

1st Stakeholder Workshop of the BMBF-project InnoMat.Life

Tuesday, June 15th 2021

Innovative and complex materials: Towards grouping to support hazard and risk assessment

Nanosafety research so far mainly investigated simple nanomaterials while materials on the market often cover broad size distributions (nm to μm), they show a variety of different morphologies and may be composed of different substances. It remains unclear to which extent existing methods and knowledge can be applied to these complex material types.

The BMBF-funded project InnoMat.Life (“Innovative materials and new production processes: Safety along the life cycle and in industrial value chains”, www.innomatlife.de) addresses this challenge and investigates three additional material classes: (1) **polydisperse materials** for industrial applications such as metals or polymer powders **for additive manufacturing**, (2) **materials with other and potentially critical morphologies such as rods, plates or fibres** and (3) **hybrid materials of mixed chemical composition**. The project assesses exposure and hazards for humans and the environment and considers the whole life cycle.

InnoMat.Life aims to support regulators, industry and decision makers by providing suitable methods to conduct hazard and risk assessment of these innovative and complex material types with a special emphasis on establishing criteria and similarity concepts to perform grouping. To achieve this the project combines expertise from academia, agencies and industry.

This workshop is addressed to stakeholders from policy, science, industry and NGOs who are dealing with regulatory implications of innovative materials in the context of chemical safety. InnoMat.Life will present the interim results of the project to seek stakeholder’s input for the last project year.

Please note, that the workshop is organized back-to-back with the 3rd Thematic Conference on Advanced Materials being organized by UBA and Ökopol on June 14th 2021.

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Agenda

10:00	Opening of the meeting, tbc
10:15	Introduction and Overview of the InnoMat.Life Project <i>Andrea Haase, BfR</i>

Session 1: Fibre Pillar (Human Health)		
10:30	The extended InnoMat.Life Fibre Risk Banding Scheme	Dirk Brossell, BAuA
10:50	<i>Towards appropriate test methods</i>	
	Fibre dispersions and optimal dosimetry	Dirk Brossell, BAuA
	Toxicity Testing <i>in vitro</i> : Moving from submersed to Air Liquid Exposure	Martin Wiemann, IBE
	Screening for Fibre Transformation with two draft OECD protocols	Wendel Wohlleben, BASF
11:30	Overall Interactive Discussion	
12:30	Lunch Break (45 min)	
Session 2: Polymer Pillar (Human Health)		
13:15	Towards Grouping Approaches for Polymer Particles	Wendel Wohlleben, BASF
13:35	<i>Towards appropriate test methods</i>	
	Adsorption of Persistent Organic Pollutants (POPs) to polymer particles	Alexander Roloff, BfR
	Ageing of primary particles, fragmentation to secondary structures by adapted ISO protocols	Patrizia Pohl, BASF
	Measuring emissions at 3D printing facilities	Burkhard Stahlmecke, IUTA
14:15	Overall Interactive Discussion	
15:15	Coffee Break (15 min)	
Session 3: Grouping for Environmental Effects		
15:30	Towards a Grouping Scheme for Environmental Effects	Kerstin Hund-Rinke, IME
15:45	Outcomes in algae for fibres, polymers and other	Kerstin Hund-Rinke, IME
16:00	Outcomes in daphnia for fibres, polymers and other	Dana Kühnel, UFZ
16:15	Conclusions for the Grouping Scheme	Dana Kühnel, UFZ
16:30	Overall Interactive Discussion	
Session 4: Outlook on materials with complex compositions and morphologies		
17:30	How to approach materials with complex compositions and morphologies? <i>(1-2 teaser presentations, each 5 min, followed by discussion)</i>	
18:00	Conclusions and End of Workshop	

The workshop will take place at the German Federal Institute for Risk Assessment (BfR), Max-Dohrn-Strasse 8-10, Berlin, Germany (www.bfr.bund.de), if the pandemic situation allows for that. Online participation will be possible.

Link for Registration: www.bfr-akademie.de/english/innomat-life.html