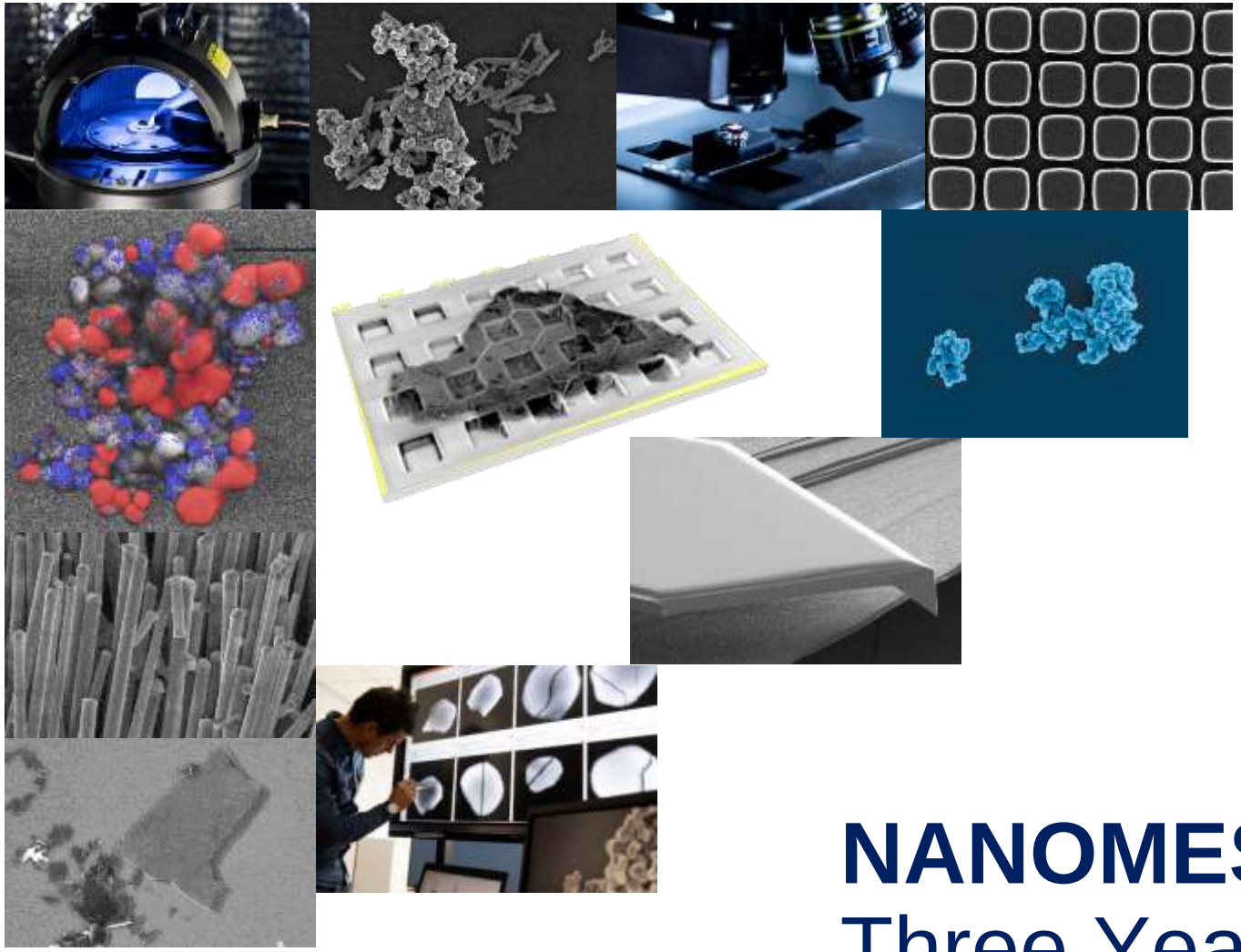


Nano Mesure France

NANOMESUREFRANCE: Three Years of Advances in **Nanomaterial** Identification and **Characterization**

USE OF NANOMATERIALS: *CHALLENGES*

https://euon.echa.europa.eu/fr/uses

Safe & sustainable development*

REGULATORY FRAMEWORK

TRUST

https://euon.echa.europa.eu/documents/2435000/3268573/nano_perception_study_en.pdf

NEED FOR RELIABLE & COMPARABLE **TEST DATA**

GOVERNANCE

Nano Mesure France

*https://joint-research-centre.ec.europa.eu/jrc-news-and-updates/contributing-greener-eu-safe-and-sustainable-nanomaterials-design-stage-2021-04-19_en

NANOMESUREFRANCE: *GENESIS*

Nanomaterials are at the heart of industrial innovation, but their **characterization** and regulation remain **major challenges**

PIPAME
Pôle interministériel de Prospective et d'Anticipation des Mutations économiques

NanoFabNet
sustainable High-Tech Innovation

- **DECOMPARTMENTALISING** INDUSTRIAL SECTORS
- ACCESS TO **CENTRALISED INFORMATION**
- FACILITATING **ACCESS TO EXPERTISE**
- **HARMONISATION** AND VALIDATION OF TEST METHODS
- **SHARING** GOOD PRACTICE/TRAINING
- **VALIDATION** OF STAKEHOLDERS' SKILLS

How is France organizing itself to address these issues?

Nano Mesure France

NANOMESUREFRANCE: *GENESIS*

DIRECTION GÉNÉRALE DES ENTREPRISES

PIPAME
Pôle interministériel de Prospective et d'Anticipation des Mutations économiques

2018
Request from the LNE's supervisory body (DGE) to consider setting up a structure to address the obstacles identified in the PIPAME prospective study

2018 - 2020
2 years of exchanges with multiple (> 100) stakeholders

2020
Project submitted as part of the *Plan d'Investissement d'Avenir* program (Call for ***Industry structuring***)

2021 – 2024
Project supported by Ile-de-France region and the French government → **Grant for LNE**

PRÉFET DE LA RÉGION D'ÎLE-DE-FRANCE
Région îledeFrance
bpifrance

September 2024
End of PIA → NMF financially independent

NANOMESUREFRANCE: *OUR DNA*

HARMONIZING MEASUREMENT METHODS:

- For RELIABLE AND COMPARABLE nanomaterial characterization

SUPPORTING INNOVATION:

- By assisting companies and laboratories in DEVELOPING NEW MEASUREMENT TECHNOLOGIES TO ANSWER ANALYTICAL NEEDS expressed by NanoMesureFrance's members

PROMOTE KNOWLEDGE SHARING:

- Through TRAINING, WORKSHOPS and SCIENTIFIC EVENTS

NANOMESUREFRANCE: *CREATION*

September 2022
CREATION OF
Nano Mesure France

NON-PROFIT ASSOCIATION

3 FOUNDING MEMBERS

FRANCE CHIMIE	**PRESIDENCY**
FEBEA – FÉDÉRATION DES ENTREPRISES DE LA BEAUTÉ	**VICE-PRESIDENCY**
LNE	**TREASURER & SECRETARY**

ASSOCIATION « NANOMESUREFRANCE »

STATUTS DE L'ASSOCIATION

Article 1er - Constitution

Entre les soussignés :
- Laboratoire National de métrologie et d'Essais (LNE)-1 rue Gaston Boissier 75724 Paris Cedex 15
- France Chimie - 14 Rue de la République, 92800 Puteaux
- Fédération des Entreprises de la Beauté (FEBEA) - 137, rue de l'Université, 75007 Paris

Et les autres parties en nombre illimité qui acceptent ces statuts, a été créée une association à but non lucratif régie par les présents statuts et par la loi française du 1er juillet 1901 (et les textes subséquents) sur les associations à but non lucratif.

Article 2 - Dénomination de l'Association

L'Association (ci-après dénommée « l'Association ») a pour dénomination « NanoMesureFrance ».

