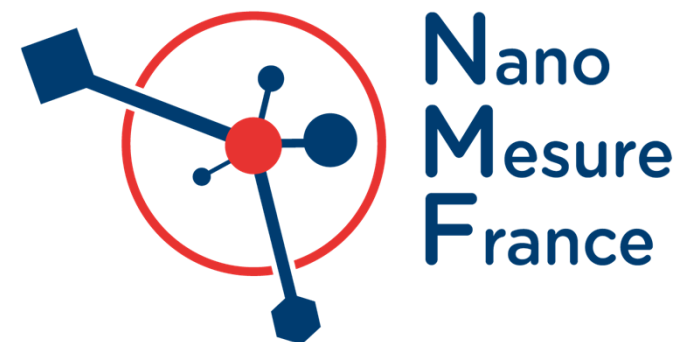
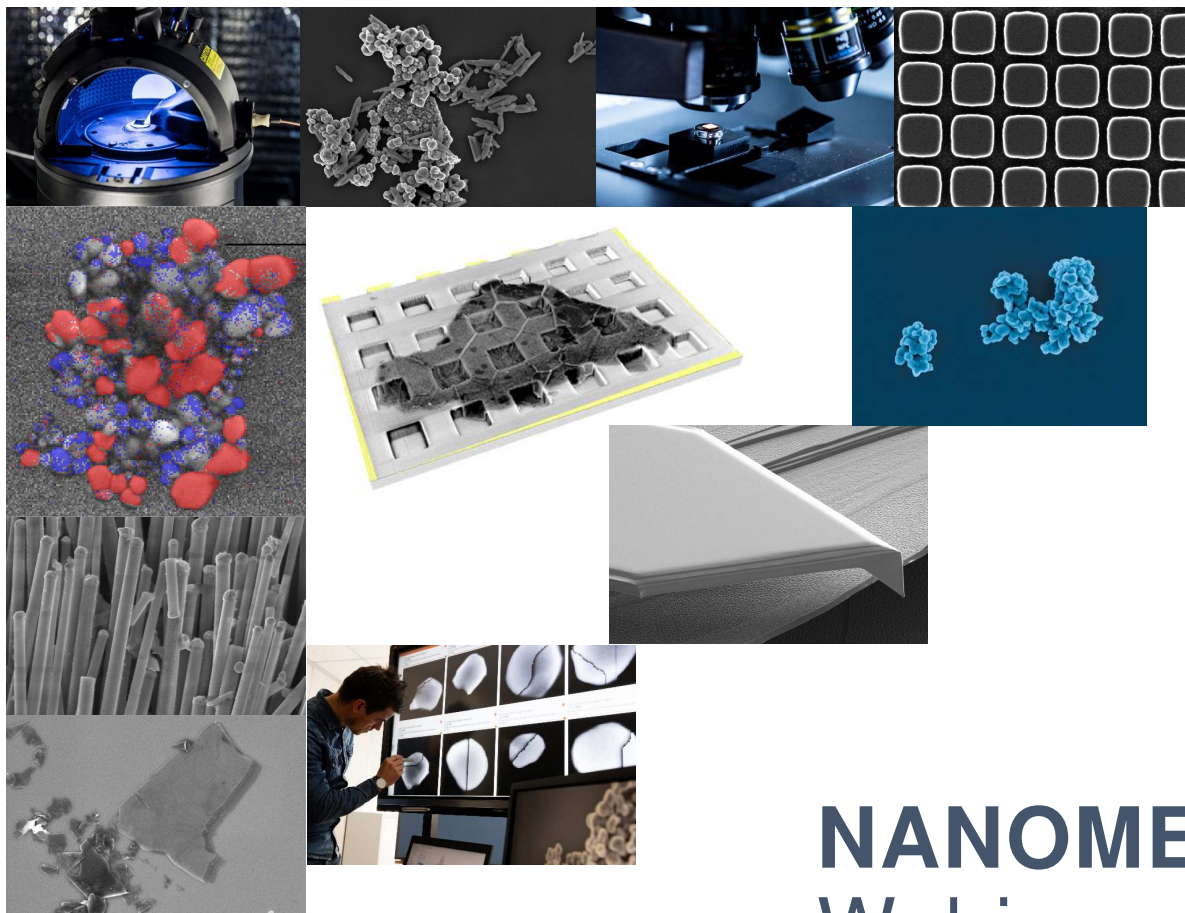
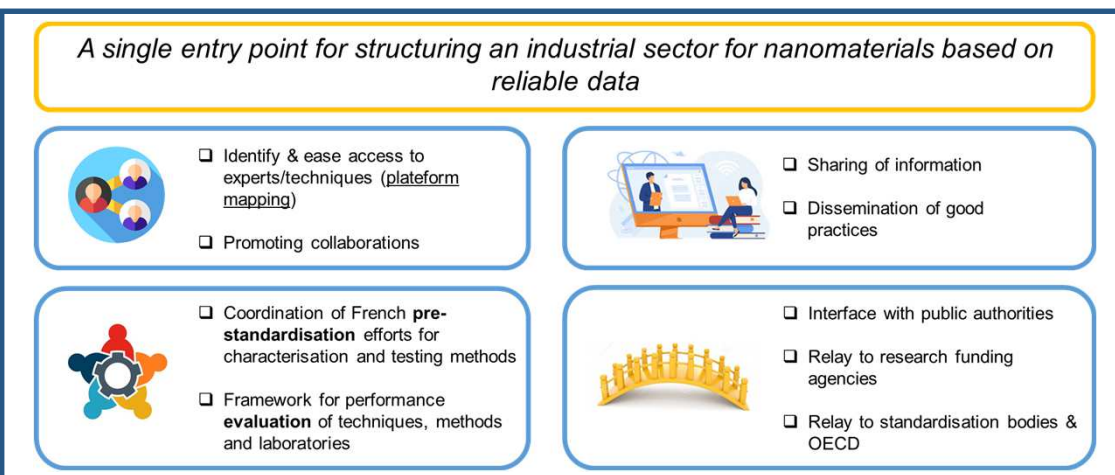




