

# Tuesday, 5th March 2024

## Science-driven methods and tools for the for the transformation of Safe-by-Design (NMBP-15 Final Event)

**08:30 - 09:00** Arrival & registration

**09:00 - 09:15** Setting the scene: Safe-by-Design challenges and solutions

Moderation of ANTHOS Day 1 - by Susanne Resch (BNN)

**09:15 - 10:30** Safe-by-Material-Design

- “Hazard Assessment Strategy towards Safer Development of NEP in SAbyNA SbD Guidance Platform”, by Ana Candaliija (LEITAT)
- “An integrated new approach methodology (NAM) for risk assessment of Safe and Sustainable by Design nanomaterials”, by Rossella Bengalli (UNIMIB)
- “SABYDOMA SOPs & tools for Risk Assessment”, by Maria Dusinska (NILU)
- “Safe-by-Design for Nanomaterial Safety: Role of Surface Chemistry”,  
by Mustafa Culha (SUNUM)

**10:30 - 11:00** Coffee break

**11:00 - 12:00** Safe-by-Process-Design

- “Safe-by-Process-Design to mitigate exposure to Advanced Materials”,  
by Wouter Fransman (TNO)
- “Industrial-oriented exposure assessment”, by Joonas Koivisto (APM)
- “Digital Twin for sustainable manufacturing”,  
by Jesús Lopez De Ipiña Peña(TECNALIA)

**12:00 - 12:15** Sustainability (LCA, LCC): Functionality & costs

- “SbD4Nano production cost analysis of modified vs unmodified nanomaterials”,  
by Alina Bisag (ART-ER)
- “Sustainability and Cost Assessment tools in SAbyNA SbD Guidance Platform”,  
by Leire Barrueta-beña (GAIKER)

**12:15 - 12:30**

## **Legal aspects of Safe-by-Design**

- “The legal aspects and challenges of SSbD”, by Anthony Bochon (G&S)
- “‘Soft’ drivers for adoption of SbD”, by Neil Hunt (YOR)

**12:30 - 14:00**

**Lunch**

**14:00 - 15:30**

## **Safe-by-Design tools and technologies for nanomaterials**

**Session chair:** Irantzu Garmendia Aguirre (EC JRC)

- “SABYNA guidance platform and SbD4Nano e-Infrastructure to support the design process towards safer nanoforms, nano-enabled products and processes”,  
by Ralph Vanhauten (ThinkWorks)
- “An integrated quantitative approach in Safe and Sustainable by Design decision support systems: from ASINA to INTEGRANO Expert Systems”,  
by Massimo Perucca (ProjectHub)
- “The SABYDOMA Safety by Process Control approach for the Production of Safe & Sustainable by Design Nanomaterials”, by Athanassios Nikolakopoulos (NTUA)
- “Self-Optimisation of Non-Toxic Spherical Silver Nanoparticles in Continuous Flow”, by Thomas Chamberlain (UNIVLEEDS)
- “Microfluidic platform concept for NP toxicity screening with cell lines”,  
by Thorsten Knoll (FRAUNHOFER IBMT)

**15:30 - 16:00**

**Coffee break**

**16:00 - 17:00**

## **Safe-by-Design case studies: Industrial success stories**

- “Success and limitation in the implementation of SbD interventions on SABYNA case studies for 3D printing products and processes”,  
by Apostolos Salmatonidis (LEITAT)
- “Real-life transfer of SSbD platform to industry: coupling Online screening & characterization to a continuous-flow AgNPs production line”,  
by Martí Busquets (APPNPS)
- “Promoting photocatalytic activity of S-doped TiO<sub>2</sub> NPs by applying a SbD modification”, by Alex Grigoropoulos (Cnano)

- “Implementation of SbD in the preparation of graphene and related materials and its composites“, by Julio Gomez (AVANZARE)
- “How a standardization tool can boost R&I”, by Adriano Ferrara (UNI)

**17:00 - 18:30**    **Lessons learned & future impact of the developed methods and tools: Roundtable discussion with EC & NMBP-15 experts“**

**Discussion moderator:** Andreas Falk (BNN)

**Panellists:** Hubert Rauscher (EC JRC), Massimo Perucca (Project-Hub360), Carlos Fito (ITENE), Andrew Nelson (UNIVLEEDS), Socorro Vázquez Campos (LEITAT), Anke Jesse (Malta Initiative), Victor Puentes (APPNPS, VHIR, ICN2)

**18:30 - open end**    **Dinner @ ['ThirtyFive'](#)**



Advanced (Nano)Materials and Technologies: Science, Research, Innovation for Safety and Sustainability



# Wednesday, 6th March 2024

## Translation and implementation of SSbD: Towards an innovation-driven ecosystem (NMBP-16 session, PARC & IRISS session)

**08:30 - 09:00** Arrival & registration

**09:00 - 09:30** Setting the scene: Translation and valorisation of SSbD

- "Safe and Sustainable by Design chemicals and materials: state of play",  
by Evangelos Daskalopoulos (European Commission-DG-RTD)
- "SSbD Framework: JRC perspective on the actual SSbD developments",  
by Irantzu Garmendia (European Commission-JRC)
- "Advanced Materials for Industrial Leadership",  
by Evangelos Daskalopoulos (European Commission-DG-RTD)

**09:30 - 10:45**

**SSbD approaches for advanced multi-component nanomaterials**

- "Developing grouping of multi-component nanomaterials to facilitate SbD",  
by Vicki Stone (HW)
- "Similarity of multicomponent nanomaterials in a SSbD context: the cases of quantum dots in TV screens and of perovskites in automotive catalysts",  
by Wendel Wohlleben (BASF)

**10:45 - 11:15**

Coffee break

**11:15 - 12:45**

**SSbD decision support system & industrial implementation**

- "SUNSHINE SSbD approach and e-infrastructure", by Lisa Pizzol (GD)
- "HARMLESS SSbD Framework, tools and Design Principles", by Blanca Suarez (TEMASOL)
- "HARMLESS Decision Support System (DSS) for Safe and Sustainable by Design (SSbD)",  
by Susan Dekkers (TNO)
- "Metallic HARNs for printed electronics: Ag nanowires", by Carlos Rumbo (UBU)

12:45 - 14:15

Lunch

14:15 - 15:45

**Knowledge sharing within the SSbD community -  
An interactive PARC and IRISS session**

**Session chair:** Evangelos P. Daskalopoulos (EC DG RTD)

“Knowledge sharing within the SSbD community - An interactive PARC – IRISS session”, by Emma Strömberg (IVL), Denis Sarigiannis (AUTH), Doris Völker (UBA), and Anne Chloé Devic (SSbD Consulting Europe)

15:45 - 16:15

Coffee break

16:15 - 17:45

**Roundtable discussion: Creating long-term impact for society  
considering multistakeholder needs**

**Discussion moderator:** Monique Groenewold (RIVM, NSC coordination team)

**Panellists:** Danail Hristozov (University Ca' Foscari of Venice), Otmar Schmid (HMGU), Carlos Rumbo (UBU), Emma Strömberg (IVL), Denis Sarigiannis (AUTH), Mar González (OECD), Thomas Jakl (BMK), Evangelos Daskalopoulos (European Commission-DG-RTD)

17:45 - 18:00

**Concluding remarks of the ANTHOS'24**

**Speaker:** Andreas Falk (BNN, NSC coordination team)

18:00 - open end

Dinner @ ['Twelve'](#)