Article 3 – Objet

L'Association a pour objet de :
- Fédérer et animer le réseau d'acteurs nationaux de la future filière industrielle « nanomatériaux » à travers la coordination des efforts français sur les problématiques d'identification et de caractérisation des nanomatériaux, ainsi que d'évaluation de l'émission de nanoobjets à différentes étapes du cycle de vie des produits ;
- Définir les besoins de la filière et élaborer des feuilles de route et documents d'orientation stratégique sur ces sujets ;
- Diffuser des informations auprès des adhérents (veille technologique et scientifique, documents pertinents dans un cadre réglementaire, normes et documents de référence, bonnes pratiques, événements et les opportunités des dispositifs de financement) ;
- Cartographier les moyens pertinents et disponibles à l'échelle nationale sur ces sujets afin de faciliter leur accès aux adhérents de l'Association et d'identifier les investissements à réaliser ;
- Participer et promouvoir au développement, à la validation et à l'harmonisation de méthodologies pour l'identification et la caractérisation des nanomatériaux, ainsi que pour l'évaluation de l'émission de nanoobjets à différentes étapes du cycle de vie des produits ;
- Valoriser les travaux réalisés en son sein dans différents réseaux d'influence à l'échelle européenne et internationale (AFNOR, ISO, CEN, OCDE, VAMAS) afin d'accroître la visibilité de positions françaises coordonnées.

Article 4 - Siège

Le siège de l'Association est fixé à :

Laboratoire National de métrologie et d'Essai (LNE)
1 rue Gaston Boissier
75724 Paris Cedex 15

Il pourra être transféré en tout autre endroit par simple décision du Conseil d'Administration.

Article 5 - Durée

La durée de l'Association est illimitée.

Article 6 – Composition

Statuts de l'Association « NanoMesureFrance », version du 29 Août 2022

https://www.journal-officiel.gouv.fr/pages/associations-detail-annonce/?q.id=id:202200371460

December 2022 : LAUNCH EVENT

- ❑ **Over 120 participants** (¾ from private sector/industry)
- ❑ Video highlights (FR & EN)
  https://www.youtube.com/watch?v=pmx241GxcEg
- ❑ **European visibility**

3 MAIN ISSUES CONSIDERED

Identify

nanomaterials in support of increased traceability of their use in value chains

Characterise

their key physical and chemical properties and their possible changes during the life of the substance with regard to regulatory requirements

Evaluate

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

BUILD COLLECTIVE SOLUTIONS

Nano Mesure France

TRUSTED THIRD-PARTY

NANOMESUREFRANCE: *AMBITIONS*

*A **single entry point** for structuring a nanomaterials industry based on reliable and comparable data*

- ❑ Promoting <u>collaborations</u>
- ❑ Identify & ease access to experts/techniques
  (→ **Mapping of analytical platforms**)

NANOMESUREFRANCE: *FOR WHOM?*

1 PRODUCERS AND USERS OF NANOMATERIALS

- Expression of needs & prioritisation of actions to be implemented
- Facilitated access to expert actors and relevant tools
- A bridge towards normative and regulatory bodies/public authorities

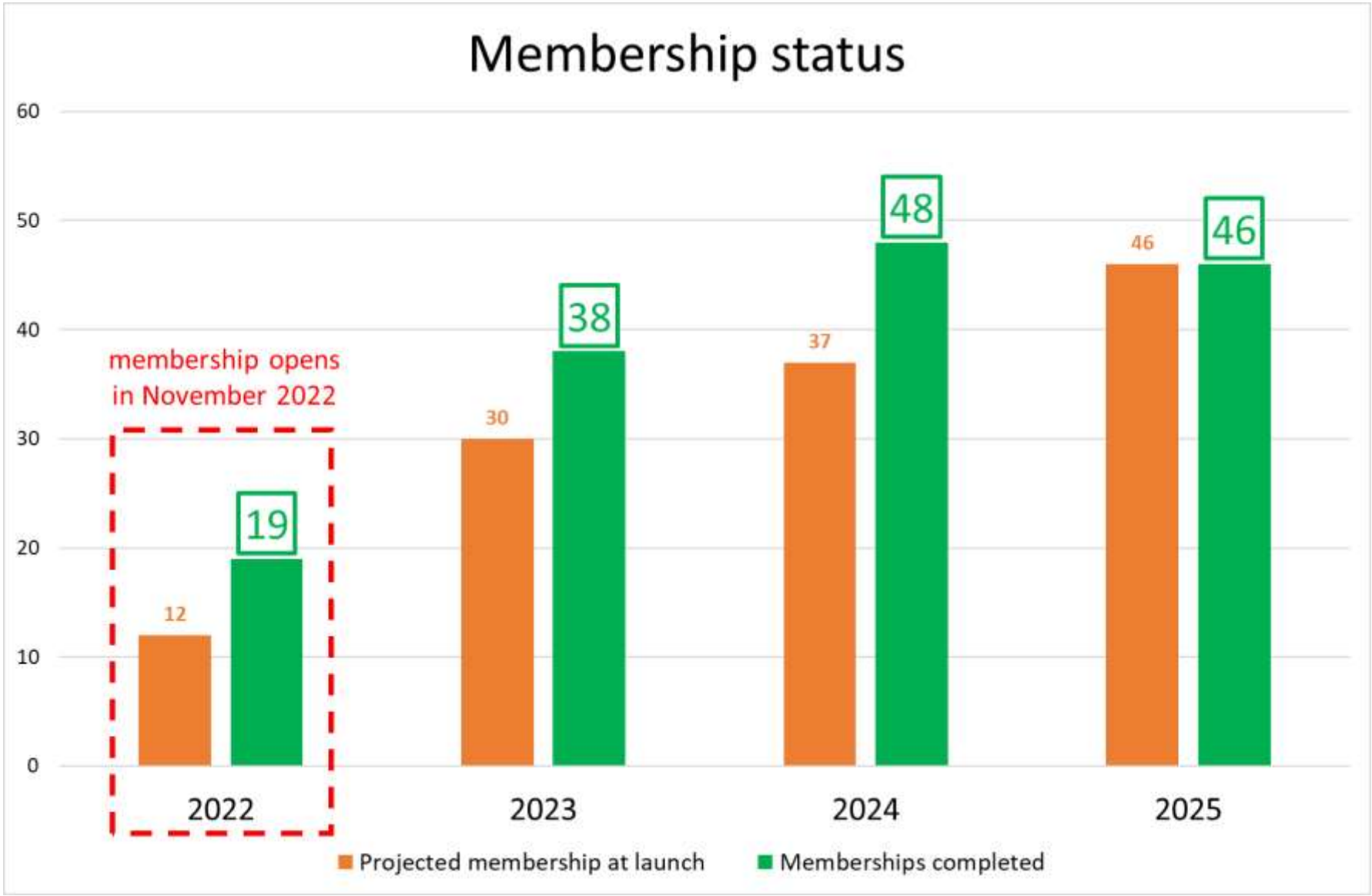
2 INSTRUMENT MANUFACTURERS

- Visibility / inclusion of new instrumental technologies in initiated actions + Identification of stakeholders' needs for future instrumental developments
- Framework for validation of characterisation instrument performances
- Development of harmonised methods / protocols & recognition of methods within a standardisation framework

3 SERVICE PROVIDERS/ ANALYTICAL PLATFORM

- Access to harmonised and validated state-of-the-art methods
- Training / Transfer of good practices
- Proficiency Testings to demonstrate skills

NANOMESUREFRANCE: *CREATE A NATIONAL NETWORK*



NANOMESUREFRANCE: *OUR MEMBERS IN 2025*

Materials & Chemistry

FRANCE CHIMIE · BASF · Merck · Baikowski · UGDL · TRONOX · IMERYS Talc · SENSIENT COSMETIC TECHNOLOGIES · Carbon Waters ENDLESS HORIZON OF MATERIALS

Cosmetics

FEBEA FÉDÉRATION DES ENTREPRISES DE LA BEAUTÉ · COSMED · COSME BIO · L'ORÉAL · CHANEL PARFUMS BEAUTÉ · LVMH / RECHERCHE Parfums & Cosmétiques · Pierre Fabre · sisley PARIS · INSTITUT NAOS des sciences de la vie · CATALYONS

Others

IPC · MICHELIN · Merck · ifp Energies nouvelles · CSTB · SARPI VEOLIA · ASNR · DANONE

