Collaboration between IMT and the JRC in the frame of FP7 projects

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COMMON TOPIC OF RESEARCH

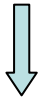
SAFETY ISSUES OF NANOMATERIALS ALONG THEIR LIFE CYCLE

- activities towards the development of appropriate solutions for the use, recycling and/or final treatment of nanotechnology-based products.

RESEARCH CONTEXT:

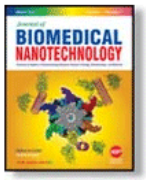
> the amount of engineered nanomaterials (ENMs) have rapidly increased in the last years

> the concern that some ENMs may become a new class of hazardous pollutants that threaten public and environmental health exists



> assessing their hazard and risk is complex and needs new approaches, which take the unique aspects and whole life cycle of these materials fully into account.

The NanoSustain and NanoValid Project—Two New EU FP7 Research Initiatives to Assess the Unique Physical-Chemical and Toxicological Properties of Engineered Nanomaterials



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Abstract:

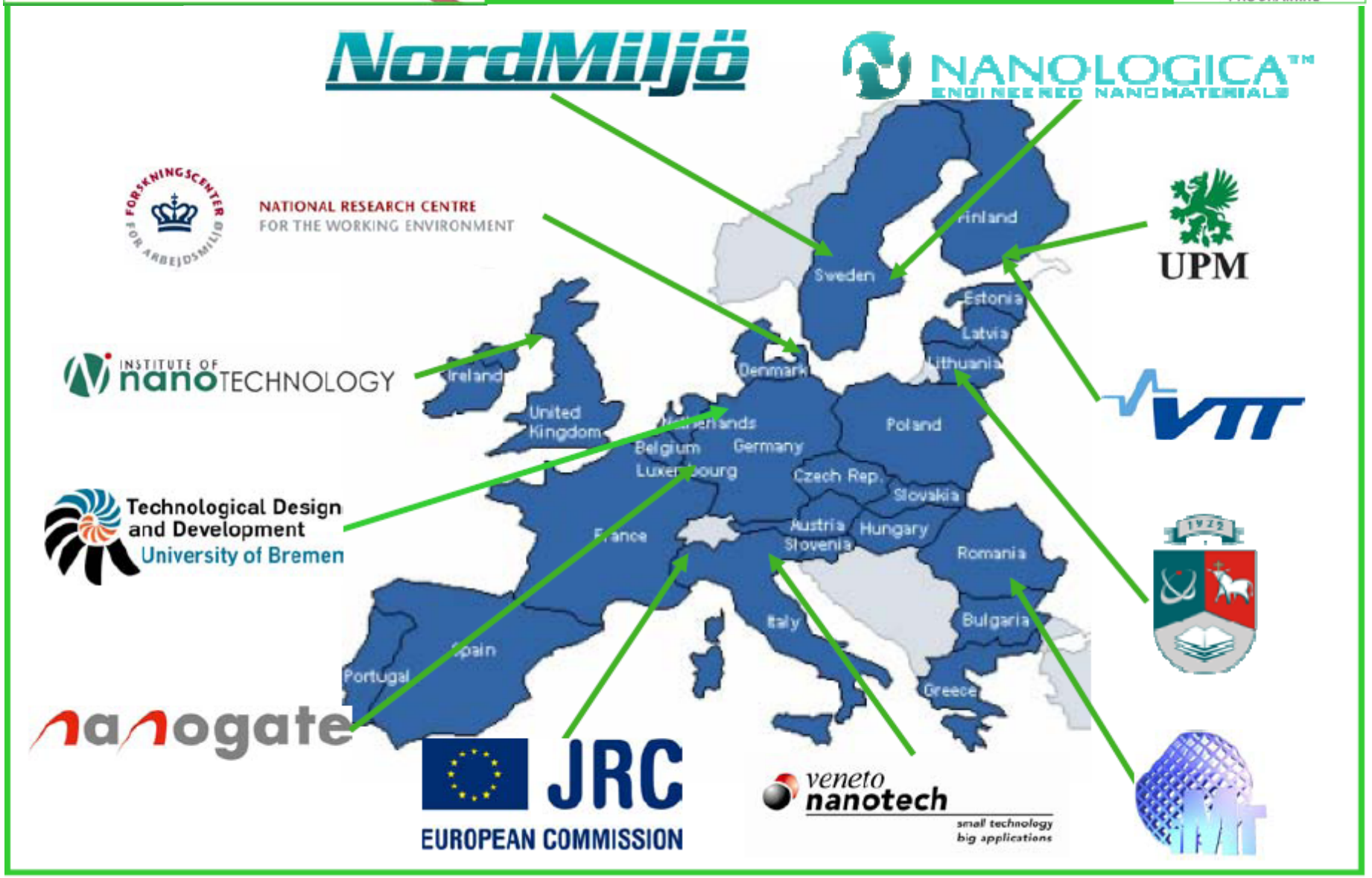
In 2010, the EU FP NanoSustain project (247989) has been successfully launched with the objective to develop innovative solutions for the sustainable use, recycling and final treatment of engineered nanomaterials (ENMs). The same year, NanoValid (263147), a large-scale integrating EU FP7 project has been initiated and contract negotiations with the European Commission commenced, to develop new reference methods and materials applicable to the unique properties of ENMs. The paper presented will give an overview on the main objectives of these 2 new European research initiatives, on main tasks to achieve objectives, and on the impact on current standardization efforts and technical innovations.

Keywords: NANOMATERIALS; NANOSAFETY; NANOTOXICOLOGY; HAZARD IDENTIFICATION; EXPOSURE AND RISK ASSESSMENT; LCA; SUSTAINABILITY; REFERENCE METHODS AND MATERIALS; STANDARDIZATION; ENVIRONMENTAL IMPACT AND FATE

NanoSustain

www.nanosustain.eu

SEVENTH FRAMEWORK PROGRAMME



NanoSustain - EU FP7 collaborative project (www.nanosustain.eu)

FP7-NMP-ENV-2009 Project (collaborative Small or medium-scale focused research project)

*„Development of sustainable solutions for nanotechnology based products based on hazard characterization and LCA - **NanoSustain**"* (2010-2013)

***THEME 4 NMP** - Nanosciences, Nanotechnologies, Materials and new Production Technologies*
and
***Theme 6 ENVIRONMENT**, including Climate Change*

The project is focused on developing innovative solutions for the sustainable design, use, recycling and final treatment of nanotechnology-based products;

A step further

NanoValid

> a new EU FP7 large scale integrating project going forward to validation of measurements and test methods, for reliable reference methods development for risk and life-cycle assessment of engineered nanomaterials

FP7-NMP-2010 Project *Large-scale integrating Collaborative project*

THEME NMP.2010.1.3-1 *Reference methods for managing the risk of engineered nanoparticles*

"Development of reference methods for hazard identification, risk assessment and LCA of engineered nanomaterials – ***NanoValid"***

The project will start in July 2011

(in cooperation with international standardisation bodies and the concerned industry)