

[Subscribe](#)[Share ▼](#)[Past Issues](#)[Tr](#)

[View this email in your browser](#)



Nr.6

Welcome to our 6th Thinface Newsletter which is also ment to be for the PCAM network. The design is changed and I hope you will enjoy the quick overview and access. I look forward to your feedback.

Yours,

Katharina Rubahn



Scientific Breakthrough

Myles Rooney, UNIMIB, together with Weike Wang, NANOGUNE, developed a stable PSS free dispersion of a proprietary EDOT monomer.



Award

Research Award of the BHJ Foundation goes to Morten Madsen, Mads Clausen Institute at SDU.

[Read more](#)



Impressions of the MRS Conference in Boston, November 2015



Chloé Rodriguez spend some time at Mecwins as her secondment and lets us know about her research and experience.



Three assistant professor positions available at TUGraz.



EU-Calls of interest

[Future Emerging Technologies](#), H2020-FETPROACT-2016-2017, Area 4: New technologies for energy and functional materials, Open until April 12, 2016

[MSCA-ITN](#), Call opens September 15, 2016 and Closes January 10, 2017

[MSCA Cofund](#), Call opens April 5, 2017 and Closes September 28, 2017

[MSCA-Rise_2016](#) Call open until April 28, 2016



Two Thinface events are ready for registration: a workshop on 'Lifetime and Stability of Hybrid and Organic Devices' in April and a summer school on 'Organic Electronics' in July and many more events in the field.

[Read more](#)

Breaking News: PEDOT goes PSS free

Within a joint effort between UNIMIB PhD fellow Myles Rooney and NANOGUNE fellow Weike Wang, PEDOT – possibly the most technologically ubiquitous semiconducting polymer – makes a step forward towards the resolution of a known intrinsic limitation. PEDOT itself is a totally insoluble, and thus hardly processable, polymer. Its most common processable form is a waterborne dispersion, the PEDOT:PSS, whose major limit is the corrosive nature of PSS. Limited stability of PEDOT:PSS containing devices is a very well known issue, particularly when such dispersion is applied over conductive oxides such as ITO or FTO.

On following up the seminal results obtained by the US company TDA Research, UNIMIB fellow developed a stable PSS free dispersion of a proprietary EDOT monomer enabling the preparation of pinhole free, conductive (conductivity up to 60 S/cm) films that are stable to solvent wash, after thermal treatment.

Nanogune fellow prepared alternative functionalized EDOT monomers, leading to polymers with selective binding properties towards a range of oxide materials. More details will follow after suitable protection of IP relevant details. As an extra gift, films are remarkably electrochromic. Samples are available to partners for evaluation. Please contact Luca Beverina at University Milano-Bicocca.

Materials Research Society Boston 2015 Conference

The MRS15 Fall Meeting and exhibit 2015 was held from November 29th to December the 4th at the Hynes Convention Center and Sheraton Boston Hotel in Boston, Massachusetts. This was very adequate, since it was in a huge facility where you could find everything you need to go through the day (free coffee!) without stumbling upon the cold Boston weather. Extra facilities as a free Internet computers, an MRS TV channel or an app with real time information and alerts about the talks given were also very appreciated and showed how

much attention the organizers payed to the comfort of the attendees.

The scope of the Conference is very broad, holding 56 different symposia from very diverse Material-related topics, tutorials, poster exhibitions or programming competitions. Soft skills tutorials where also hosted mainly on Sunday, focusing in Talk presentations or Essentials of getting your work published.

From the scientific point of view, the symposia AA on Organic Semiconductors, Surface Interface and Bulk doping was very adequate, starting with a very good tutorial to refresh concepts that could be forgotten or to gain more knowledge on the topic of organic semiconductor doping. The chance to hear big celebrities was very appreciated by the audience, resulting in a lack of space/chairs in the room for most of the talks.

Several poster sessions were held, bringing us the opportunity to meet and discuss our presented investigations with other scientist that could help to develop new ideas or different approaches. Even though it was late in the evening, the audience was excited and long and interesting discussions happened there.

My overall impression of the conference is excellent. Everything was very well organized and the experience of the hosts could be felt in every single detail.
Antón Fernandez

Secondment at MecWins



I am Chloé Rodriguez, I am working on the project "Humidity effects at the organic/porous silicon sensor interface" (ESR 4) at Universidad Autónoma de Madrid (UAM). My secondment to Mecwins, a company located close to the Campus and specialized in nanomechanical sensing, aims at the micromechanical characterization of modified porous silicon-silicon (PSi-Si) cantilevers. Mecwins offers an optical platform for MEMs monitoring and characterization named SCALA, which uses its proprietary technology and allows measuring in air, liquid, and vacuum environment. In particular, the presence of a humidity control system within the equipment is especially interesting to study the effect of humidity on the deflection of the cantilevers. Their technology development also focuses on the analysis of biomolecule interactions for several applications including biomedicine, pharmacogenomics, drug discovery and microRNA research. The analysis of biomolecular interactions with my functionalized PSi samples will be the next objective of my investigations at Mecwins. Indeed, my project aims at using the high surface sensitivity of PSi as biosensing platform upon modification by self-assembled silane monolayers.

Until now, all my work at the company was facilitated by the presence of a team composed of physicists, chemists, biologists and engineers who transmitted me their know-how and helped me with any worries or concerns I could have. That allowed me to acquire new skills and experience in industry. This was also a good opportunity to apply the work realized in the laboratory at UAM to concrete systems (nanomechanical platforms for biosensing). To resume, I have benefited greatly from the experience and I still have a lot to learn from them.

Three assistant professor positions available at TUGraz

There are three open positions at the Institute of Solid State Physics, >Graz University of Technology, Austria.

Two assistant professors should complement the research activities of the institute in the field of inorganic /organic semiconductors, surface science, thin film technology. Additional there is one position open for a guest professor who teaches "x-ray physics" and "soft matter physics".

Deadline for applications is May 1st, 2016.

[Assistant professors](#)

[Visiting professor](#)

