



newsletter

Issue 3
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MICRO & NANO
sector group

editorial

The world is rapidly changing. Faster and faster. But what I'm telling you ! Especially entrepreneurs know how to adapt to an ever changing world. Notably if they are active in the field of micro & nanotechnology

High-value expertise in nice-markets driven by fast developing technologies and strong market requirements !

Take material related nanotechnology. It is not difficult to predict how nanoparticles will change product properties and create complete new products. Opportunities seem limitless but implementations are still limited. Particularly within SMEs.

The use of nanoparticles is seriously delayed by the fact we are unaware of long term effects on human health. The fear for unknown responsibility paralyses the will to implement. It is our Sector Group's task to help SMEs that are struggling with this kind of uncertainties to make the right decisions. Try us !

Rim H.M. Stroeks
Chairman

summary

NANOTECH EXPO
Tokyo

SUCCESS-STORIES

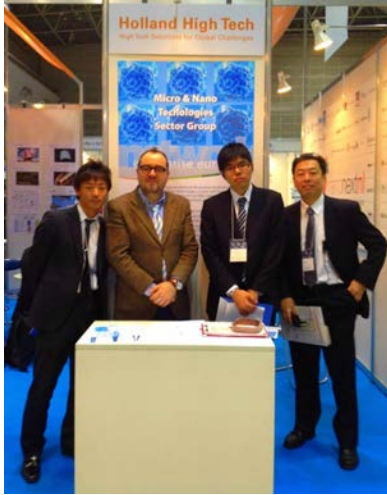
Micronora 2012
Outcomes and video

EUROPEAN
OPPORTUNITIES

UPCOMING EVENTS



NANOTECH - TOKYO



Our sector group (SG) was offered the possibility to present itself at the world's largest nanotechnology exhibition held end of January in Tokyo. With over more than 45000 visitors and 1200 exhibitors, the NanoTech is considered one of the leading shows concerning the latest innovations and breakthroughs in the field of nanotechnology. Simultaneously with the NanoTech over 10 other concurrent exhibitions were held at the same fairground.

One of the most eye-catching issues of the exhibition is the fact that micro and nanotechnology are moving closer together and becoming more and more connected and integrated. Of course there still is a very strong focus on nanoparticles and fibres, but more and more devices or instruments combining nanotechnology are being presented as well. A good example of this is the presentation of a new principle digital microscope with ultrahigh resolution and a form-measuring laser capable of both high-resolution analysis and form measurement. Other innovations shown at this year's edition were the large-scale use of carbon nanotubes as a replacement for conventional copper cabling within now and two years, a newly created graphene compound with the same performance as current metal electrodes and a new developed technology to create electronic components, using the structure of micro-organisms as templates to replace conventional microfabrication.

Besides exhibiting at the fair the SG was invited to contribute to a special organized seminar at MANA (the International Center for Materials Nanoarchitectonics) part of NIMS (National Institute for Materials Sciences) as well, together with the Dutch NanoNextNL cluster, the Technical University of Delft and the company of DELMIC (which combines optical and scanning microscopy in a single device). Although the SG and Enterprise Europe Network was already well presented at the exhibition with 3 partners organizations (CSIC and ImagineNano from Spain and Syntens from the Netherlands). Our Czech Enterprise Europe Network colleagues, for the upcoming editions, we hope to team-up with other relevant clusters like Minnovarc and Micronarc and bring our clients to this leading nanotechnology exhibition.

MICRO & NANO SG SUCCESS-STORIES

Microtechnics Alliance (DE – CH – FR)

Officially launched during Micronora 2012, the Microtechnics Alliance offered to members of the 4 involved clusters (MicroTECH Südwest, Pôle des Microtechniques, Micronarc, Minalogic) to present their activities and cooperation ideas. The 4 Enterprise Europe Network's members (Steinbeis, Euresearch, CCI Grenoble, CCI Franche-Comté) are now working with the clusters of the Microtechnics Alliance to offer them a new occasion to meet and get to know better with B2B meetings during EPMT fair on 12 June 2013.

Partnership Agreement (SE – DK) Update 2012 in Helsingborg, Sweden, was a two day event held in March 2012 for companies and scientists interested in industrial cooperation. The focus was on themes where nanotechnology plays a key role. It attracted almost 250 participants. The matchmaking event was arranged by the Enterprise Europe Network partners Acreo Swedish ICT in cooperation with the Danish colleagues REG LAB. Two of the matchmaking parties were Gammadata Instruments AB from Sweden and DTU Nanotech. Gammadata Instruments AB is a supplier of tools, instrumentation and tailor made solutions in the field of Nuclear Physics, Analysis Instruments, Optronics and Natural Science Education.

