Advanced Characterisation Methodologies to assess and predict

Advanced Characterisation Methodologies to assess and predict the Health and Environmental Risks of Advanced Materials

Welcome & Introduction







1ST JOINT ONLINE WORKSHOP: HARMONISATION & STANDARDISATION OF TEST METHODS FOR NANO- AND ADVANCED MATERIALS

22ND – 23RD NOVEMBER 2023, ONLINE



The MACRAMÉ project has received funding from the European Union's Horizon Europe Research and Innovation programme under grant agreement No. 101092686.

The 'DigiMerge' Group

Five 'HORIZON-CL4-2022-DIGITAL-EMERGING-01-35' Sister Projects:

- <u>ACCORDs</u> Green deal inspired correlative imaging-based characterization for safety profiling of 2D materials
- iCARE Integrated assessment and Advanced Characterisation of Neuro-Nanotoxicity
- MACRAMÉ Advanced Characterisation Methodologies to assess and predict the Health and Environmental Risks of Advanced Materials
- <u>nanoPASS</u> Bridging the gaps in nanosafety for animal-free prediction of adverse outcomes
- POTENTIAL Optimisation To Enable NanomaTerIAL safety assessment for rapid commercialisation



Call-Text: HORIZON-CL4-2022-DIGITAL-EMERGING-01-35

Expected Outcomes:

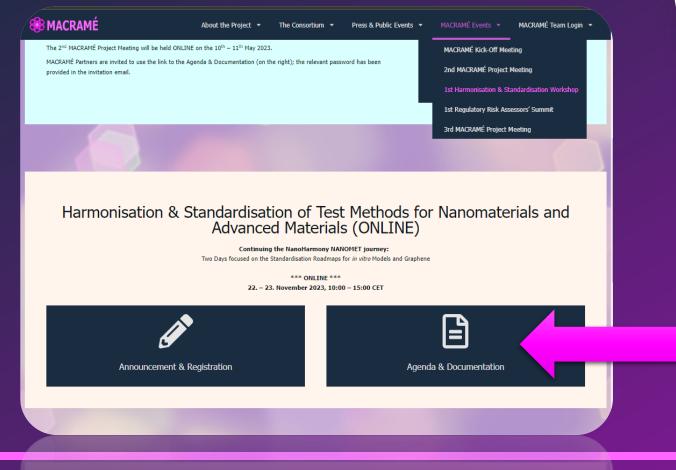
RAME

- Develop high-resolution imaging methods for quantification and characterization of nanomaterials (e.g. nanoplastics) in complex matrices and determinations of their transformations in such environments.
- Increase availability of validated protocols to advance both nanosafety studies and material characterization.
- Ensure appropriate control experiments and more realistic *in vitro* models to address current gaps in nanotoxicology.
- Deliver reliable data and improved data reporting guidelines, supported by computational modelling, in order to allow the development of grouping and read across methods. Make use of open access database and using standards for data documentation (e.g. CHADA).
- Develop harmonized standardized test methods that can be used in a regulatory framework including test hazard assessment, biodegradability and sustainability for advanced nanomaterials.
- Increase the efficiency and effectiveness of materials and product development by reducing costs and time for product design, time-to-market and regulatory compliance

Workshop Agenda

MACRAMÉ

... best accessed *via* the website: <u>www.macrame-project.eu</u>



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Core MACRAME MALTA

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Workshop Agenda – Day 1

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Time (CET)	Session Title	Speakers
10.00-10.20	Welcome & Introduction to the Workshop	Steffi Friedrichs (AcumenIST)
10.20-10.40	Status of OECD TG developments for nanomaterial	Mar Gonzalez (OECD)
10.40-11.00	The European Partnership on Metrology (EPM) and VAMAS: Opportunities for Pre- Standardisation Activities	Georges Favre (LNE)
11.00-11.20	Contribution of ECVAM towards Validation and regulatory Acceptance of in vitro Methods	Valerie Zuang (ECVAM)
11.20-11.40	Approach Methodologies (NAMs) and how to bridge them into regulation	Andrea Haase (BfR)
Developments of i	n-vitro Models and bridging them towards Standardisation / Harmonisation and Regula	ation
11.20-11:40	MACRAMÉ's Approach towards the Harmonisation of in vitro/ex vivo Models for Inhalation Toxicology	Tommaso Serchi (LIST)
11:40 -12.40	Lunch Break	
12.40-13.00	The Work planned in nanoPASS to support the Weight of Evidence of AOP302 Lung Surfactant Function Inhibition Leads to reduced Lung Function	Jorid Birkelund Sørli (NRCWE)
13.00-13.20	iCare's Approach towards the Harmonisation of human and ecotox Models for Neurotoxicity	Alberto Katsumiti (GAIKER)
13.20-13.40	Strategies to increase the technical Quality of new Approach Methodologies (NAMs) and Nanoecotoxicology Tests	Elijah Petersen (NIST)
13.40-15.00	Round Table on Harmonisation & Standardisation of in vitro Models and how to bridge them into Regulation	Chair: Blanca Suarez Merino (NIA) Participants: presenters of the day
15.00-15.15	Round-up of Day 1	Sean



