The focus of EuroNanoForum (ENF) 2015, the seventh ENF event, was on promoting European reindustrialisation and creating new markets for advanced technology. Organised by the University of Latvia and Spinverse, the Nordic leader in innovation consulting, in cooperation with the European Commission’s Directorate-General for Research and Innovation, the theme of this year’s conference was ‘Nanotechnology for European competitiveness’.

Coinciding with the Latvian presidency of the council of the European Union (EU), ENF 2015 took place on 10-12 June and offered an outlook of European and global developments, trends and innovation demands in nanotechnologies and advanced materials industries. Across the three-day event, attendees participated in plenaries, sessions and workshops that focused on advanced materials and new production technologies within the healthcare, energy, chemical and automotive industries.

Representatives from industry, along with SMEs, investors and policy makers, were afforded the opportunity to debate pressing topics, spanning education and entrepreneurship. In addition, participants were privy to first-hand knowledge on initial activities launched under Horizon 2020 and expert insight for coming calls during sessions on finance and funding through European and national programmes, smart specialisation and public-private partnership initiatives. Alongside the conference, the event also featured a Nanotech Europe Exhibition, Brokerage Day, Poster Session, Best Project Award, FutureFlash! and Latvian Saiets.

ENF 2015 brought together 1,200 delegates, including 150 speakers from 50 countries.
MANUFACTURING MATTERS

Speaking at the conference, Rudolf Strohmeier, Deputy Director-General of Research Programmes, highlighted the importance of manufacturing industries in Europe.

"In the EU, manufacturing is responsible for 80 per cent of total exports and for 32 million direct jobs and another 20 million indirect jobs in the related supply sector. In addition, manufacturing is responsible for three-quarters of private sector R&D expenditure and half of the innovation expenditure. If we lose manufacturing in Europe, we also lose R&D and, as a final consequence, growth and jobs.

We cannot allow this to happen. We must reindustrialise Europe and the Commission has set the ambitious goal to raise industry’s share of the GDP to 20 per cent by 2020. Industry is on the verge of a new industrial revolution, sometimes called Industry 4.0, or cyber-physical systems, where the progress in information and communication technologies is shaking up the landscape of industry and manufacturing.

The reason I wish to address Industry 4.0 in this nano and materials conference is that although ICT is driving the developments, Industry 4.0 is more than ‘digital’. Linking the ‘physical’ with the ‘digital’ world through ‘cyber-physical systems’ has the power of making our industrial system truly flexible, resilient, resource efficient, human centred and highly competitive. It also enables new intelligent products – based on nanotechnologies and advanced materials – to reach the market place and provide the needed innovation to address societal challenges.

Making Industry 4.0 work for Europe therefore requires a holistic and systemic approach. Digitalisation alone will not reindustrialise Europe."

FutureFlash!

- Best project competition – the 10 best projects launched under the EU funding instruments
- Demo area – showcasing the 10 best projects in nanotechnology and advanced materials

REALISING POTENTIAL


Exploiting the physical, chemical and biological properties of materials at the nanometre scale, nanomedicine has the potential to enable early detection and prevention, and essentially improve diagnosis and treatment processes. In Europe there are more than 1,500 academic teams and over 500 SMEs working in the various fields of nanomedicine, such as in vitro diagnostics, medical imaging, therapy, regenerative medicine and patient monitoring.

With more than €600 million of European Commission funding invested in nanomedicine projects between 2007 and 2014, and 122 products under clinical trial, Europe has the potential to become a future world leader in nanomedicine. However, European patients are still missing the innovative nanotherapeutics under development compared with the US market.

The European Technology Platform on Nanomedicine identified several bottlenecks, which required coordinated public actions to create a favourable ecosystem in Europe for the blooming of the most promising SMEs or startups, and possibly the relocation of large companies. Now at a turning point, Europe could soon create a profitable nanomedicine sector, thus contributing to an industrial renaissance on the continent.