

## Best practices effectiveness, prevention and protection measures for control of risk posed by engineered nanomaterials

### BACKGROUND

LIFE NanoRISK is a research and development project focused on the evaluation of the effectiveness of common personal protective equipment (PPE) and engineering controls against nanomaterials



Launched on the 1<sup>st</sup> October 2013,  
NanoRISK opens a new window to provide  
the industry with proven risk management measures  
(RMMs) to protect workers and the environment from  
potential risk of engineered nanomaterials in the EU within 3 years

### PROJECT PARTNERS



**avanzare**



### OBJECTIVES

The overall aim of  
nanoRISK project is to demonstrate the  
effectiveness of workplace controls to prevent or minimize  
exposure to engineered nanomaterials (ENMs) during the  
specific workplace situations of the polymer nanocomposite  
industry, providing valuable data for determining whether a Risk  
Management Measure (RMM) is suitable for a particular  
exposure scenario (ES) on the basis of REACH regulation.

### CONTACT

#### Coordinating Beneficiary

Packaging, Transport & Logistics Research Center

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# NanoRISK – Proven solutions to protect human health and safety

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## SAFE NANOTECHNOLOGY

- UNDERSTANDING RISK.
- PROTECTING WORKERS.
- ENVIRONMENTAL PROTECTION
- STANDARDIZATION.

The project deals with the characterization of highly-efficient work place controls to reduce and control the risk posed by the use of ENMs in the nanocomposite industry, as well as with the development of standardized approaches to support the testing and demonstration activities within the project.

## Effective control against nanomaterials

### PROBLEM TARGETED

The environmental problem targeted by the project is based on the control and mitigation of the potential release of ENMs to the environment in order to minimize their subsequent effects on ecosystem health. To this end, as stated previously, the nanoRISK project will provide an improved understanding of the effectiveness of the RMM to control the exposure to ENMs and mitigate their release to the environment during its entire life cycle.

### RESULTS

The main outcomes of the project will be a library of proven prevention and protection measures for mitigating and control the risks posed by ENMs during the nanocomposites production, use and release, as well as a set of standardized testing protocols based on the application of a newly designed test chamber to support the quantitative evaluation of the effectiveness of the workplace controls.



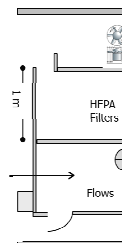
### PPE Testing

Definition of well-defined harmonized protocols to test the effectiveness of respirators, dermal protection and local ventilation.



### WEB BASED RMM Library

A library of proven, technically feasible and economically viable organizational measures, PPE and engineering techniques to control and reduce the risk of exposure to ENMs will be developed



### TESTING CHAMBER PROTOTYPE

As key point within NanoRISK, an aerosol testing chamber prototype to evaluate and demonstrate the performance of the RMM at laboratory scale will be developed



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