Service providers / Analytical Platforms

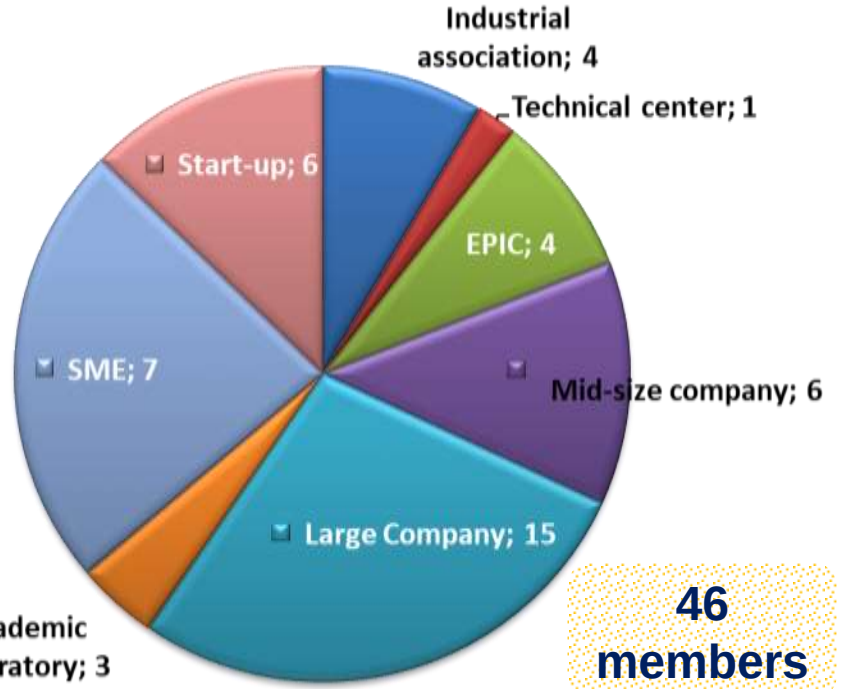
LNE · eurofins · FILAB · ILV Institut Lavoisier de Versailles · UVSQ · INSTITUT JEAN LAMOUR · PURPAN ÉCOLE D'INGÉNIEURS · Mérieux NutriSciences

Instrumentation

ThermoFisher SCIENTIFIC · Nanoscale Metrix · Digital Surf · PAT-INDUSTRY UNDERSTAND. CONTROL. OPTIMIZE. · HORIBA · Quantum Design · JEOL · Park SYSTEMS

Nanomedecine

NANOBIOTIX EXPANDING LIFE · euroAPI Active Solutions for Health · inside · SUPERBRANCHE

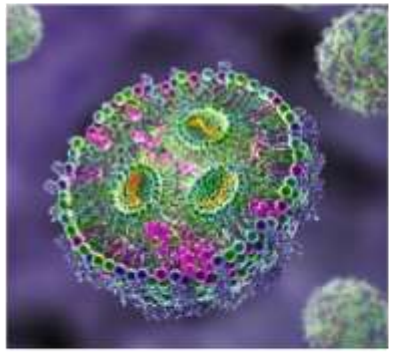


46 members

NANOMESUREFRANCE: *OUR WORKING GROUPS*

Materials & Chemistry

Cosmetics

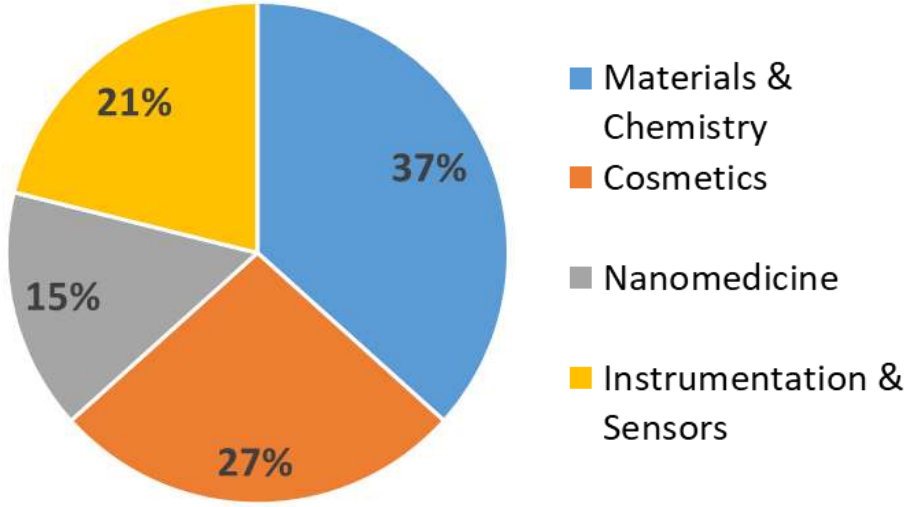


Nanomedicine

Instrumentation & Sensors

- Identification of **sectoral concerns**
- Sharing **cross-cutting issues** and view / **analytical approaches / initiatives**

Distribution of members by WG



SOME MEMBERS PRESENT IN SEVERAL WGs

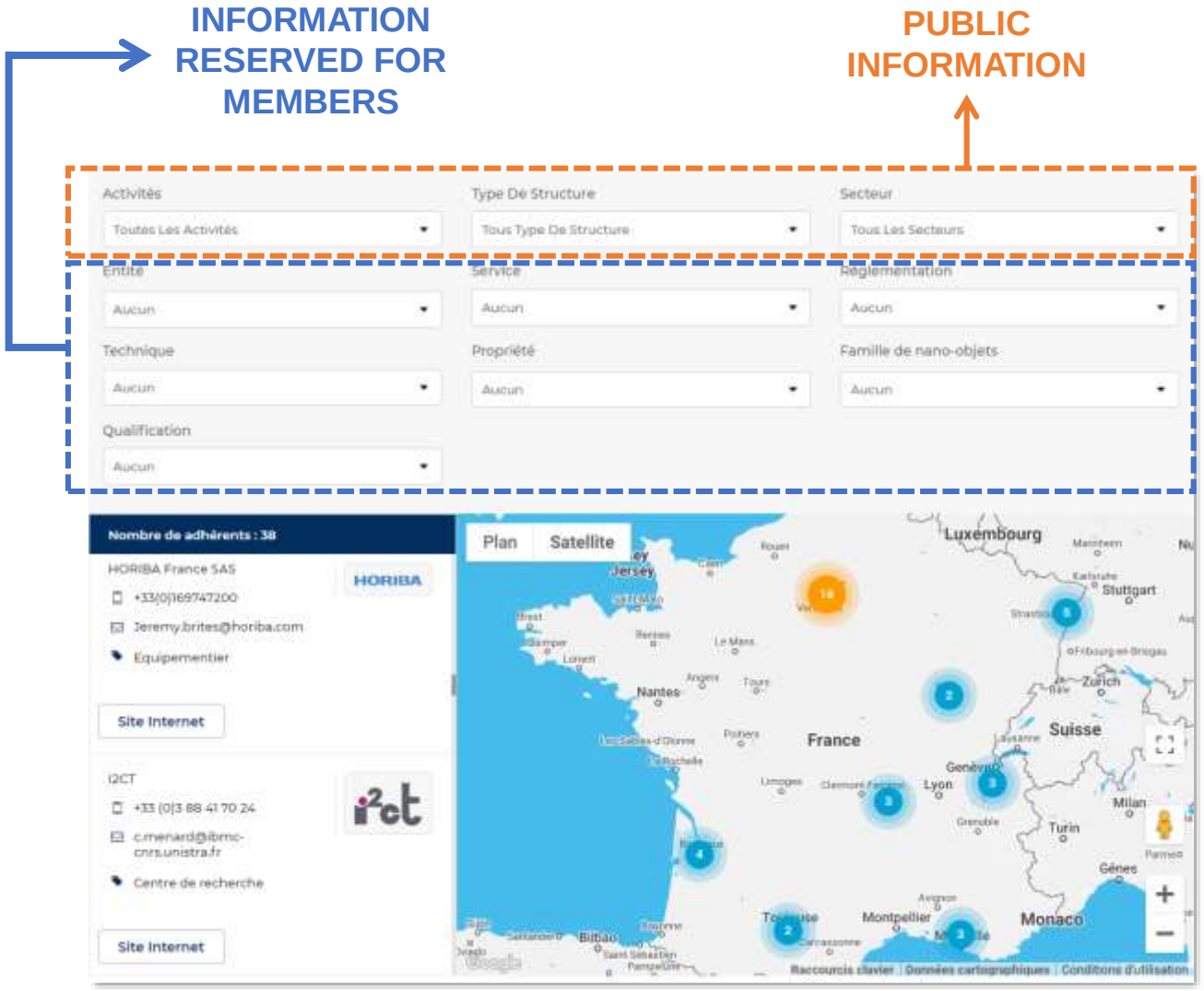
R&D Support

Valérie GODEFERT (LNE)

NANOMESUREFRANCE: *EASE ACCESS TO EXPERTISE*

CARTOGRAPHY

Facilitate the identification of existing analytical methods and associated expertise for different types of nano-objects and physicochemical properties.



