

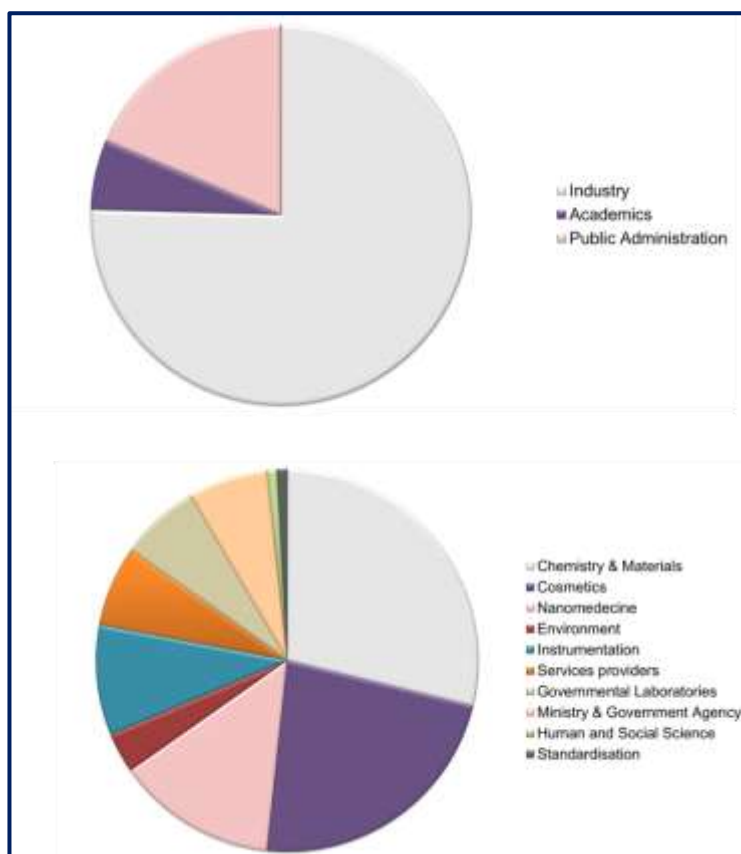


NanoMesureFrance Association

A successful launch with more than 120 participants!

The **official launch of the NanoMesureFrance association** took place on 8 December at the LNE (Laboratoire National de métrologie et d'Essais) in Paris. This was an opportunity to bring together the various stakeholders concerned by the subject of nanomaterials in order **to share the needs and expectations** of the different players and **to set out NanoMesureFrance's ambitions** to support the production of more reliable and comparable data in support of better governance around these innovative materials.

More than 120 participants were present in the room or connected online (**75% from industry**, 6% from the academic research sector and 19% from public administrations including ministries, governmental agencies or laboratories) to attend the interventions of representatives of the **General Directorate of Enterprises** (DGE / Ministry of Economy, Finance and Industrial and Digital Sovereignty), the **General Directorate for Risk Prevention** (DGPR / Ministry of Ecological Transition and Territorial Cohesion), **LNE, BASF, the German Ministry of the Environment and CNRS**, as well as a round table discussion led by LNE and including **L'Oréal, Nanobiotix and Carbon Waters**. A **wide range of sectors were represented**, including **chemistry and materials** (29%), **cosmetics** (23%), **nanomedicine** (14%), **instrumentation** (9%), **services** (7%) and **government laboratories** (7%).



Thomas GRENON, Director General of the LNE, welcomed the participants. He emphasised LNE's role and missions in supporting the development of responsible innovation **by producing the necessary references** (metrology, testing, and certification) **to build trust** between the various stakeholders

(industry, research, public authorities, civil society). He emphasised that LNE's aim with NanoMesureFrance is to make its expertise and technical resources, its network and the close links it has with the world of standardisation available to work on harmonising practices and thus contribute to dispassionate debate on the subject of nanomaterials. He also stressed the desire to reproduce at national level what LNE achieved internally five years ago with the creation of the Nanotech Institute to bring together the expertise of different teams and provide more relevant and better coordinated responses.

Romain BONENFANT, Head of the Industry Department at the DGE, emphasised the **many applications of nanomaterials to support innovation**, as well as the need to take into account **Safer by Design approaches** in order to market safe and sustainable products. He also emphasised the **key role of science and technology** in enabling discussions to take place on a solid and dispassionate basis.

Finally, **Philippe BODENEZ**, Head of the Department of Environmental Health Risks, Waste and Diffuse Pollution at the DGPR, recalled the DGPR's actions to improve the framework for nanomaterials, in particular through the R-Nano register and the **National Health and Environment Plan 4** (PNSE 4), as well as the DGPR's interactions with Europe on REACH. He also stressed the need for **better quality data** to improve the traceability of the use of substances in the nanoparticle state, as the ANSES had pointed out a few months ago.

