ACE nano Analytical and Characterisation Excellence

Analytical and Characterisation Excellence in nanomaterial risk assessment: A tiered approach

ACEnano final training event The ACEnano Toolbox

May 28th at 10 AM CET on ZOOM

The ACEnano project (2017-2021) has the overall aim of introducing confidence, adaptability and clarity into nanomaterial risk assessment by developing a widely implementable and robust tiered approach to nanomaterials physicochemical characterisation, that will simplify and facilitate contextual (hazard or exposure) description and its transcription into a reliable nanomaterials grouping framework.

A central output of the project is the **ACEnano Toolbox**, a set of linked online tools and resources to help stakeholders choose the optimal analytical techniques for their needs. It comprises:

- the **ACEnano Decision Tool**, which provides users with recommendations on which analytical technique(s) are best for their specific nanomaterial and measurement endpoint needs, and which links to
- the ACEnano Knowledge Infrastructure, which provides a range of resources including Standard Operating Protocols, comparative interlaboratory performance data for selected techniques, and links to video resources providing visual demonstrations of key techniques.

This workshop

The purpose of this workshop is:

- to introduce the concepts, structure and aims of the ACEnano Toolbox to stakeholders from academia and industry (including SMEs) with interests in conducting or commissioning nanomaterial analysis for risk assessment purposes;
- To provide sessions of basic "hands-on" training in the use of the online tools

Workshop structure

Welcome and event structure	Prof. Eva Valsami-Jones, University of Birmingham
ACEnano Toolbox overview	Dr. Stephen Lofts, UK Centre for Ecology and Hydrology
Training Session 1: the ACEnano Decision Tool	Dr. Ruud Peters, Wageningen Food Safety Research
Training Session 2: the ACEnano Knowledge Infrastructure	Dr. Barry Hardy, Edelweiss Connect

Each training session will comprise an introduction, a hands-on training session allowing users to try out the tool, and a washup session to allow users to ask questions and provide feedback.

The workshop will be held online and will last for 2 hours. A team of trained helpers will be present during the Training Sessions to provide interactive help to attendees in the use of the tools.

Registration

Registration is free, but places are limited! Please register using this link: hips://ukri.zoom.us/ meeting/register/tJItdOCvqD4vGNLeeVj51WE15OQF_LtAkCq before 25th May.





What is ACEnano?

ACEnano is providing confidence, adaptability and clarity into nanomaterial risk assessment by	 Innovation in nanomaterial physico-chemical characterization methods; Delivery of a robust, tiered approach in characterization;
	 Development of widely implementable analytical tools, with a simple and facile contextual description;
	 Generation of a framework for prioritizing analytical approaches to nanomaterial characterization;
	 Support for stakeholders and users, e.g. in the choice of optimal analytical approach for their needs.
What are the key	 Method alignment and simplification;
innovations of ACEnano?	 Comprehensive physicochemical characterization;
	 Universal sample preparation and introduction systems;
	 Harmonisation of hardware to reduce equipment cost;
	 Error reduction through enhanced data management;
	 Tools for improving the comparability of methods.
What tools and	→ Analytical innovation in either novel or poorly developed techniques;
guidance is ACEnano developing?	 Optimisation of existing techniques and instrumentation;
	 Benchmarking and standardisation of well developed techniques;
	 Data capturing and warehousing innovations;
	 Video demonstrations of key analytical techniques;
	 Decision tool to guide users (especially SMEs) through selection of the most appropriate methods to address their needs for risk assessment.
What are the expected impacts of ACEnano?	 Confidence in measuring key descriptors relevant to assessing the health and environmental impacts of nanomaterials;
	 Support for grouping, read-across and QSARs;
	 Improved reliability in nanosafety studies and findings through sound physico-chemical characterisation methods and standard operating procedures;
	 Reduction in costs related to the physico-chemical characterisation of nanomaterials in relevant media;
	 Synergies with applications of the methods in other areas such as quality control, product traceability, labelling and counterfeiting.

Consortium: A multidisciplinary team of 26 members from 9 countries.



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www.acenano-project.eu 💥