

The **NANOGENOTOX** Joint Action has a total budget of over 6 million euros to reach its goals; 2.9 million euros are co-funded by the European Commission's Health Programme, while partners and ministries of the participating Member States provide the rest.



16 key actors from 11 member states and additional affiliated partners came together to join their expertise and competencies.

Launched on 1st March 2010, the project aims to obtain a sound and reliable method for detecting the potential genotoxicity of MNs within a period of 3 years.



www.nanogenotox.eu

Partners

French Agency for Food, Environmental and Occupational Health Safety (France)	ANSES	
Federal Institute of Risk Assessment (Germany)	BfR	
French Atomic Energy Commission (France)	CEA	
Institute of Mineralogy and Crystallography (Bulgaria)	IMC-BAS	
Veterinary and Agrochemical Research Centre (Belgium)	CODA-CERVA	
Finnish Institute of Occupational Health (Finland)	FIOH	
Roumen Tsanev Institute of Molecular Biology Academy of Sciences (Bulgaria)	IMB-BAS	
Institut national de recherche et de sécurité (France)	INRS	
National Health Institute Doutor Ricardo Jorge (Portugal)	INSA	
Scientific Institute of Public Health (Belgium)	IPH	
Institut Pasteur de Lille (France)	IPL	
Istituto superiore di sanità (Italy)	ISS	
The Nofer institute of Occupational Medicine (Poland)	NIOM	
National Research Centre for the Working Environment (Denmark)	NRCWE	
National Institute for Public Health and the Environment (The Netherlands)	RIVM	
Universitat Autònoma de Barcelona (Spain)	UAB	



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NANOGENOTOX

Towards a method for detecting the potential genotoxicity of nanomaterials

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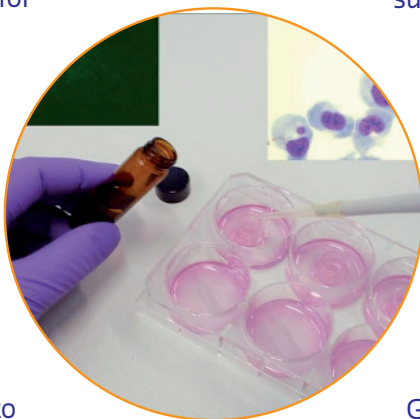
e-mail: nanogenotox@anses.fr



Context

Nanotechnology is a highly strategic industrial and economic sector with enormous potential benefits for many societal and environmental domains.

Human exposure to **manufactured nanomaterials** (MNs) used in consumer products may occur during several phases of their life cycle, from synthesis, production and inclusion in products to the release of these nanomaterials into the environment.



The lack of scientific knowledge and the absence of evidence demonstrating the safety of certain nanotechnology products make regulation very difficult (Source: January 2009 SCENIHR opinion). Because of this, health and safety evaluation is attracting the attention of the public and of governments worldwide.

The Executive Agency for Health and Consumers awarded a grant through the second programme of Community action in the field of health (2008-2013) for a **Joint Action on the "Safety of nanomaterials"**.

The aim of this Joint Action is to **establish a robust (specific and sensitive) methodology to assess the potential genotoxicity (i.e. inducing DNA damage) of MNs** and to generate data on the genotoxic effect of certain reference materials.

Objectives

Provide high added value as a complement to the Member States' policies for nanomaterial safety.

Contribute to improving citizens' health and safety.

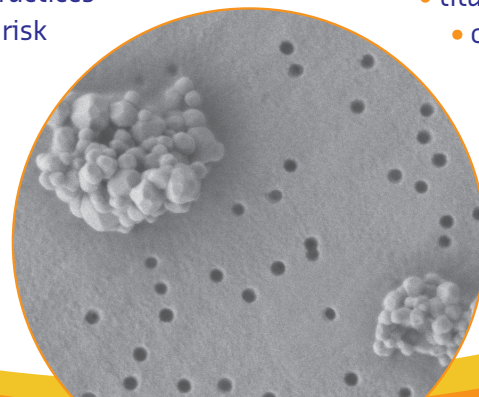
Contribute to the EU's leadership position in this field as well as in ongoing international work (OECD, ISO, etc.).

• Joint Action target groups •

General public
Regulatory authorities
Market surveillance bodies
Implicated industries
Policy-making bodies

• Expected major scientific outcomes •

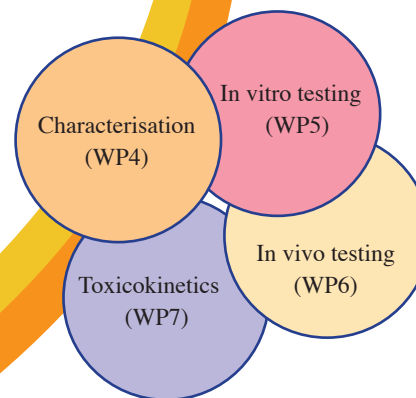
Strengthen, expand and share the knowledge required for the assessment of the hazards, exposure and overall risk of nanomaterials;
Accelerate the exploitation of existing data and the exchange of best practices in risk assessment and risk management;
Promote the establishment of robust methodologies using alternative techniques to animal experimentation.



Work plan

The methods and means implemented include four scientific work packages (WP) and are supported by three transversal WPs:

- coordination
- dissemination
- scientific evaluation of the Joint Action



Dissemination through the web site, newsletters and other tools will also focus on strong two-way communication with

stakeholders. The internal evaluation of the Joint Action will serve to validate the scientific results and guarantee their quality.

• Nanomaterials to be tested •

- silicon dioxides (SiO₂)
- titanium dioxides (TiO₂)
- carbon nanotubes (CNT)

All are produced in Europe and readily available on the market, in many common consumer products (i.e. cosmetics, food, etc.).

All materials will be provided by the Joint Research Center (Ispra, IT).

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