NANOMESUREFRANCE: Webinar series 2026

[HTTPS://WWW.NANOMESUREFRANCE.FR](https://www.nanomesurefrance.fr)

ASSOCIATION NANOMESUREFRANCE: A RESPONSE TO IMPROVE THE CONFIDENCE ESSENTIAL TO A BETTER GOVERNANCE OF INNOVATION AROUND NANOMATERIAL



Association's website: <https://www.nanomesurefrance.fr>

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

Contact: contact@nanomesurefrance.fr

WEBINAR PROGRAMME FOR 2026

AIMS

- to **highlight innovative characterisation** technologies that can meet some of the needs expressed by NanoMeasureFrance members
- to **present key initiatives** regarding pre-standardisation activities
- more than **1200 participants** in total over the 25 webinars organised since 2023



**FULL 2026
AVAILABLE**

<https://www.nanomesurefrance.fr/>

A poster for a webinar. At the top left is the Nano Measure France logo. A yellow banner with a speaker icon and the word 'WEBINAIRE' is in the top right. Below this, the text 'Nos experts seront...' is followed by two experts: Valérie GODEFERT, Chef de projet transverse (LNE, France), and Vincent MALESYS, Ingénieur Instrumentation (LNE, France). Each expert has a circular portrait photo. At the bottom, a calendar icon is next to the date '12 juin 2026', and a clock icon is next to the time '11h00 - 11h45 (CEST)'. The background is dark blue with white and red geometric shapes.