OBJECTIVES / ACTIONS

- Definition of the membership form and mapping fields
- Development of an online cartography
- 2 levels of information
  - General public
  - Reserved for NMF members

https://www.nanomesurefrance.fr/cartographie/

NANOMESUREFRANCE: *AMBITIONS*

*A **single entry point** for structuring a nanomaterials industry based on reliable and comparable data*

- Promoting collaborations
- Identify & ease access to experts/techniques (→ **Mapping of analytical platforms**)

- Identification of needs/priorities in terms of **pre-standardisation** of characterisation and testing methods & Coordination of French efforts
- Framework for **evaluation** of performances and **recognition** of techniques, methods and laboratories

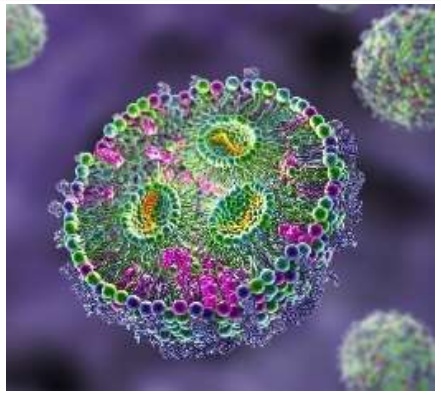
NANOMESUREFRANCE: *IDENTIFIED NEEDS*

Materials & Chemistry

- **Increase confidence** in test method data
- **Facilitate discussions** with the regulatory authorities

Cosmetics

- **Ease exchanges** between manufacturers and users of NMs
- **Facilitate discussions** with the regulatory authorities



Nanomedicine

- Recognised methods and SOPs for characterization of **size, shape & surface properties**
- Share industry **feedback on analytical difficulties encountered and strategies implemented**

Instrumentation & Sensors

- **Identify specific needs** of sectors covered by NMF
- **Demonstrate the performances** of new nanomaterials characterisation technologies

COMMON CONCERN = NANOMATERIAL IDENTIFICATION

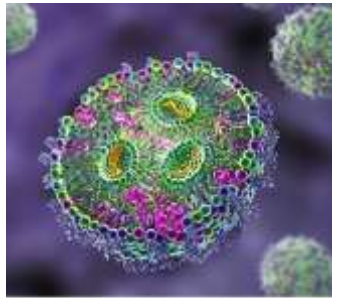
DEMONSTRATION OF TESTING LAB SKILLS (TRAINING – GOOD PRACTICE / ACCREDITATION / GMP CERTIFICATION)

SHARE EXPERTISE & FEEDBACK ON CHALLENGES**, IDENTIFY NEEDS** AND **RELEVANT ANALYTICAL TECHNOLOGIES TO BUILD COMMON SOLUTIONS**

INCREASE CONFIDENCE IN TEST METHOD DATA

Materials & Chemistry

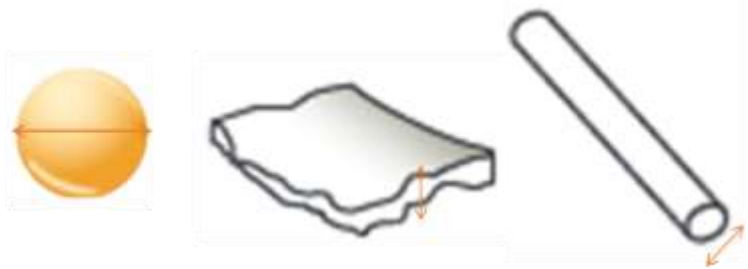
Cosmetics



Nanomedicine

Identify

nanomaterials in support of increased traceability of their use in value chains



- **How to tackle complex industrial « real life »** samples?
  - ➔ Applicability of available guidances
- How to improve the collection of **relevant and robust data** from ingredient suppliers to support « *nanomaterial* » or « *non nanomaterial* » statements

➔ **Improve exchanges** between users & suppliers

➔ **Provide easy-to-use documents** for non-experts

INCREASE CONFIDENCE IN DATA: *APPLICABILITY OF AVAILABLE GUIDANCES*

Considering the confirmation methods (**EM & AFM**) and recommended analysis rules (**JRC & OECD guides**)

Nano Mesure France

FEEDBACK from NanoMesureFrance members on materials for which they are unable to establish the number size distribution and to conclude on « nanomaterial » status

Identify **specific features** & **group** materials into complexity classes

Identify the **limitations** of SEM, TEM & AFM techniques

Propose **first analytical solutions**

NanoMesureFrance guide outlining the **limitations of SEM, TEM & AFM techniques** for characterising the size of **some commonly encountered particulate materials**

INCREASE CONFIDENCE IN DATA: *GUIDE BY EXAMPLE*

- **Summary** and introduction of complexity class
- **Issues** (limitations of EM/AFM techniques to analyse the complexity class)
- Most « illustratives » **SEM/TEM/AFM images**
- **State of the art of existing technologies** able to respond to these difficulties
- **Recommendations** and **development areas**

