

# Study proposal for EUON:

## April 2025

# Information on - and of - workers exposed to nanomaterials



This proposal is submitted in response to the call for topics launched by the European Union Observatory for Nanomaterials (EUON).

The study aims to address three main objectives:

# 1 - Identification and quantification of workers exposed to manufactured nanomaterials

From research laboratories and start-ups to companies of all sizes — and across a wide range of professions including dentists and other healthcare workers, construction workers, artisans, hairdressers, farmers, bakers, and maintenance staff - many workers are potentially exposed to manufactured nanomaterials. But how many, exactly? Qualitative and quantitative estimates are scarce and outdated<sup>1</sup>. There is a pressing need to update the identification and quantification of occupational exposure to nanomaterials, in order to ensure workers are adequately informed and effectively protected.

The outcomes of this first part of the study would provide public authorities, trade unions, occupational health and safety (OHS) professionals, and workers themselves with a comprehensive overview of:

- the number and profile of workers exposed to nanomaterials across the EU;
  - the types and quantities of nanomaterials to which these workers are primarily exposed...
    - across sectors such as construction, textiles, food processing, cosmetics, healthcare, etc. 0
    - by type of workplace or setting: R&D laboratories / large, medium, small companies / industry, 0 liberal professions, independent craftsmen, etc.
- exposure scenarios by work processes and conditions, not only during the production or transformation of nanomaterials, but also in incidental or unexpected situations — for example, firefighters and first responders facing exposure during industrial or residential fires, or traffic accidents involving the spillage of nanomaterials during transport
- exposure across different stages of the product life cycle, including during use, maintenance, cleaning, and waste management.

## 2 - Summary of knowledge on the risks associated with occupational exposure to nanomaterials

This second part would involve gathering, analyzing, and organizing available information on the health risks associated with occupational exposure to nanomaterials.

This may be achieved by combining various methods of data collection, such as company and user surveys, administrative sources, scientific publications, epidemiologic studies, and more.

## 3 - Information and protection of workers exposed to manufactured nanomaterials

The last part of the study would:

- examine the existing tools available to inform and protect workers about the presence and the risks of nanomaterials they are exposed to, and about the available protective measures
- identify best practices
- and propose additional tools that could or should be developed to enhance both the quality and accessibility of information, as well as the effective implementation of tailored protective measures.

<sup>&</sup>lt;sup>1</sup> "the direct employment in nanotechnology is estimated at 300 000 to 400 000 jobs in the EU, with an increasing tendency" - European Commission, Second Regulatory Review on Nanomaterials, 2012