.ac.uk/microsystems/mnt2007.html](http://www.engineering.lancs.ac.uk/microsystems/mnt2007.html)

---

## News from the DfMM community

### **Call for nominations - EDAA Outstanding Dissertations Award 2007**

#### **Deadline for nominations: 8 Sep 07**

In recognition of the importance of University research to the advancement of design, automation and test, and to encourage young researchers to work in the field, EDAA has established an award for outstanding Ph.D. dissertations in 4 categories:

Topic 1 – New directions in embedded system design and embedded software

Topic 2 – New directions in logic and system design

Topic 3 – New directions in physical design, design for manufacturing and CAD for analog circuits

Topic 4 – New directions in circuit and system test

In each category, one award can be given. Each award consists of a 1000 € prize and a certificate.

The awards will be presented at the DATE 2008 conference.

- Eligible are all dissertations which have been finalized in the last 2 years before the submission deadline.

- Nominations shall be submitted electronically

- Nominations shall be supported by at least 2 reference letters of experts in the respective fields, at least one from a different university.

- Awardees must be present at DATE 2008 to receive the Award.

*More details and submission guideline:* <http://edaaward.imag.fr>

### **CEMMNT delivers new calibration capability for industry**

The Centre of Excellence in Metrology for Micro and Nano Technologies (CEMMNT) has expanded its measurement, characterisation and design capabilities for industry to provide extensive calibration and test services through its UKAS accredited partners which include the National Physical Laboratory and Ametek Taylor Hobson. CEMMNT delivers a fast turn-around service to re-certify standard samples, calibrate metrology instrumentation and measure components. New standard samples are available for verifying the performance of stylus, optical, scanning probe, coordinate measuring machines and similar instruments. Artefacts, such as 1-D and 2-D grid plates, linescales and graticules, specifically designed for microscopy instruments can be supplied or re-verified.

Customer samples can be calibrated traceably for critical dimensions, texture, straightness and roundness to internationally recognised standards. A wide range of parts and components can be measured calibrated or certified. Optical lenses, flats and spheres can be tested for form, asphericity and flatness. Dimensions can be determined for engineering components including spheres, plugs, rings, gauge blocks and length bars. Equipment such as autocollimators, angle gauges, polygons, instrument tables, clinometers, prisms and telescopes can all be calibrated and certified.

CEMMNT additionally provides services to calibrate metrology instrumentation either at client sites or in partner centres of excellence.

Contact: [enquiry@cemmnt.co.uk](mailto:enquiry@cemmnt.co.uk), [www.cemmnt.co.uk](http://www.cemmnt.co.uk)

### **New Consortium Group is launched in Scotland**

The Institute for System Level Integration (iSLI), The Scottish Microelectronics Centre (SMC), Optocap and Photonix have announced a collaborative agreement to form a consortium group to engage with emerging technologies companies in the MEMS, biomedical, control electronics, remote sensing and advanced technologies sectors.

As well as providing education and training at post graduate level, iSLI performs MEMS research and development for system level integration using advanced technologies. SMC houses world class technology research and development facilities designed to foster indigenous company growth, Photonix is a world-class Microsystems fabrication facility used by technology companies and academia to drive new ideas and technologies, Optocap develops advanced device packaging solutions for the communications, consumer, industrial, medical and automotive markets worldwide. This collaboration between four specialist companies sits at the critical interface between the academic and commercial engineering worlds; the benefits to emerging technologies companies will be felt throughout the commercial sector.

To read the complete press release, please visit: <http://www.sli-institute.ac.uk/pdf/news/NewConsortium.pdf>

---

## **Event Announcements**

### **3rd MINOS-EURONET Strategy Forum, 6-7 Sep 07, Krakow, Poland**

The third MINOS-EURONET Strategy Forum aims to promote and facilitate the potential of combined efforts of research, industry and policy makers to increase the competitiveness of European economy, with special focus on New Member States (NMS), by developing new technologies, emerging technologies and new design and development techniques. The Forum will focus on strategy issues of R&D in the area of nanoelectronics and MNST, cooperation and coordination of research and technology transfer and its future commercial exploitation.

The first session will be devoted to the strategic issues of innovation policy, presentations given by EU representatives and Polish Ministry of Science will explain the objectives and will give details on procedures created for supporting innovative cooperation. During the second session scheduled meetings between MINOS-EURONET and NEXUS as well as EURIPIDES initiatives are planned in order to deepen their contacts as well as to discuss and plan joint efforts enhancing innovative MNST cooperation particularly focused for NMS. The third session will be devoted to local solutions for coordination of R&D activities. In the fourth session existing European Technology Platforms will be presented to express the industrial expectations and market-focused point of view of potential recipients of research efforts.