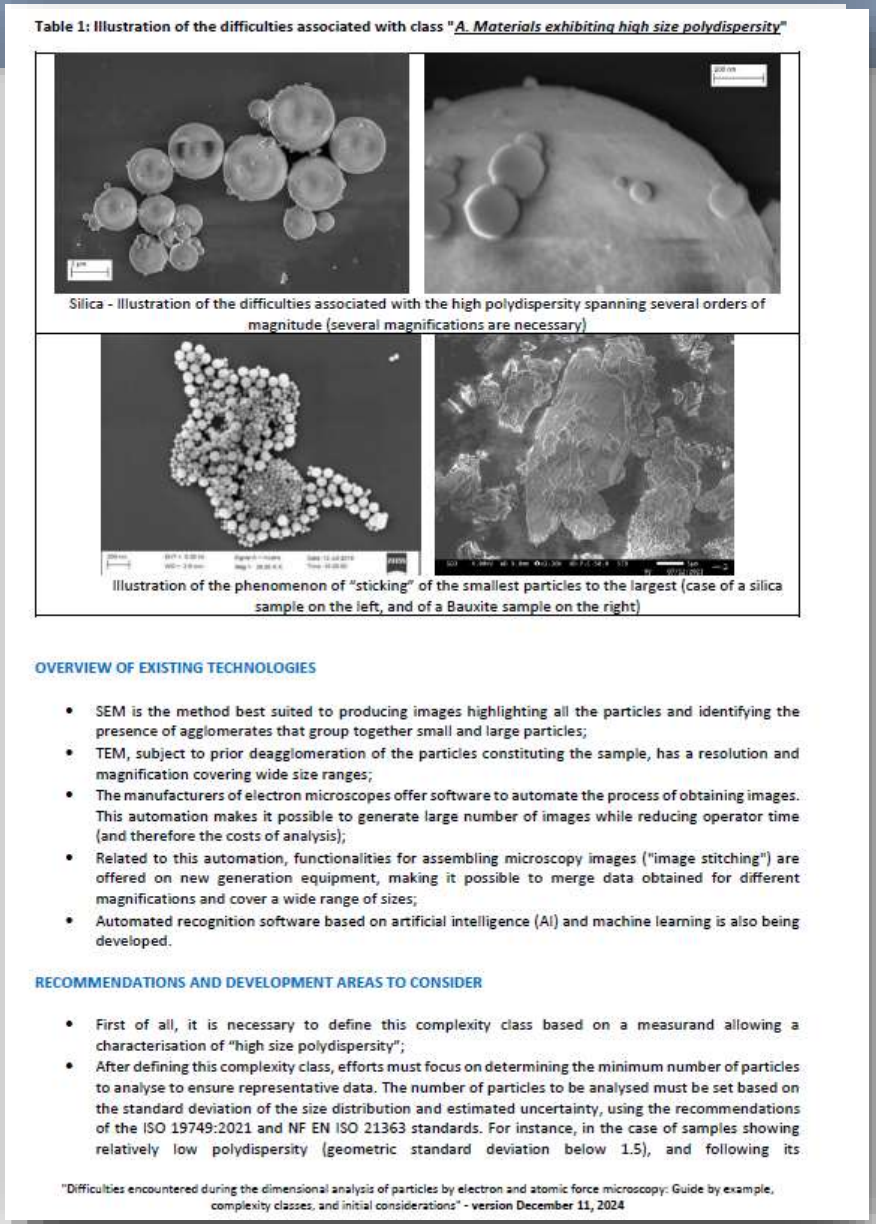


Table 1: Illustration of the difficulties associated with class "*A. Materials exhibiting high size polydispersity*"

Silica - Illustration of the difficulties associated with the high polydispersity spanning several orders of magnitude (several magnifications are necessary)

Illustration of the phenomenon of "sticking" of the smallest particles to the largest (case of a silica sample on the left, and of a Bauxite sample on the right)

OVERVIEW OF EXISTING TECHNOLOGIES

- SEM is the method best suited to producing images highlighting all the particles and identifying the presence of agglomerates that group together small and large particles;
- TEM, subject to prior deagglomeration of the particles constituting the sample, has a resolution and magnification covering wide size ranges;
- The manufacturers of electron microscopes offer software to automate the process of obtaining images. This automation makes it possible to generate large number of images while reducing operator time (and therefore the costs of analysis);
- Related to this automation, functionalities for assembling microscopy images ("image stitching") are offered on new generation equipment, making it possible to merge data obtained for different magnifications and cover a wide range of sizes;
- Automated recognition software based on artificial intelligence (AI) and machine learning is also being developed.

RECOMMENDATIONS AND DEVELOPMENT AREAS TO CONSIDER

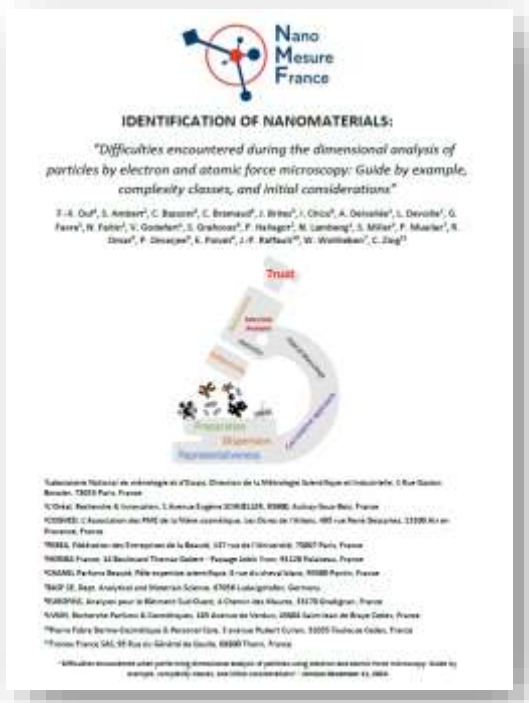
- First of all, it is necessary to define this complexity class based on a measurand allowing a characterisation of "high size polydispersity";
- After defining this complexity class, efforts must focus on determining the minimum number of particles to analyse to ensure representative data. The number of particles to be analysed must be set based on the standard deviation of the size distribution and estimated uncertainty, using the recommendations of the ISO 19749:2021 and NF EN ISO 21363 standards. For instance, in the case of samples showing relatively low polydispersity (geometric standard deviation below 1.5), and following its

"Difficulties encountered during the dimensional analysis of particles by electron and atomic force microscopy: Guide by example, complexity classes, and initial considerations" - **version December 11, 2024**

Nano Mesure France

INCREASE CONFIDENCE IN DATA: *GUIDE BY EXAMPLE*

Full version
(~ 50 pages with tables & appendices)


Nano Mesure France

IDENTIFICATION OF NANOMATERIALS:

"Difficulties encountered during the dimensional analysis of particles by electron and atomic force microscopy: Guide by example, complexity classes, and initial considerations"

Summarised version
(~ 10 pages with glossary)


Nano Mesure France

Identification of nanomaterials: Anticipating and addressing the main difficulties during dimensional analysis by microscopy of particulate substances

Documents available in French and English

https://www.nanomesurefrance.fr/publications-nanomesurefrance/

1. Supporting **analytical experts** when implementing microscopy techniques
2. Assisting **stakeholders** in the process of identification of « ***Nanomaterials*** **»** in a regulatory framework

1. Sharing key information with **non-experts** in order to anticipate possible identification difficulties
2. Inform the **regulatory authorities** so that they are aware of the problems encountered

EASE EXCHANGES BETWEEN STAKEHOLDERS

How to improve the collection of **relevant and robust data** from ingredient suppliers to support « *Nanomaterial* » or « *Non Nanomaterial* » statement?

Non-EU players not necessarily aware of EU regulatory issues

→ ***Non Nanomaterial*** **statement not necessarily supported by relevant or reliable information and/or data**

Need to ask the right questions / challenge ingredient suppliers

Many SMEs as users of ingredients potentially Nanomaterials with no means to digest long and complex documents/guidance

Person who request information / declarations on NM status not familiar with technical issues

Need easy-to-access documents understandable by non-experts

EASE EXCHANGES: *METHODOLOGICAL GUIDE*

AMBITION

- To help professionals (particularly those without advanced expertise in this field) **assess the relevance and quality of data** provided by all stakeholders in the supply chain

STRUCTURE

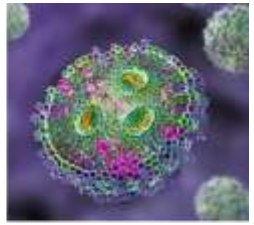
- **Chapter 1 ➔** Concepts & points of attention
- **Chapter 2 ➔** List of questions
- **Chapter 3 ➔** Decision trees

β-testing and translation in progress
➔ final version in 1st quarter 2026

EVALUATION OF CHARACTERIZATION TECHNOLOGIES

Materials & Chemistry

Cosmetics



Nanomedicine

NEEDS

Instrumentation & Sensors

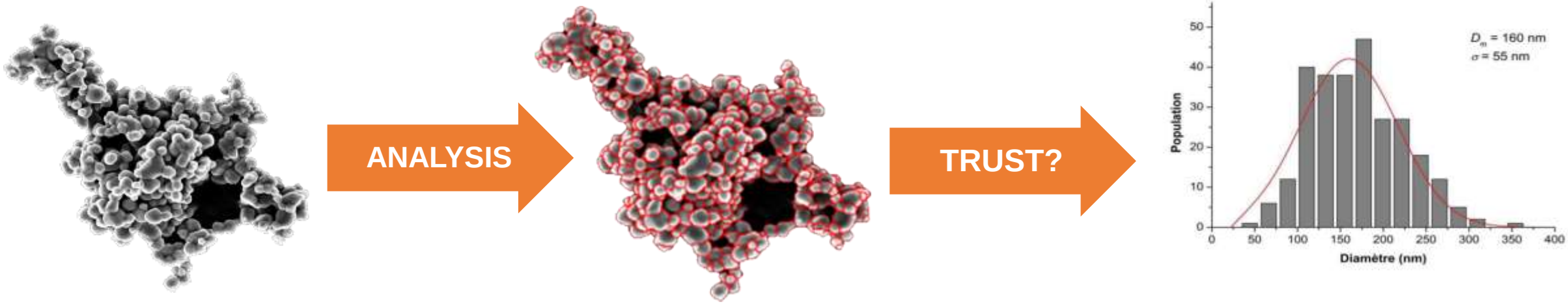
Characterise
their key physical and chemical properties and their possible changes during the life of the substance with regard to regulatory requirements

- **Identify needs** and relevant technologies.
  - ➔ NMF as a trusted environment.
- How to **improve comparability and confidence in** test data?
  - ➔ NMF as a framework to organize inter-laboratory comparisons.
- **Demonstrate the performances** of new nanomaterials characterisation technologies

QUALIFY TECHNOLOGIES: *INTER-LAB COMPARISONS*

INTER-LABORATORY COMPARISON ON SEM ANALYSIS

- **To review the performance** of manual or automatic **scanning electron microscopy (SEM) image analysis tools for determining the size distribution in terms of numbers of constituent particles.**
- **To define a harmonised framework for using, demonstrating and comparing the performance of such tools**, which could be used in the future for more complex applications.



