

EXECUTIVE SUMMARY

Industrial Technologies 2014, the third in the series of Industrial Technologies bi-annual conferences, was held in Athens, Greece on April 9-11, 2014. Over 1300 delegates participated in the event, among which 150 high-level speakers presenting nanotechnology, biotechnology, advanced materials and new production technologies.

Presentations, workshops, exhibitions, poster displays and competitions over three days demonstrated convincingly the importance of NMP technologies in ensuring that Europe retains a foothold at the very forefront of global manufacturing. Indeed, the importance of European re-industrialization through research and innovation in industrial technologies was the fundamental topic which repeatedly emerged during the course of the three days. Furthermore, the importance of innovation in SME's through the commercialization of NMP research results, including the support of smart specialization by pushing innovation policy further in the new member states, especially in the Balkan and Mediterranean countries was repeatedly emphasized and highlighted by all key players and was reflected in the committed participation of so many delegates from beyond those borders. The enthusiastic participation of so many delegates in the brokerage sessions demonstrated a very real willingness on the part of those delegates to establish new collaborations.

The event programme featured updates on the latest developments in NMP technologies from many leading research centres and universities and provided practical information on industrial applications from European industrial companies. Inevitably, due to its timing with the Greek EU presidency, the relevance and importance of Horizon 2020 (Europe's new Framework Programme for Research and Innovation) was repeatedly addressed. Hopes were expressed that the projected growth of this Programme and the strategic positioning of NMP technologies within that Programme, would remain as a characteristic of the Industrial Technologies element of the Programme.

Throughout the conference, the need to focus on bringing nanotechnology advances and how NMP-enabled products change worlds and daily life has been emphasised. The conference has also addressed other areas where nanotechnology can be applied and emphasised how businesses need to move with the times and need to redirect their attention towards transformation into new areas. Furthermore, issues regarding safety of advanced materials and process in terms of nanotechnology were also mentioned. Finally, the impact of nanotechnology in sustainable healthcare, biotechnology and water supply were fields that driven the interest of many delegates.

The conference gave a multi-perspective view on innovation processes, highlighting the critical role of cooperative research and regional development. It discussed the major challenges related to efficient, high quality and agile manufacturing; it contributed a vision about the resource-efficient factories of the future and a comprehensive view on market needs and technology trends for the smart manufacturing systems of the future. It also gave an insight on new approaches to skills development and competence building, in view of the critical role of talent-driven innovation for future manufacturing and the foreseen change of employment pattern in industry towards more knowledge- and skills-intensive jobs.

Finally, through the Greek Showcase and the matchmaking activities bridges of communications between academia and industry were built, supporting the effort to commercialize the new key enabling technologies (KETs). Integration between academia, SMEs and industry will allow innovations to be commercialised and then produced on a large industrial scale (developing demo and pilot lines through clustering activities) for economic growth and job creation. This will bring

more cutting-edge technology related jobs and patents back to Europe to complement the knowledge-creation