WEBINAR PROGRAMME FOR 2026

DATE (Central European Time, CET)	TITLE	SPEAKER(S)
JANUARY 30, 2026 11h00-11h45	SR-DLS Fundamentals and NanoFlowSizer Applications: Towards Automated Size-Based Process Control	Dr. Albert GRAU-CARBONELL (InProcess-LSP / NL)
FEBRUARY 20, 2026 14h00-14h45	LUMISpec: an advanced single-particle analysis system	Elii WOLLIK (LUM GMBH / DE)
MARCH 20, 2026 11h00-11h45	Présentation du dispositif Seirich. Aide à l'évaluation des risques chimiques (présentation en Français)	Florian MARC (INRS / FR)
APRIL 17, 2026 11h00-11h45	Advanced characterization of nanomaterial.	Ian BELDING (ZEISS / UK)
MAY 22, 2026 11h00-11h45	The importance of pre-normalisation research: VAMAS and graphene related 2D materials	Dr. Andrew POLLARD (NPL / UK)
JUNE 12, 2026 11h00-11h45	First lessons from the inter-laboratory comparison on SEM images analysis carried out by NanoMesureFrance	Valérie GODEFERT Dr. Vincent MALESYS (NanoMesureFrance – LNE / FR)
JUNE 29, 2026 11h00-11h45	Etudes des matériaux nano-additifs dans le cadre bâti	Stéphane DELABY (CSTB / FR)
AUGUST 2026: SUMMER BREAK		
SEPTEMBER 04, 2026 11h00-11h45	Presentation of the CEN TC 352 Technical Specification on identification of food additives by spICP-MS and EM-EDX	Dr. François-Xavier OUF (LNE / FR)
OCTOBER 02, 2026 11h00-11h45	Atom Probe Tomography for the analysis of nanomaterials	Dr. Baptiste GAULT (Univ. & INSA ROUEN - CNRS / FR)
NOVEMBER 06, 2026 11h00-11h45	Application of (nano)SIMS to nanomaterials characterization	Dr. Aurélien THOMEN (CAMECA / FR)
DECEMBER 04, 2026 11h00-11h45	Scatter-Free UV-Vis: a new standard for quantifying therapeutic payloads in Lipid Nanoparticles	Dr. Albert GRAU-CARBONELL (Marama Labs / IIR)



NEXT WEBINAR

Etudes des matériaux nano-additifs dans le cadre bâti

CSTB
le futur en construction



29 June, 2026
11:00-11:45 AM CET

EVENTS ORGANISED BY NANOMESUREFRANCE



Joint workshop: Metrology and Industrial Advanced (Nano)Materials: Collaborative Approaches to Method Development, Assessment, and Global Standardization



Discount for NanoMesureFrance and SMURFNano members



<https://setcor.org/conferences/nanotech-france-2026>



Contribution de l'IA au développement, à la caractérisation et à la conformité réglementaire des nanomatériaux

2 juillet 2026, LNE (Paris 15^{ème}), Event in French

Discount for NanoMesureFrance members

NANOMESUREFRANCE: *FOLLOW AND JOIN US*



<https://www.nanomesurefrance.fr/>



contact@nanomesurefrance.fr



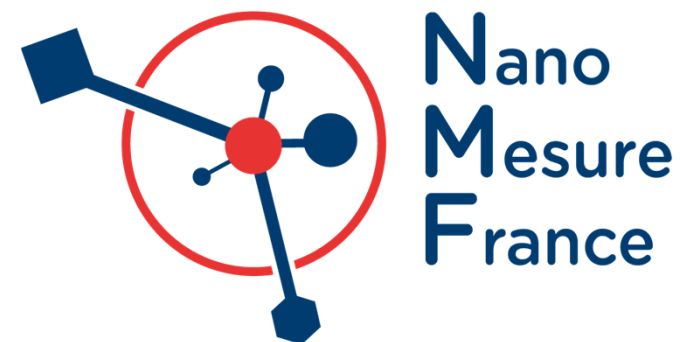
<https://www.linkedin.com/company/association-nanomesurefrance>



Would you like to join us?

Memberships for 2026 are now open...





SEM images analysis ILC by NMF: 1st lessons and outputs

VALÉRIE GODEFERT & VINCENT MALESYS

12th June 2026

Online

AGENDA

- 1. BACKGROUND OF THE INTERLABORATORY COMPARISON**
- 2. ORGANIZATION OF THE ILC: OBJECTIVES AND MODALITIES**
- 3. RESULTS**
- 4. CONCLUSION**

1. NanoMeasureFrance: NMs identification

1. Share good practices with all members:

- Inter-working groups meetings

- NanoMeasureFrance Website / events :