QUALIFY TECHNOLOGIES: *INTER-LAB COMPARISONS*

5 SAMPLES

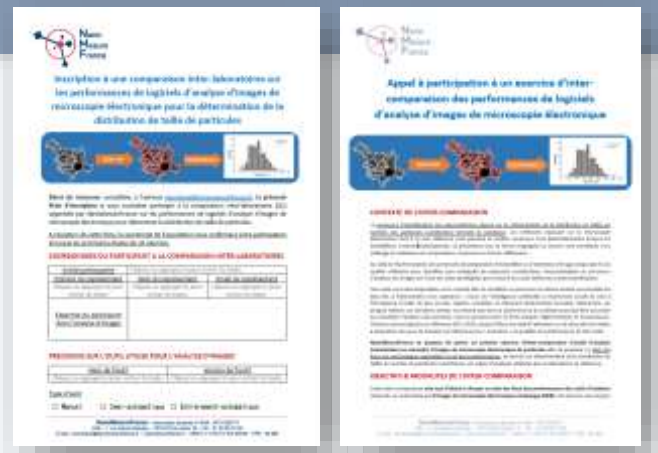
- Spherical monodisperse
- Spherical with D50 close to 100 nm
- Aggregates-agglomerates poorly dispersed
- High polydispersity with spherical or complex shape

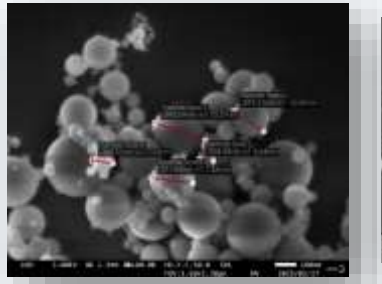
17 PARTICIPANTS

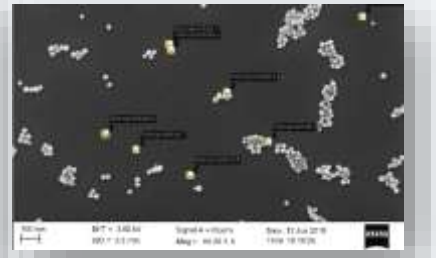
BASF / CSTB / Digital Surf / FILAB / Groupe Mérieux / IFPEN / Institut NAOS / JRC / LNE / L'Oréal / Merck / MICHELIN / Nanobiotix / SENSIENT / ThermoFisher Scientific/ TRONOX

RESULTS UNDER DISCUSSION

- Communication in 2026







NANOMESUREFRANCE: *AMBITIONS*

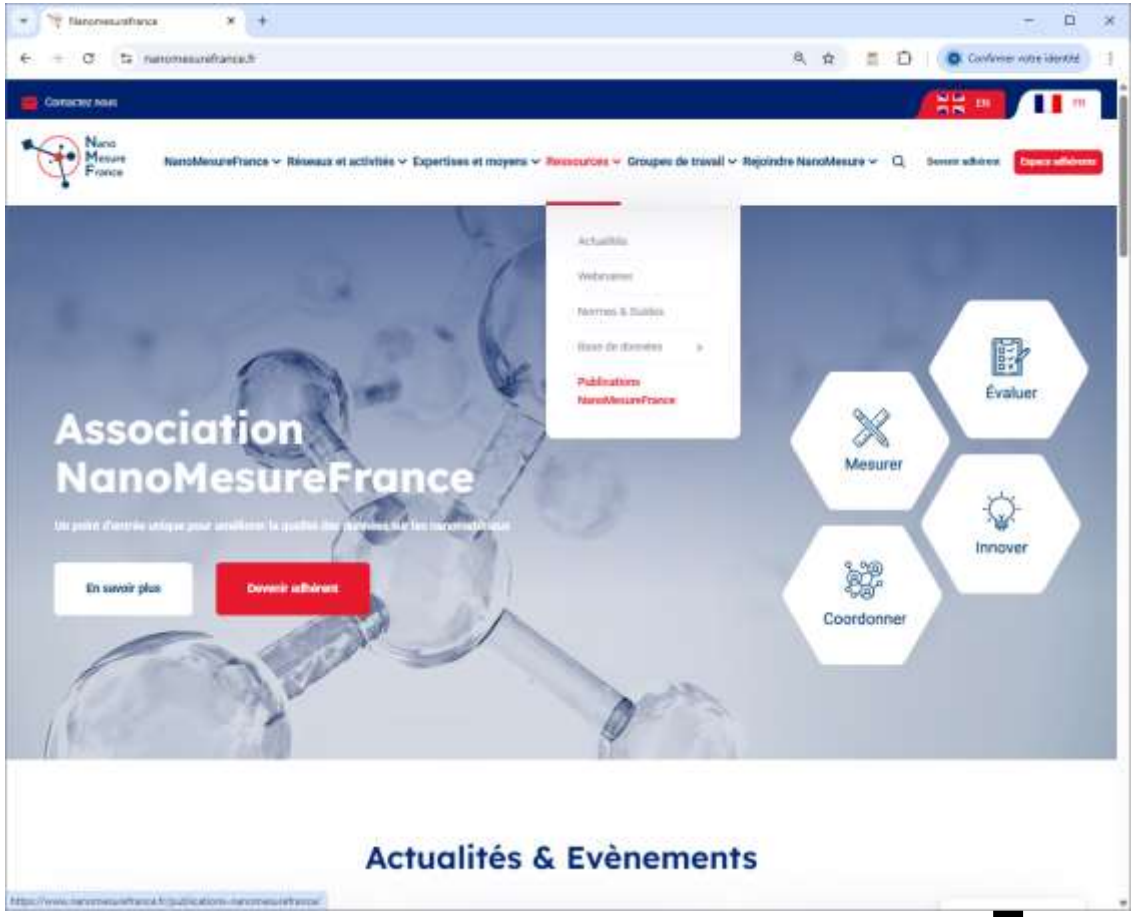
*A **single entry point** for structuring a nanomaterials industry based on reliable and comparable data*