The Forum is linked to the IX-th National Scientific Conference on Electron Technology ELTE'07 ([www.elte2007.agh.edu.pl](http://www.elte2007.agh.edu.pl)).

More information: <http://asiclab.ite.waw.pl/krakow/home.htm> and [www.minos-euro.net](http://www.minos-euro.net)

3 September 2007

### **International Semiconductor Conference (CAS 2007), 15-17 Oct 07, Sinaia, Romania**

The 2007 International Semiconductor Conference (CAS 2007) – former Annual Semiconductor Conference – is the 30th of an annual sequence and is the 17th edition with international participation. The aim of the conference is two-fold. First, it provides a forum of debate on selected topics of scientific research and technological development. On the other hand, this is an occasion for refreshing a broad perspective of the participants through invited papers and tutorials. CAS 2007 program will consist in contributed (structured in oral or poster sessions) and invited papers.  
*More information:* [www.imt.ro/cas](http://www.imt.ro/cas)

### **INTEGRAMplus CAS Workshop "Silicon / Polymer Microsystems for Life Sciences", 17 Oct 07, Sinaia, Romania**

INTEGRAMplus (FP6 Integrated Project) brings together the complementary expertise of 10 major companies and institutes from 7 European countries to accelerate the development of novel MNT (MicroNanoTechnology) products, including consultancy, feasibility studies, design, development, prototyping and a route to production. (see [www.integramplus.com](http://www.integramplus.com)).  
The main focus of INTEGRAMplus is a service offering on integrating silicon-based MEMS components, with biomaterials and polymers for packaging and interfacing to the macro-world in order to stimulate development of MNT products in emerging markets (biomedical and healthcare; environmental and security).

The INTEGRAMplus Workshop will focus on the background to microfluidics, biosensing and bio-MEMS; design tools and prototyping services for MEMS; microfabrication and integration techniques; and what the specific INTEGRAMplus technology and demonstrator platforms can offer.

The event is free of charge and has the goal to present the service offer, to stimulate uptake of integrated MNT technologies by SMEs and other end-users and to train the MNT community in Eastern Europe and elsewhere

*For more information and registration:* [http://www.imt.ro/cas/integram\\_cas2007.htm](http://www.imt.ro/cas/integram_cas2007.htm)

### **MEMS Executive Congress, 4-5 Nov 07, Del Mar, CA, USA**

The next MEMS Industry Group event, MEMS Executive Congress, will be held on 4-5 November in Del Mar, California (San Diego County). MEMS Executive Congress is an elite forum open to leaders of MEMS and user/integrator companies and provides the opportunity for executives to connect and discuss critical business and MEMS integration issues. Congress events will include a number of high-level keynote speakers as well as informative panel discussions about the role of MEMS in areas such as energy, mobile media, consumer goods, and medical.

Please visit [www.memscongress.com](http://www.memscongress.com) for more information and to register.

---

## **Other Events**

17 - 19 September 2007

### **THERMINIC 2007 International Workshop on Thermal Investigations of ICs and Systems**

Budapest, Hungary

<http://tima.imag.fr/conferences/therminic/>

17 - 21 September 2007

### **2007 European MRS Fall Meeting**

Warsaw, Poland

<http://science24.com/event/emrs2007fall/>

26 September 2007

### **NANOSTRANDS's Standardisation Foresight Workshop**

Prague, Czech Republic

[www.nanostrand.net](http://www.nanostrand.net)

1 - 4 October 2007

### **Design, Test & Manufacturing Technologies for Integrated Micro & Nano Systems**

Lancaster, UK

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

3 September 2007

3 - 5 October 2007

**4M2007 Conference**

Borovets, Bulgaria

[www.4m-net.org/Conference/4M2007](http://www.4m-net.org/Conference/4M2007)

7 - 11 October 2007

**microTAS 2007 International Conference on Miniaturized Systems for Chemistry and Life Sciences**

Paris, France

[www.microtas2007.org](http://www.microtas2007.org)

10 October 2007

**NANOSTRANDS's Nanometrology Research Foresight Workshop**

Paris, France

[www.nanostrand.net](http://www.nanostrand.net)

15 - 17 October 2007

**CAS 2007 International Semiconductor Conference**

Sinaia, Romania

[www.imt.ro/cas](http://www.imt.ro/cas)

17 - 18 October 2007

**MINAM/ IPMMAN Workshop "The International Workshop on Micro- and Nano Production Technologies and Systems"**

Moscow, Russia

[http://www.ipmman.eu/moscow\\_workshop.htm](http://www.ipmman.eu/moscow_workshop.htm)