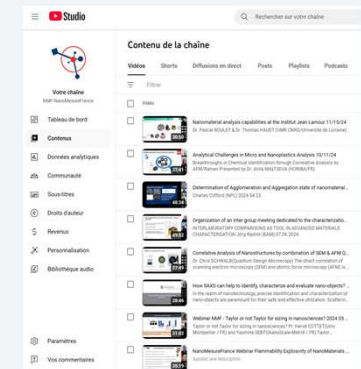
technical days “Cosmetics”, “Identification”, “REACH” or workshops
“Nanomedecine”

2. Assess the applicability of the recommended methods

- Subjectivity of particles counting rules

- Limitations of electron microscopy inherent in the physchem specificities of “real-life” particulate materials

3. Identify analytical solutions and the means to implement them in response to difficulties and limitations



1. Context of the interlaboratory comparison

European Recommendation 2022/C 229/01 on the definition of nanomaterial

- Determination the number-based size distribution of the constituent particles forming the substance (counting rule 4)
 - Current methods based on electron microscopy:
 - cheap and efficient for the easiest sample,
 - costly and time consuming for polydispersed or aggregated samples,
 - not always conclusive.
- Automation of the image analysis process to reduce the costs?
 - What about existing tools on the market to simplify process & minimize operator bias?
 - AI as the solution for an increasingly fast, versatile tools that reduce human intervention and bias?

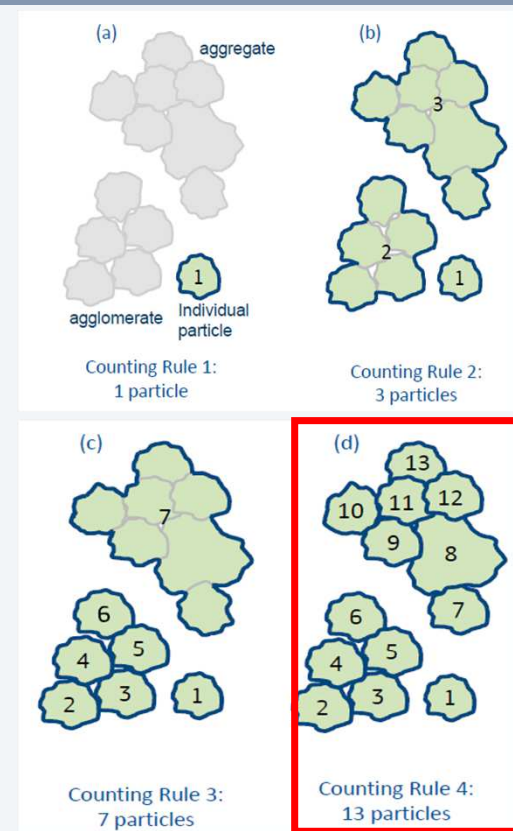
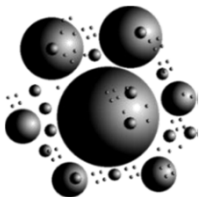
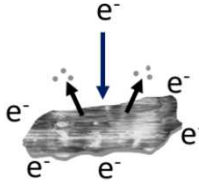
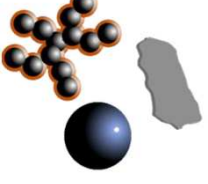


Illustration of the counting rules detailed in the JRC guide, **counting rule 4 has to be considered in the context of this inter-laboratory comparison.**

1. Context of the interlaboratory comparison

Guide by examples

■ Identification of complexity classes:

		
A. Materials with high size polydispersity	B. Materials of the platelet type	C. Materials exhibiting aggregates
		
D. Materials exhibiting restricted stability under analysis conditions	E. Mixtures of materials	F. Composite materials

→ Need of ILC for testing materials from the real life



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"

F.-X. Ouf¹, S. Ambert², C. Bassoni³, C. Bramaud⁴, J. Brites⁵, I. Chicu⁶, A. Delvalle⁷, L. Devoille⁸, G. Favre⁹, N. Feltrin¹⁰, V. Godefert¹¹, S. Grahovac¹², P. Hallegot¹³, N. Lambert¹⁴, S. Millet¹⁵, P. Mueller¹⁶, R. Omar¹⁷, P. Omarjee¹⁸, E. Poivet¹⁹, J.-P. Raffault²⁰, W. Wohlleben²¹, C. Zing²²



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³COSMED, L'Association des PME de la filière cosmétique, Les Ocre de l'Arbois, 495 rue René Descartes, 13100 Aix en Provence, France

⁴FEBA, Fédération des Entreprises de la Beauté, 137 rue de l'Université, 75007 Paris, France

⁵HORIBA France, 14 Boulevard Thomas Gobert - Passage Jobin Yvon, 91120 Palaiseau, France

⁶CHANEL Parfums Beauté, Pôle expertise scientifique, 8 rue du cheval blanc, 93500 Pantin, France

⁷BASF SE, Dept. Analytical and Materials Science, 67056 Ludwigshafen, Germany.

