INDUSTRIAL INNOVATION – REAL-LIFE RELEVANT TRANSLATION OF NANOSAFETY INTO PILOTS

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1. INTRODUCTION & MOTIVATION

As one of the most promising KETs, nanotechnology facilitates major breakthroughs in different application sectors. However, the nanoscale opens the doors to new or different potential risks that are still not fully explored [1, 2]. To ensure the responsible and safe use of nanomaterials (NMs) along the value chain of industrial innovation processes, safety-related issues have to keep pace with emerging technologies.

Two main bottlenecks that hinder the sustainable development of nanoinnovations are that (i) knowledge and information on nanosafety is still widely dispersed, and (ii) hubs of innovation and safety are not linked sufficiently [3].

2. AIMS

To create a cross-linking between safety work and industry sectors, BNN initiated the “Industrial Innovation Liaison (i2L) group” as part of WG9 within the NSC, aiming to:

- Focus on the needs of industry
- Maximise synergies between ongoing pilot line projects that are dealing with key aspects of nanosafety
- Convince industry that the term “nano” is NOT an uncertainty label
- Sustain data from pilot line and innovation-led projects
- Increase public awareness and regulatory acceptance of performed safety work

3. POSITIONING i2L GROUP

Figure 1: Linkage of NanoSafety Cluster, European Pilot Production Network (EPPN) and projects contributing to the i2L group

4. ACTIONS

- Creating simple, broad-reaching strategies across the industrial sectors
- Promoting a two-way communication channel to facilitate the understanding of real industrial needs (EPPN-side) and promote the industrial implementation of solutions developed by the NSC
- Sharing agreed safety strategies/guidelines to deal with nanosafety issues in the design/production of NMs and nano-enabled products
- Pooling together and sharing non-confidential data/information related to the conditions of use, risk management measures and exposure data throughout the life cycle of NMs, to provide inputs for practical and cost-effective risk management, common safety guidelines and safe-by-design strategies
- Bringing the NSC research community and the general public closer together by establishing links and communication platforms

5. CONCLUSION

The i2L group will support technical development in the European Pilot Production Network (EPPN) by bringing together nanosafety-relevant experts from pilot-line and innovation-led projects.

The added value to all participating members is equal access to nanosafety knowhow and innovation-relevant information (e.g., needs, barriers and solutions). Furthermore, nanosafety experts increase societal and economic impact of their work by tackling the needs and barriers of safe innovations on their way to the market.

REFERENCES


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