Newsletter – May 2021

Integrated approach for exposure and health effects monitoring of engineered nanomaterials in workplaces and urban areas

www.lifenanoexplore.eu

The project NanoExplore uses an integrated approach containing biomonitoring studies and the characterisation of exposure levels of engineered nanomaterials (ENM) in indoor workplaces and urban areas. Data of ENMs concentrations, measured by a wireless sensor network, appropriate biomarkers and a web-based data management tool will help to minimise possible effects of ENMs to human health.

Status quo:

- The last couple of months brought some excellent results with several publications coming out. Read the latest NanoExplore publications and discover the project progress below:

Available here:
Evaluation of potential engineered nanomaterials impacts on human health: from risk for workers to impact on consumers

Available here:
Producers of Engineered Nanomaterials—What Motivates Company and Worker Participation in Biomonitoring Programs?

Available here:
Reference Ranges of 8-Isoprostane Concentrations in Exhaled Breath Condensate (EBC): A Systematic Review and Meta-Analysis .

Available here:
Urinary 8-OHdG as a Biomarker for Oxidative Stress: A Systematic Literature Review and Meta-Analysis

RELEVANT NEWS

The nanosafety community met virtually for their 10th International Conference on Nanotoxicology - Nanotox between 20th to 22nd April 2021. During the conference the NanoExplore team presented posters about 'A biomonitoring pilot study in workers exposed to pigment-grade titanium dioxide (TiO2) during paints production', and 'NanoExplore – A pilot study to demonstrate the feasibility of a harmonized approach for monitoring exposure to engineered and incidental nanoparticles and their potential health effects'.

This project is part funded by the European Commission
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- An OPEA experimental study has been launched. Recruitment and data collection are ongoing by the SHeS-pp research team; the Provisional deadline for data statistical analyses and report is by the end of 2021.
- COVID really made it difficult to conduct studies on site, but, despite that, field campaigns, for the “exposed” and “internal control” groups in companies, are planned for May-June (Italy), June-July (Spain) and October-November (Switzerland). All partners involved are working hard towards companies recruitment and campaign organisation.
- A Pilot study has been held in a factory close to Turin where TiO2 is used for paints and varnishes.
- Members of the NanoExplore team participated in NanoTox Conference 20th - 22nd April 2021. They presented posters about ‘A biomonitoring pilot study in workers exposed to pigment-grade titanium dioxide (TiO2) during paints production’ and ‘NanoExplore – A pilot study to demonstrate the feasibility of a harmonized approach for monitoring exposure to engineered and incidental nanoparticles and their potential health effects’.

NEXT EVENTS

29th June - 1st July, 2021
Nanomed Europe 2021
Virtual

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