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Workshop Agenda – Day 2

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Time (CET)	Session Title	Speakers	
10.00-10.10	Welcome & Introduction to Day 2	Ernesto Alfaro-Moreno (INL)	
10:10-10.30	OECD Test Guidelines for Nanomaterials: Support and future steps towards TG development by Malta Initiative and NanoHarmony	Elisabeth Heunisch (BAuA)	
10.30-10.50	Status and Challenges in Regulation of Graphene	Eric Bleeker (RIVM)	
Session on (Pre-)Standardisation Activities for pristine Graphene			
10.50 - 11.10	ISO and VAMAS Activities on (pristine) Graphene	Charles Clifford (NPL)	
11.10 - 11.30	Achievements of the Graphene Flagship and the Way forward	Jörg Radnik (BAM)	
11.30-11.50	Framework on Characterisation	Terance Barkan (Graphene Council)	
11.50-12.30	Lunch Break		
Activities on Determination of Graphene in complex Media			
12.30-12.50	Interlaboratory Study of graphene using TGA	Dusan Losic (University of Adelaide)	
12.50 - 13.10	Simultaneous Screening of the Stability and Dosimetry of Nanoparticles Dispersions using SMLS for in vitro Toxicological Studies	Guillaume Lemahieu (Formulaction)	
13.10 - 13.30	Approaches to identify and measure the Stability of Graphene in complex Media	Fanny Caputo (LNE)	
13.30 - 15.00	Round Table on the Needs for Characterisation and Test Method Developments for Graphene	Chair: Georges Favre (LNE) Participants: presenters of the day	
15.00-15.15	Workshop Wrap-Up – Conclusions - Outlook	Steffi Friedrichs (AcumenIST)	





Meeting Announcements



1st MACRAMÉ Regulatory Risk Assessors' Summit: 27th – 28th November 2023, Berlin

'Materials Week 2024': 17th – 21st June 2024, Limassol, Cyprus





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Thank you

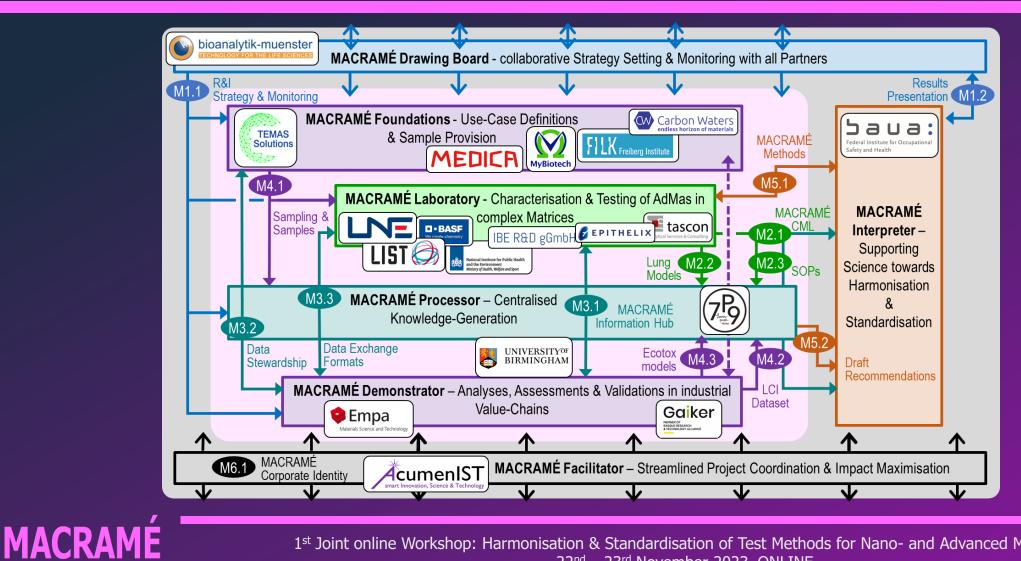
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