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CO-pilot: Pilot Manufacturer of polymeric Nanocomposites



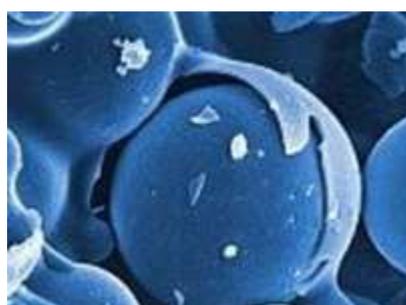
Polymeric nanocomposites represent an interesting class of materials which are formed by a combination of nanoparticles with polymeric matrix materials. New polymeric nanocomposites are developed every day, often at universities, knowledge institutes and spin-off companies. However, most of these products can only be produced on a very small scale, which is an enormous hurdle to further development.

Meet the future of a Smart Europe at Industrial Technologies 2016!



The ambition and distinctive competitiveness of Europe's industry lies in high value-added customised goods/services, flexible and demand-driven production and manufacturing with less waste and better use of resources as well as the effective management of value chains and access to markets throughout the world. A future industry, based on Europe-wide cross-sectoral innovation and a multidisciplinary integration of digitalisation, industrial technologies.

What are researcher seeing at the nanoscale?



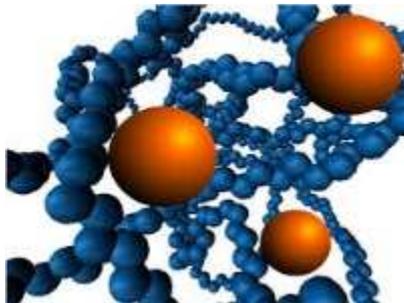
Prof. Valeria Nicolosi is leading the CRANN Advanced Microscopy Laboratory (AML) at the Trinity College Dublin, where researchers can see at the nanoscale as almost no other people can. The whole range of TCD's instruments are used to characterize the nanomaterials distribution (both in-plane and in cross-sectional configuration) in the polymeric nanocomposites produced in the Co-Pilot infrastructure.

CO-Pilot presents at Dechema-Frankfurt



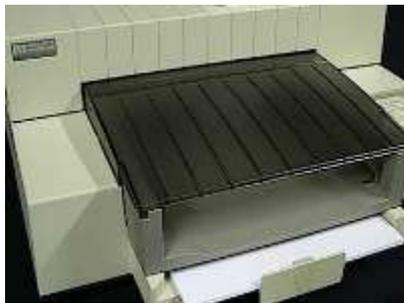
Dechema organized the Workshop "Industrielle Produktion von Nanomaterialien - Stand und aktuelle Herausforderungen" on 11 February 2016. The Co-Pilot initiative was presented by Dr. Karl Mandel (Fraunhofer ISC) among all leading players in the field. The Co-Pilot initiative was very well received by the audience. The common opinion was that initiatives like this could really bridge the gap for many new discoveries in the field of nanocomposites towards commercialization.

Pilot scale manufacturing of cost-effective nanocomposites



The field of nanocomposites materials has witnessed remarkable progress in recent years with many different types of nanocomposites exhibiting radically enhanced properties for a wide range of industrial applications. In order to enable SMEs to enter this crucial stage of the research-development-innovation cycle, the European Commission has challenged larger enterprises and research and technological organisations to get together.

Mass production of printed flexible graphene-based electronics



The ICN2 NanoBioelectronics and Biosensors Group, led by the ICREA Research Prof Arben Merkoci, presents a versatile, low-cost and customizable method for patterning graphene oxide onto a myriad of substrates. The patented technique, published in ACS Nano ("Water Activated Graphene Oxide Transfer Using Wax Printed Membranes for Fast Patterning of a Touch Sensitive Device"), requires neither a clean room nor organic solvents.

Mass-producing nanomaterials on an assembly line



Nanoparticles can be found in everything from drug delivery formulations to pollution controls on cars to HD TV sets. With special properties derived from their tiny size and subsequently increased surface area, they're critical to industry and scientific research. Researchers at USC have created a new way to manufacture nanoparticles that will transform the process from a painstaking, batch-by-batch drudgery into a large-scale, automated assembly line.

Pilot plant advanced nanomaterials for wear resistant coatings



A pilot plant designed to produce advanced nanomaterials for use in the automotive, mining and energy industries is to be built as part of the EU-funded PilotManu project, which is being led by Italian materials company MBN Nanomaterialia and also includes the UK's Centre for Process Innovation (CPI). These advanced nanopowders will be able to be used in a number of high value manufacturing applications such as a.o. automotive components.

Sappi builds ground-breaking nanocellulose pilot plant



The world of paper and wood pulp is undergoing rapid change. That is why a traditional global player like Sappi has altered course and discovered biobased. Soon 40 percent of the revenue has to come from specialised cellulose. The global demand for paper is decreasing and prices are dropping, a downward trend which has been apparent for years. Sappi also realises that the market for paper and pulp is changing fast.