DTU Nanotech is a department at the Technical University of Denmark. It's a centre of excellence in micro-and nanotechnology, exploiting sciences across the traditional boundaries of technology. At the matchmaking event the two parties met and discussed the possibility of Gammadata supplying DTU Nanotech with equipment, for electromechanical applications. The two parts came to an agreement, resulting in Gammadata, delivering the specified equipment. The equipment was used in a PhD summer school, PolyNano 2012, organized by DTU Nanotech, assisted by Gammadata Instruments. More information : hakan.sehlin@acreo.se

FOLLOW-UP MICRONORA 2012

Outcomes of the last brokerage event are published on www.micro-nano-event.eu/outcomes
Discover the interviews of 4 Smes :
<http://www.youtube.com/watch?v=-z7jWEyR6bk>

EUROPEAN OPPORTUNITIES

Technology request Technology for bonding of steel pins in ceramic holes

The requested technology is for bonding steel and ceramic, by applying a third element in-between them. It could be a combination of gluing and brazing/soldering (and/or others) for bonding components (parts of cases and bracelets for the watch industry). The Swiss company is willing to invest in R+D for finding a successful solution. She would be bringing the necessary know-how to the interested partner so that industrialization of this technology would be possible within one year maximum. 12 CH 84FB 3QRD

Technology offer Epitaxial grapheme on silicon carbide

A Swedish University spin-off SME has developed a process and know-how in manufacturing grapheme on silicon carbide (SiC). Graphene on SiC is suitable for electronic devices which require higher performance material, like high frequency applications or sensors. The company offers mono- or multi-layer grapheme, or thin graphitic layers on SiC substrates. They are looking for technical cooperations and commercial agreements with academia, RTD organizations as well as industry. 12 SE 67BY 3P64

UPCOMING EVENTS

The Enterprise Europe Network supports events enabling companies or research institutes to engage fruitful partnerships during trade-fairs or conferences.

- **12th Symposium Magnetoresistive Sensors and Magnetic Systems WETZLAR – Germany (19 – 20th March 2013)**

Contact : gerber@innomag.org



Technology Cooperation Days on Industrial Energy Efficiency – Hannover Messe – 9 – 11 April 2013

This international brokerage event is the place to be for innovative SMEs, research institutions and universities to find partners for technology and research cooperation or business partnerships in pre-organised one-to-one meetings on Hannover Fair. In 2013, the Technology Cooperation Days focus on technologies and solutions to improve energy efficiency in factories and industrial production. Only confirmed meeting requests will be organized and take place on a dedicated brokerage event area in Hall 2. In 2012, 180+ organizations/companies participated in 460 confirmed bilateral meetings. Registration on-line: www.technologycooperationdays.com

The Micro & Nano Sector Group is supported the brokerage event and will meet on this occasion.



High Tech Systems, Eindhoven, 23th to 25th April 2013

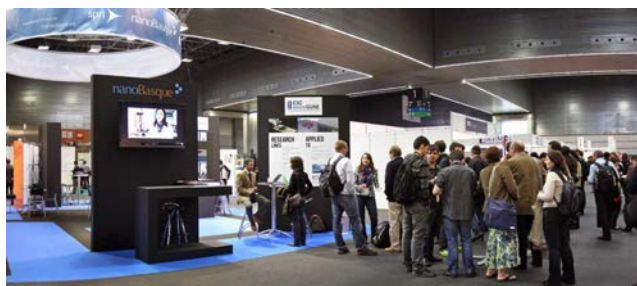
The international High-Tech Systems event will be held from 23rd till 25th of April in Eindhoven. The Dutch high-tech industry, concentrated in the Brainport region which will present itself during this event, is renowned for being one of the most advanced high-tech eco-systems in the world. It is famous for its global playing OEM's, cooperation minded and outsourcing suppliers and state-of-the-art research institutes. As open innovation is part of the Dutch high-tech industry's DNA, this event strongly focuses on how foreign technologies and expertise can add value for all involved partners.

Exclusively for the foreign participants, one day prior to the exhibition/conference (23 April) various company visiting tours are offered. A brokerage event organized by Enterprise Europe Network is going to take place on this occasion: www.b2match.eu/hts2013

ImagineNano, Bilbao SPAIN, 23 – 26 April 2013

Bilbao will host the 2nd edition of the largest European Event in Nanoscience & Nanotechnology, IMAGINENANO2013 from the 23rd until the 26th of April 2013 at Bilbao Exhibition Center (BEC). Following the overwhelming success of ImagineNano2011, several conferences will be held in parallel in a new infrastructure, as well as a vast exhibition, one-to-one meetings and an industrial forum where everyone can meet and greet Nanotechnology side by side. ImagineNano will therefore gather the global nanotechnology community, including researchers, industry policymakers and investors.

The ImagineNanoBrokerage Event will take place on 24-25 April: www.b2match.eu/imagineno2013



Nanotextology 2013, Thessaloniki, Greece, 6-13 July 2013

NANOTECHNOLOGY 2013 is the annual event to explore the opportunities in the emerging fields of Nanotechnologies and Organic Electronics. It includes a powerful community that brings together over 2.000 researchers, scientists, engineers, business and technical professionals to promote research and industrial collaborations and technology transfer by networking and matchmaking.

NANOTECHNOLOGY 2013 is a multi-event, comprising international conferences and exhibition. The 3rd edition of the expo event will unite innovators and bring nanotechnology from lab to market. The exhibition is expected to host more than 70 exhibitors and will focus on Large Scale Organic Electronics and Photonics, Micro & Nanoelectronics, Nanomaterials & Metrology, Nano-instruments & Characterization Systems, Nanotechnology & Food, Nanotextile & Clothing, Nanobio-Medicine and Business & Venture.

More information : www.nanotextology.com

This newsletter is an initiative of the Micro & Nano sector group.

Chair of the group: Rim Stroeks, Syntens, Netherlands –

Vice chair: Mehmet Kirca, Turkey –

Communication : Anne-Marie Vieux, CCIR de Franche-Comté and Melissa Machecler, CCI Essonne, France.

Visit the Micro & Nano sector group page on the Enterprise Europe Network website to get the name and contact details of the closer member in your country. :

<http://www.enterprise-europe-network.ec.europa.eu/about/sector-groups/nano-microtechnologies>

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