Georges FAVRE (LNE) presented the NanoMesureFrance Association through its creation, the objectives it has set itself and **its position as a trusted third party** aimed at facilitating dialogue between all the stakeholders concerned. It also specifies the governance of the association and some proposals for actions planned for 2023 with **the thirty or so members already expected** to join the first four working groups.

The ambitions of NanoMesureFrance are detailed, namely:

- To bring together French players involved in the characterisation of nanomaterials within a network accessible through a single entry point;



- To promote collaboration and facilitate access to recognised and qualified resources and expertise;

- To set up pre-standardisation actions for tools and methods to meet the needs identified among its members;

- Provide a framework for the coordination of French efforts on these subjects while ensuring the connection with key European and international initiatives (AFNOR, CEN, ISO, ASTM, VAMAS, OECD, EURAMET...) to better promote French positions;

- Sharing information (technological and scientific watch, standards and reference documents, events, research funding opportunities) and good practices.



Among the various points addressed during the day, the question of **better identification of nanomaterials** was at the heart of the discussions. This issue, which is central to improving the traceability of nanomaterials in the various value chains, is of course the basis of the regulatory framework in place at national (R-Nano register, occupational health, etc.) or European level (REACH, ingredient labelling, etc.). Information on the state of the art was shared by **Wendel WOHLLEBEN** (BASF), as the last ten years have seen considerable progress in the analytical aspect of determining the particle size distribution. **Various avenues for progress were nevertheless mentioned**, such as the question of

harmonising the test approaches to be deployed, the need to be able to specify (or even limit to certain substances or specific grades) the ranges of applicability of certain techniques, wider access to these good practices, training of the players or the evaluation of the capacities of the test laboratories through the introduction of proficiency tests. The issue of **complex multi-component substances or those with very wide size distributions (polydisperse sample)** was also mentioned as one that should be addressed in the future.



Beyond the questions of determining the particle size distribution, many other physico-chemical properties must be characterised in order to control the performance of these nanomaterials, but also their behaviour with regard to possible risks. Based on several examples, Wendel WOHLLEBEN (BASF) highlighted **the crucial importance of being able to harmonise characterisation and testing methods** and proposed **several avenues for progress on these subjects**. These include the need to publicise different approaches and reference guides, the setting up of collaborative projects coordinated by an independent organisation, the co-creation of white papers and representative case studies, the organisation of inter-laboratory comparisons to validate methods and

proficiency tests enabling service providers to demonstrate their skills and mastery of a procedure, and the development of reference materials, especially in the case of complex mixtures. **Finally, he indicated that NanoMesureFrance could be a place that could respond to a certain number of these actions.**

Anke JESSE (German Ministry of the Environment) then presented the **Malta Initiative** that she helped set up in 2017 at European level to support the **development of OECD Guidelines** adapted to the specificities of nanomaterials. These harmonised test methods are indeed central to enable the production of data for regulatory purposes as in the case of REACH. The Malta Initiative underlined the importance of internationally harmonised tools and their necessary adaptation to technical progress. It has also led to the initiation of various calls for projects financed by the European Commission to develop and validate these different test methods (> 20) and aims in the longer term to support the definition and implementation of an EU Strategy on test methods.



Evaluate

emissions of nano-objects
at different key stages of the
product life cycle as part of the
risk analyses to be conducted

Emmanuel FLAHAUT (CNRS) gave information on the **NaMasTE** (*Nanomaterials Manufactured, Toxicology, Ecotoxicology and Risks: Towards a Controlled Development*) **Research Group (GdR)** that he is working on setting up with various research laboratories that are experts in the "nanomaterials" theme. He details the objectives of the GdR, a multidisciplinary laboratory without walls with a mission of scientific foresight and dissemination of knowledge and know-how in emerging scientific fields. He specifies the actors involved in this approach, the axes targeted by the NaMasTE GdR as well as the calendar elements. **The links to be created with NanoMeasureFrance and the problems of pre-**

standardisation of characterisation and testing methods were emphasised during discussions with participants, as LNE is involved in these two complementary initiatives.

Finally, a round-table discussion, moderated by **François-Xavier OUF** (LNE) and bringing together several industrial players (**Philippe HALLEGOT**, L'Oréal / **Paul BEYOU**, Nanobiotix / **Alban CHESNEAU**, Carbon Waters), provided an opportunity for a 45-minute exchange of views on the needs of the industry and expectations of NanoMeasureFrance. Access to expertise and state-of-the-art characterisation resources, information sharing, the development of shared reference systems, the pre-standardisation of test methods so that they can be recognised by regulatory authorities, and the implementation of mechanisms to assess the competence of test laboratories were mentioned as being among the most critical points to be addressed in the future by the association.

FOR MORE INFORMATION

(Temporary) website of the association (in French): <https://www.nanomesurefrance.fr>

LinkedIn: <https://www.linkedin.com/company/88045212>

Join: <https://www.nanomesurefrance.fr/page/2018607-pourquoi-et-comment-adherer>

Contact: contact@nanomesurefrance.fr



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