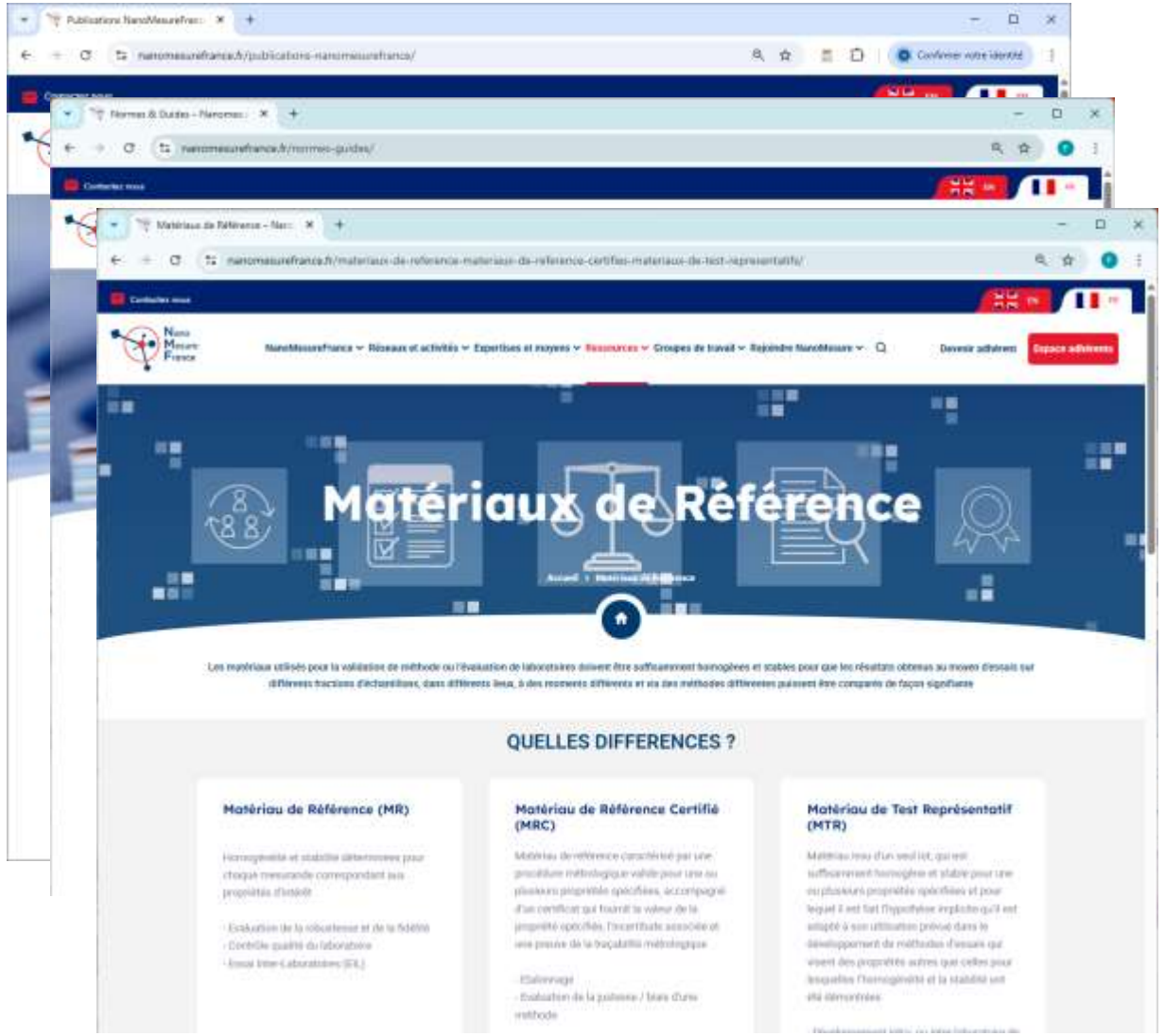
- ❑ Promoting collaborations
- ❑ Identify & ease access to experts/techniques (→ **Mapping of analytical platforms**)

- ❑ Sharing of information
- ❑ Dissemination of good practices

- ❑ Identification of needs/priorities in terms of **pre-standardisation** of characterisation and testing methods & Coordination of French efforts
- ❑ Framework for **evaluation** of performances and **recognition** of techniques, methods and laboratories

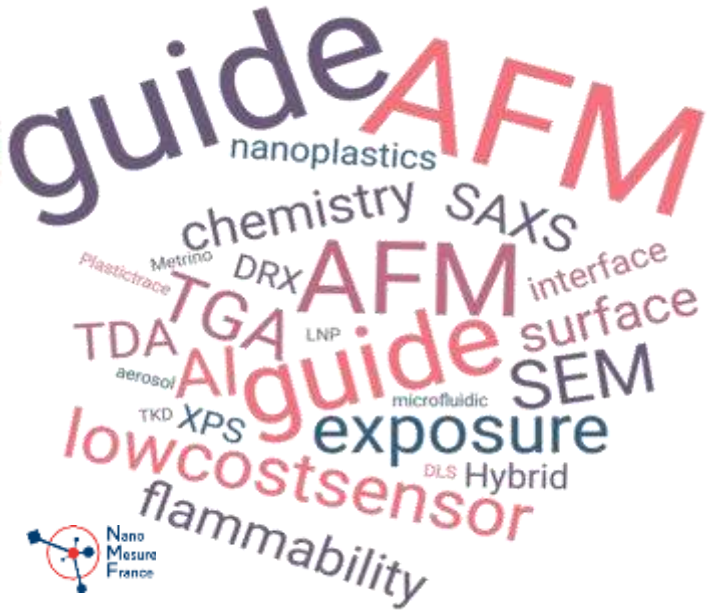
SHARE INFO – BEST PRACTICES: *NMF WEBSITE*

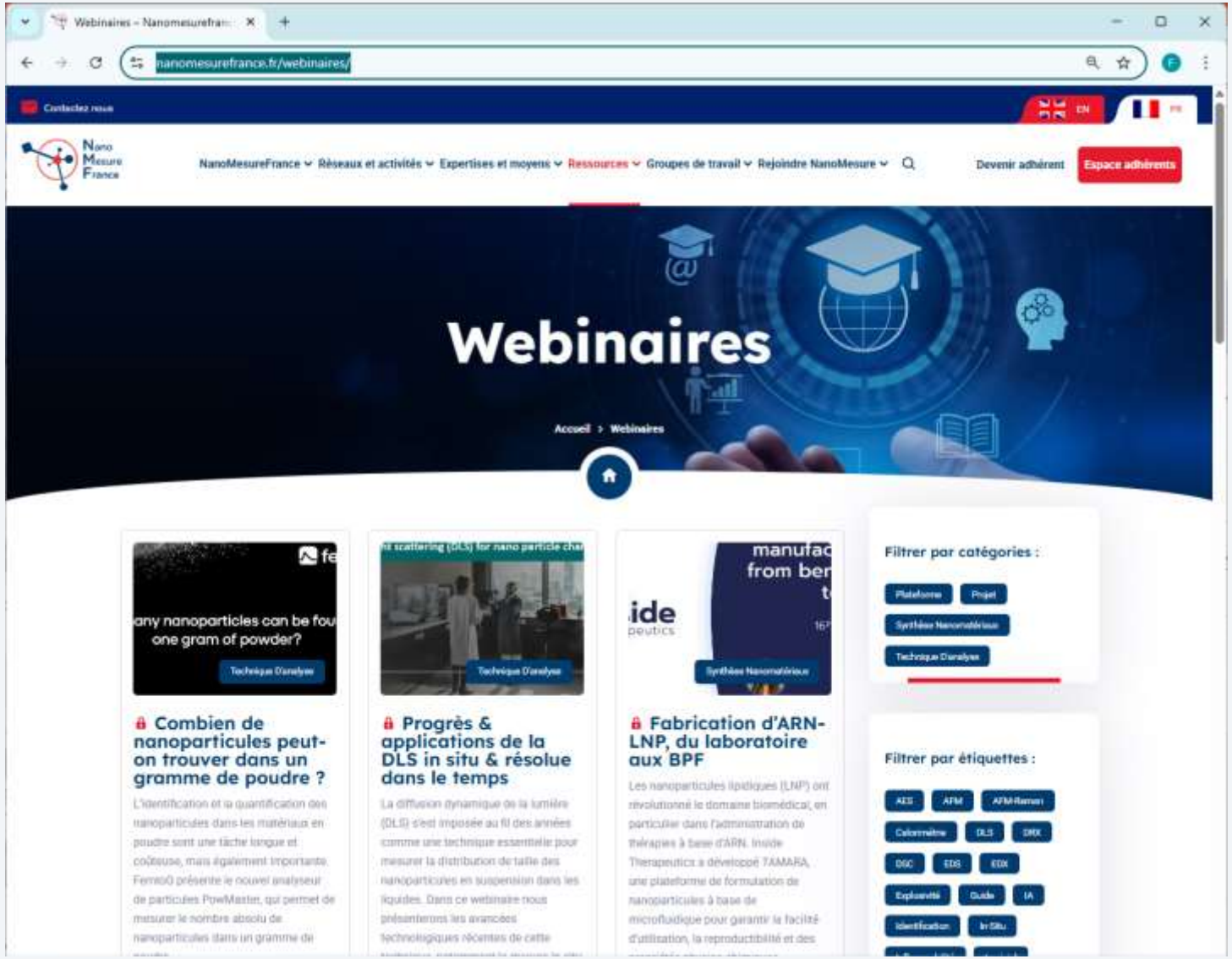




PROMOTE TECHNOLOGIES & INITIATIVES: *WEBINARS*

- AIMS
  - ✓ to highlight innovative **characterisation technologies**
  - ✓ to present pre-standardisation **key initiatives**
- Free replay for members





SHARE INFO – BUILD COMMON SOLUTIONS: *EVENTS*

HOW TO IDENTIFY NANOMATERIALS MORE EFFECTIVELY?