23 - 24 October 2007

**COMSOL Conference 2007**

Grenoble, France

[www.femlab.de/conference2007/europe/welcome](http://www.femlab.de/conference2007/europe/welcome)

23 - 25 October 2007

**ITC 2007 International Test Conference "Facing Nanometer-Technology Test Challenges"**

Santa Clara, CA, USA

[www.itctestweek.org](http://www.itctestweek.org)

4 - 5 November 2007

**MEMS Executive Congress**

San Diego, CA, USA

[www.memscongress.com](http://www.memscongress.com)

11 - 15 November 2007

**IMAPS 2007 International Symposium on Microelectronics**

San Jose, CA, USA

[www.imaps.org/imaps2007](http://www.imaps.org/imaps2007)

19 November 2007

**NEXUSplus European Microfluidics Experts Workshop**

Braga, Portugal

[www.nexus-mems.com](http://www.nexus-mems.com)

## Abstract deadlines for conferences

### **Call for Tutorials: SMT/HYBRID/PACKAGING 2008 Conference, 3-5 Jun 08, Nuremberg, Germany**

#### **Deadline 31 Oct 07**

Experts from industry and science are kindly invited to submit a tutorial proposal to be considered for presentation at SMT/HYBRID/ PACKAGING 2008. The tutorials offer an optimal platform to share your professional knowledge and expertise with your peers and to impact on the future direction of the industry. Moreover, you underline the competence of your company.

The 2008 conference will for one day focus on presentations and discussions on the topic "Requirements on Electronic Assemblies for Automotive Manufacturing". In addition, 24 practices oriented half day tutorials concerning the complete technology production chain are planned to take place. The half-day tutorials (3 hours) are to be training courses on current and future developments in the field of electronics assembly production with regard to the entire net production chain. They should have a strong practical significance.

Topics and more information: [http://www.mesago.de/en/SMT/Call\\_for\\_Tutorials/index.htm](http://www.mesago.de/en/SMT/Call_for_Tutorials/index.htm)

### **DATE 2008 Design, Automation and Test Conference**

10 - 14 March 2008

Munich, Germany

**Abstract Deadline: 9 Sep 07**

[www.date-conference.com](http://www.date-conference.com)

### **Smart Systems Integration**

9 - 10 April 2008

Barcelona, Spain

**Abstract Deadline: 10 Sep 07**

[www.mesago.de/de/SSI](http://www.mesago.de/de/SSI)

### **AMAA 2008 - Advanced Microsystems for Automotive Applications**

11 - 12 March 2008

Berlin, Germany

**Abstract Deadline: 15 Oct 07**

[www.amaa.de](http://www.amaa.de)

### **ANALOG'08**

2 - 4 April 2008

Siegen, Germany

**Abstract Deadline: 19 Oct 07**

[www.analog08.de](http://www.analog08.de)

### **SMT/HYBRID/PACKAGING 2008**

3 - 5 June 2008

Nurnberg, Germany

**Abstract Deadline: 31 Oct 07**

[www.smt-exhibition.com](http://www.smt-exhibition.com)

### **DTIP 2008 - SYMPOSIUM on Design, Test, Integration and Packaging of MEMS/MOEMS**

9 - 11 April 2008

Nice, Cote d' Azur, France

**Abstract Deadline: 6 Nov 07**

<http://tima.imag.fr/conferences/dtip/>

3 September 2007

---

Next issue planned : **November 2007** (deadline for contributions: **1 November 07**)

Please feel free to send us any DfMM-related news that might be of interest for our readership.

---

This e-mail newsletter contains public information, only. Please feel free to distribute it to anyone who might be interested in the topics.

Edited by: Conny Reichl & Patric Salomon, 4M2C PATRIC SALOMON GmbH, Germany  
E-Mail: [dfmm-news@4m2c.com](mailto:dfmm-news@4m2c.com), Phone: +49 30 2435 7870, Fax: +49 721 1515 82528

Published on behalf of the project "Design for Micro & Nano Manufacture (Patent-DfMM)", a Network of Excellence funded by the European Commission DG INFSO E5 within the Information Society Technologies (IST) Programme of FP6.

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

This e-mail newsletter is distributed to registered subscribers, project partners, and partner programmes free of charge. If you have been added to our database in error, please reply by e-mail with "UNSUBSCRIBE" in the subject field.

---

4M2C PATRIC SALOMON GmbH (Berlin, Germany), Managing Director: Patric Salomon, Registered at Amtsgericht Charlottenburg HRB 90666