4 PRESS RELEASE

INSPIRED – A PROJECT TO PRINT THE FUTURE

In January 2015, 13 partners from 7 European countries met in Brussels to kick off the project INSPIRED, acronym for "INdustrial Scale Production of Innovative nanomateRials for printEd Devices", funded under the HORIZON 2020 EU Research and Innovation programme[1].

The focus of INSPIRED is to fundamentally improve the current understanding of Printed Electronics (PE). PE is set to revolutionise the electronics industry over the next decade and can offer Europe the opportunity to regain lost market share. It allows for the direct printing of a range of functional ink formulations to enable a simpler, more cost-effective, high performance and high volume printing processing in comparison to traditional circuit board and semiconductor manufacturing techniques.

The move towards low-cost, liquid-based, high throughput techniques, such as inkjet printing, requires that suitable functional inks are available for end users. Presently there are issues with the supply of industrially relevant quantities of nanomaterials which are low cost, high performance, environmentally friendly and tailored for high throughput systems. INSPIRED will address these challenges.

"*By covering the whole value chain from nanomaterial synthesis and scale-up over printing process R&D and equipment manufacture to applications development, the INSPIRED partners will ensure the availability of nano-based functionalised inks in industrial scale quantities and enable rapid and high-throughput production of novel printed electronic components on a wide variety of substrates*" explains Dr. Andreas Klug, coordinator of INSPIRED.

"*We are very pleased to be able to start this 4 year programme to bring some effective new technology to printed electronics, and to be leading a very strong team that will realise solutions for a wide range of new and developing application areas*", adds Dr. Paul Reip, a key member of the INSPIRED management team.

In detail, the INSPIRED project will develop and demonstrate cost-effective, innovative, high throughput synthesis and functionalization of nanomaterials (e.g. nano-copper, silver nanowires, graphene nanoplatelets) for printed electronic systems in relevant industrial environments such as capacitive touch screens, liquid crystal displays, and photovoltaics modules using high volume printing techniques which surpass currently available technologies.

Further information on the INSPIRED project can be found at the project website: www.nano-inspired.eu

For more details do not hesitate to contact the project coordinator Andreas Klug (andreas.klug@ntc-weiz.at).

[1] Call: H2020-NMP-PILOTS-2014, NMP-05-2014: Industrial-scale production of nanomaterials for printing applications