

Workshop agenda

Safe and Sustainable Smart Nanomaterials

European Commission, DGs JRC & RTD Workshop





Safe and Sustainable Smart Nanomaterials

JRC Ispra site, 9-10 September 2020

Day 1

08:30 - 09:00 Connection and sound tests

09:00 - 10:10 INTRODUCTION

Chair: Juan Riego Sintes (European Commission, JRC, Consumer Products Safety Unit)

- Welcome (10 min)
 - Arnd Hoeveler (European Commission, JRC, Consumer Products Safety Unit, Head of Unit)
 - Søren Bøwadt (European Commission, RTD, Materials for Tomorrow Unit, Deputy Head of Unit)
- Setting the scene for Smart Nanomaterials (10 min)
 Agnieszka Mech (European Commission, JRC, Consumer Products Safety Unit)
- Safe-by-Design for nanomaterials (15 min)
 Blanca Suarez (TEMAS Solutions, Switzerland)
- Green chemistry and sustainability within a circular economy an outline (15 min)
 Klaus Kümmerer (Leuphana University, Germany)
- Towards Sustainable-by-Design (10 min)
 Aleksandra Malyska (European Commission, RTD, Materials for Tomorrow Unit)

10:10 - 10:20 **Break**

10:20 - 11:35 SESSION 1 - DESIGNING SMART NANOMATERIALS

Chair: Aleksandra Malyska (European Commission, RTD, Materials for Tomorrow Unit)

- Nanotechnology Solutions to Challenges in Agriculture (15 min)
 Astrid Avellan (CESAM, University of Aveiro, Portugal & Carnegie Mellon University, USA)
- Polypeptide-based Stimuli-Responsive Nanocapsules for Skin Delivery (15 min)
 Iraida Loinaz (CIDETEC, Spain)
- Design and potential applications of nanomaterial in food packaging (15 min)
 Manuela Franchi and Gloria Guidetti (Tetra Pak Packaging Solutions S.p.A., Italy)
- EUMAT¹ Technology Platform (15 min)
 Dmitri Petrovykh (International Iberian Nanotechnology Laboratory, INL, Portugal)

11:35 - 11:45 **Break**

11:45-12:30 Plenary discussion

¹ European Technology Platform for Advanced Engineering Materials and Technologies

14:00 - 15:20 SESSION 2 - FROM SAFE-BY-DESIGN TO SAFE-AND-SUSTAINABLE-BY-DESIGN

Chair: Hubert Rauscher (European Commission, JRC, Consumer Products Safety Unit)

- Nanomaterials in the Environment: Moving from Challenges in Risk Assessment to Informing Safe by Design Principles (15 min)
 Khara Grieger (Genetic Engineering and Society Center, NC State University, USA)
- Navigating nanomaterial space for performance, hazard and cost: approaching more sustainable nanomaterial selection and design (15 min)
 Mark Falinski (Yale University, USA)
- Challenges and Opportunities of Life Cycle Assessment in view of the sustainability of smart nanomaterials (15 min)
 Roland Hischier (Swiss Federal Laboratories for Materials Science and Technology, EMPA)
- Environmental and Ethical Issues for Society (15 min)
 Michael Neaves (ECOS European Environmental Citizens' Organisation for Standardisation, Belgium)

15:40 - 16:40 **Breakout session**

16:40 - 16:45 End of the first workshop day

Day 2

08:30 - 09:00 Connection and sound tests

09:00 – 10:00 **SESSION 2 (continued)**

 Challenges for Human Health Risk Assessment of Smart Nanomaterials for Applications in Consumer Products (15 min)
 Qasim Chaudhry (Scientific Committee on Consumer Safety, SCCS, Belgium)

09:15 - 10:00 **Plenary discussion**

10.00 - 10.15 Break

10:15 - 11:30 SESSION 3 - REGULATORY PREPAREDNESS

Chair: Kirsten Rasmussen (European Commission, JRC, Consumer Products Safety Unit)

- Next generation nanomaterials under the REACH regulation (10 min)
 Abdelqader Sumrein (European Chemicals Agency ECHA, Finland)
- Food legislation TBC (10 min)
 Takis Daskaleros (European Commission, SANTE, Food Processing Technologies and Novel Foods Unit)
- Assessing the risk of advanced (nano)materials in food and feed applications (10 min)
 José Tarazona (European Food Safety Authority EFSA, Italy)
- Nanomaterials and the Cosmetic products Regulation (10 min)
 Roberto Scazzola (European Commission, GROW, Consumer Industry Unit)
- Information to facilitate safe design and use of smart/advanced materials. An exploration for nanobio- structures (15 min)
 Agnes Oomen (National Institute for Public Health and the Environment, RIVM, the Netherlands) (15 min)

11.35 - 12:35 **Breakout session**

12:35 - 14:00 **Break** (Lunch)

14.00 - 14:45 Plenary discussion

14:45 – 15:30 SESSION 4 - OUTLOOK: How to shift towards a more sustainable path? Implications of the Chemical Strategy for Sustainability

Chair: Søren Bøwadt (European Commission, RTD, Materials for Tomorrow Unit, Deputy Head of Unit)

15:30 – 15.45 **Group Photo** (cameras on)

15:45 - 16:15 WRAP-UP AND CONCLUSIONS

Chairs: Juan Riego Sintes (European Commission, JRC, Consumer Products Safety Unit)

Barend Verachtert (European Commission, RTD, Materials for Tomorrow Unit, Head of Unit)

16:15 END OF THE WORKSHOP



Organizers:

European Commission Join Research Centre (JRC): Agnieszka Mech, Stefania Gottardo, Hubert Rauscher, Juan Riego Sintes, Kirsten Rasmussen, Paula Jantunen, Heidi Olsson

European Commission Directorate-General for Research and Innovation (RTD): Jana Drbovhlavova, Aleksandra Malyska, Søren Bøwadt, Alessia Amodio

Contact: <u>JRC-Smart-Nanomaterials-Workshop@ec.europa.eu</u>