⁸EUROFINS, Analyses pour le Bâtiment Sud-Ouest, 4 Chemin des Maures, 33170 Gradignan, France

⁹LVMH, Recherche Parfums & Cosmétiques, 185 Avenue de Verdun, 45804 Saint-Jean de Braye Cedex, France

¹⁰Pierre Fabre Dermo-Cosmétique & Personal Care, 3 avenue Hubert Curien, 31035 Toulouse Cedex, France

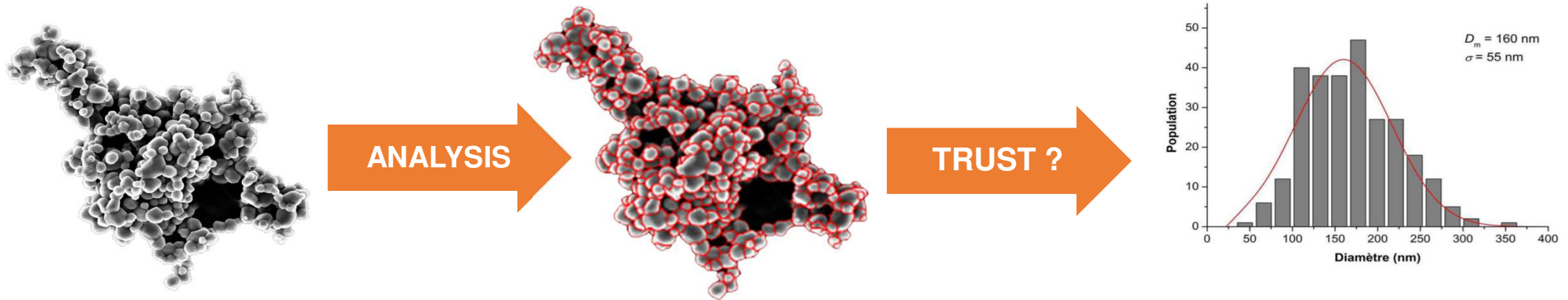
¹¹Tronox France SAS, 95 Rue du Général de Gaulle, 68800 Thann, France

²²"Difficulties encountered when performing dimensional analysis of particles using electron and atomic force microscopy: Guide by example, complexity classes, and initial considerations" - version December 11, 2024

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

2. Objectives of the inter-laboratory comparison

- Review the performance scanning electron microscopy (SEM) image analysis tools for determining the size distribution of constituent particles.
- Define a framework for using, demonstrating and comparing the performance of such tools
- What software could be used in the future for the most complex applications?



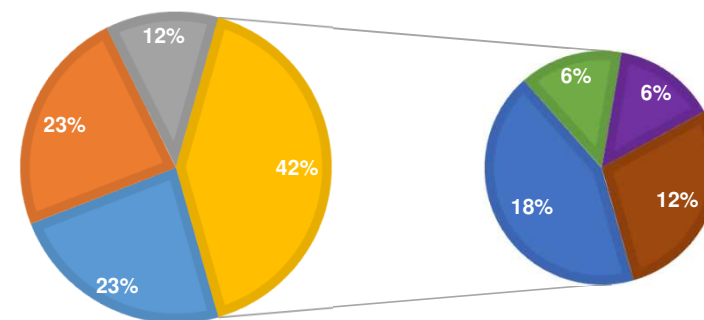
- Assess software robustness under realistic analytical conditions
- Identify sources of variability beyond software performance

2. Who are the participants?



17 PARTICIPANTS

■ Laboratories ■ Manufacturers ■ Instrumentation ■ Users
 ■ Cosmetics ■ Nanomedicine ■ Food ■ Multisector