MAY 2023

75 Participants

13 speakers: JRC, BAM, COFRAC

Event report for NMF members

NANOMATERIALS & REACH

WHAT RECOGNITION FOR THE METHODS AND LABORATORIES THAT CAN PRODUCE THE REQUIRED DATA?

DECEMBER 2023

65 Participants

14 speakers: ECHA, OCDE, DGPR, ANSES

EU REACH Compliance

NANOMEDICINE

THE INTERNATIONAL STANDARDISATION ROADMAP FOR NANOMEDICINE

NOVEMBER 2023

65 Participants

11 speakers: ISO, CEN, JRC, VAMAS

Publication in DDTR

Nano Mesure France

SHARE INFO – BEST PRACTICES: *EVENTS*

NANOPLASTICS: WHAT METHODS ARE AVAILABLE AND HOW CAN PROGRESS BE MADE ON THIS ISSUE?

JUNE 2024

30 NMF Participants

5 speakers: INRIM, LVMH, CSTB, HORIBA, CNRS

Event report to NMF members

DIMENSIONAL ANALYSIS OF COMPLEX NANOMATERIALS: HOW TO ADDRESS THE CHALLENGES IDENTIFIED BY NANOMESUREFRANCE

JUNE 2025

28 NMF Participants

8 speakers: LNE, FILAB, Park Systems, IJL, ThermoFisher Scientific, L'Oréal, Purpan, Quantum Design

Event report to NMF members

TECHNICAL DAY: NANOMATERIALS & SURFACE CHEMISTRY

NOVEMBER 2025

40 Participants

8 speakers: BAM, CAMECA, FILAB, France Chimie, L'Oréal, NFA, Superbranche, SMURFNano

Co-organised with SMURFNano

NANOMESUREFRANCE: *AMBITIONS*

*A **single entry point** for structuring a nanomaterials industry based on reliable and comparable data*

- ❑ Promoting collaborations
- ❑ Identify & ease access to experts/techniques (→ **Mapping of analytical platforms**)

- ❑ Sharing of information
- ❑ Dissemination of good practices

- ❑ Identification of needs/priorities in terms of **pre-standardisation** of characterisation and testing methods & Coordination of French efforts
- ❑ Framework for **evaluation** of performances and **recognition** of techniques, methods and laboratories

- ❑ Interface with **public authorities**
- ❑ Relay to **standardisation bodies** & **OECD**
- ❑ Relay to research funding agencies

NANOMESUREFRANCE: *STRATEGIC ADVISORY BOARD*

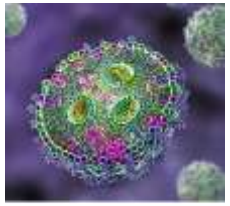
- **COMMUNICATE** on NanoMesureFrance's actions
- **EXPRESS the VIEWS, EXPECTATIONS & RECOMMENDATIONS** of key entities outside the association
- **SHED LIGHT** on regulatory issues
- **PROVIDE INFORMATION** on initiatives undertaken by other national, european or international bodies

- **ANNUAL MEETING:** 3rd April 2024, 29th September 2025
- **RECOMMENDATION REPORT:** NMF website

EXCHANGES WITH KEY ENTITIES ON REGULATORY TOPICS

Materials & Chemistry

Cosmetics



Nanomedicine

EXCHANGES WITH KEY ENTITIES ON REGULATORY SUBJECTS TO IMPROVE THE TOPIC OF CHARACTERISATION / TESTING

- ❑ **NanoMesureFrance's ADVISORY BOARD**
- ❑ **EVENTS / WORKSHOPS / JOINT MEETINGS**
- ❑ **MALTA INITIATIVE BOARD / OECD WPMN**

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE ET DE LA COHÉSION DES TERRITOIRES

anses

R-NANO

European Commission

Identification

OECD

ECHA
EUROPEAN CHEMICALS AGENCY

REACh

efsa
EUROPEAN FOOD SAFETY AUTHORITY

MALTA INITIATIVE

Scientific Committees

edqm
COUNCIL OF EUROPE

Sectorial regulatory issues

Nano Mesure France

EXCHANGES WITH KEY ENTITIES ON REGULATORY, STANDARDISATION AND R&D&I TOPICS: *2024-2025*

PARTICIPATION IN EVENTS

- Participation in two PSINano meetings (08/02/24, Saclay ; 29/03/24, Orsay).
- Presentation at the 24th Congrès Réglementaire COSMED (27/03/24, Paris).
- Co-chairing a session “Analytical techniques for accurate nanoscale characterization of advanced materials” (27-31/05/24, Strasbourg).
- Webinar to COSMEBIO members (30/05/24, On-Line).
- ELENAM summer school « Metrology at the nanoscale » (03/06/24, Frejus).
- MaterialsWeek2024 (17-21/06/24, Chypre).
- Presentation of NanoMesureFrance to PSINano (19/03/25, Orsay, FR)
- TEM connect event EMAT-ThermoFisher Scientific (04/12/25, Anvers,BE)
- ChemDay: 16/12/25 (Paris, FR)
- Inauguration MUSIICS Platform Institut Chimie Physique: 19/12/25 (Orsay , FR)

EXCHANGES WITH STRATEGIC WORKING GROUPS

- Malta Initiative Board: 05/12/24 (on-line), 07/07/25 (LIST, LU)
- OECD WPMN annual meeting: 27-28/06/24, 17-18/06/25, (Paris, FR)
- NanoMesureFrance as a member of OECD WPMN
- Task-force R-nano + ANSES/DGPR webinar « R-Nano »: 19/12/24 (on-line)
- VAMAS Steering Committee: 15-19/09/25 (Teddington, UK)
- Presentation of NanoMesureFrance to AFNOR X457 (30/10/25, on-line)

Congrès réglementaire COSMED
nanomesurefrance.fr

E-MRS
European Materials Research Society

PSINANO | université PARIS-SACLAY

ThermoFisher SCIENTIFIC

icp Institut de Chimie Physique

OECD

MALTA INITIATIVE

VAMAS

afnor

Nano Mesure France

NANOMESUREFRANCE: *TAKE HOME MESSAGES*

PUBLIC-PRIVATE ASSOCIATION CREATED IN 2022

AMBITIONS

- To contribute to the **structuring of the nanomaterials industry** by bringing together the relevant stakeholders around reliable and recognised data.
- To build a **common foundation of trust**, promoting competitiveness and safety of innovations.

46	135	4	23	6	90
Members	Experts	Working groups	Webinars	Events	Documents (minutes, report, guides)

NANOMESUREFRANCE: *PROSPECTS*

SUPPORTING SMES AND STARTUPS:

- By offering tailored services, the association seeks to facilitate access for smaller structures to metrology tools and knowledge for nanomaterials (**open platforms, training, proficiency testing**).

DEVELOPING NEW MEASUREMENT PROTOCOLS:

- In response to the rapid evolution of nanotechnologies, NanoMesureFrance plans to anticipate future needs in characterization and standardization **(library of representatives materials, review of available recommendations, confrontation of methods).**

STRENGTHENING INTERNATIONAL PARTNERSHIPS:

- By collaborating with foreign organizations (**OECD WPMN, JRC, CEN, ISO**), the association aims to harmonize metrological practices globally.

NANOMESUREFRANCE: *QUESTIONS?*

https://www.nanomesurefrance.fr/en/

contact@nanomesurefrance.fr

https://www.linkedin.com/company/association-nanomesurefrance

Nano Mesure France

Would you like to join us?

Memberships for 2026 are now open...