ILC on SEM images: 1st outputs

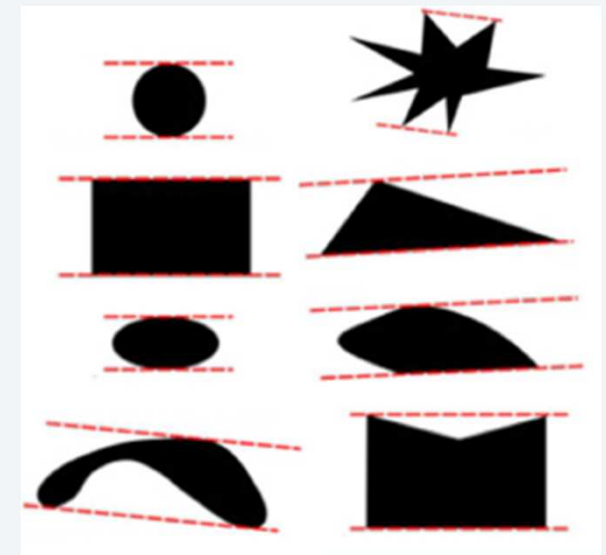
2. Modalities: what we expected from the participants?

- 5 samples submitted
- 6 to 23 SEM images per sample
- Segment 300 to 700 particles depending on the sample
- Measurand considered: $D_{feret_{min}}$ → minimum feret diameter

Minimum Feret Diameter : minimum length of an object in any direction
ISO 9749:2021

- Analysis mode:
 - Manual: the operator is doing the measure (with a ruler for instance)
 - Semi-Auto: the software makes a measure or a segmentation and the operator confirms
 - Auto: the software detects and measures

→ Do these definitions apply universally?



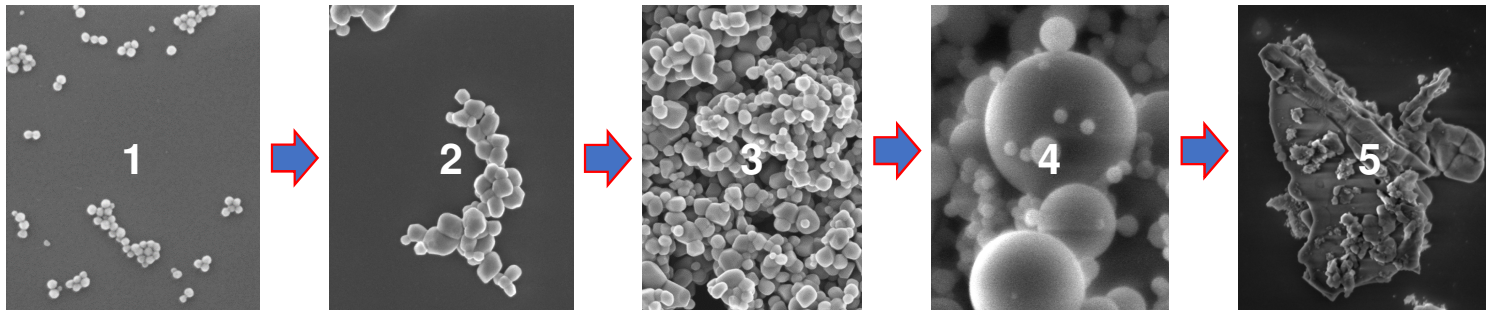
Schematic example of $D_{feret_{min}}$ determination taken from JRC3 recommendations

ILC on SEM images: 1st outputs

2. Presentations of the samples and challenges of the ILC

- 5 samples of increasing complexity selected

→ From spherical monodisperse SiO_2 particles to Bauxite samples with blurry edges



- SEM images made by LNE and given to the participants for analysis:
 - segment 300 to 700 particles (depending on complexity),
 - determine the minimum Feret diameter,
 - build the size distribution and compare the median diameters.

The objective is to compare:

- | | | |
|-----------------|------------------------------|---------------|
| ▪ participants, | ▪ analysis modes (M, SA, A), | ▪ dispersion, |
| ▪ software, | ▪ time/analysis, | ▪ Z-score. |

→ Is there a “better” software?
→ Could we determine a
“reference” value per sample ?