

“From Nano Risk Management to Risk Governance: Methods and Tools”

Society for Risk Analysis – EU NanoSafety Cluster Round Table

28 January 2016

University Ca' Foscari Venice

Venice, Italy

Background

The increasing development and marketing of nanotechnologies raises fundamental Environmental Health and Safety (EHS) challenges. Even though the conventional paradigm for Risk Assessment and Management (RA&M) is applicable to nanomaterials, its implementation requires information that is difficult to obtain given the current understanding of their EHS implications. This issue is even more serious in the case of new emerging manufactured nanomaterials (MN) for which almost no EHS data are available. In order to narrow the growing gap between nanotechnology EHS research and innovation, a comprehensive Risk Governance (RG) framework is required.

The EU and US governments have funded significant efforts to bridge scientific and technological gaps that make MN safer. For example, the European Commission has established the NSC as a coordinating mechanism for EU-funded projects. The US National Nanotechnology Initiative coordinates research and investment of the US Government across multiple partner agencies. Additionally, other agencies such as the US National Science Foundation (NSF) administer an annual nano grantees meeting. The EU-US Communities of Research (CoRs) coordinate the nano-EHS research collaboration efforts between EU and US. Scientific and professional societies like the Society for Risk Analysis (SRA) have established working groups focusing on nano-EHS risks. These efforts, which aim at enhancing the feasibility of applying the conventional RA&M paradigm to MN, have shown the need to include a wider range of disciplines, and move from RA&M to RG through stakeholder engagement. This requires the development and application of methods that span beyond the RA&M, i.e. tools for cost-benefit analysis, risk communication, and risk governance of MN.

This workshop will provide a forum for cross-fertilization of current initiatives designed to foster progression of risk assessment and management towards risk governance through integration of traditional risk management tools rooted in physical science with risk governance approaches including economic and social issues evolving from social science and related disciplines. This meeting will include summaries of current activities of multiple efforts in the USA and EU as well as opportunities for leveraging future meetings and research.

Workshop agenda

8.30-9.00 Arrival & registration

SESSION 1. SRANSC^{RT} WHITE PAPER

9.00-9.20 SRANSC^{RT} scope and objectives and the SUN project

Danail Hristozov, Ca' Foscari University of Venice (Italy)

9.20-9.40 Risk governance and the long-term sustainability of nanotechnology

Igor Linkov, US Army Corps of Engineers (USA)

9.40-10.10 White paper: Understanding tools to drive risk governance of nanomaterials

Benjamin Trump, University of Michigan (USA)

10.10- 10.30 Discussion

10.30-11.00 Coffee break

SESSION 2. CURRENT STATE OF RISK GOVERNANCE IN THE EU

11.00-11.20 Results of the ProSafe Delphi on whether risk management is on pace with innovation for nanomaterial uses

Alice Davis, Institute of Occupational Medicine (Scotland)

11.20-11.40 Engaging civil society in the risk governance of nanomaterials

Ineke Malsch, Malsch Techno Valuation (Netherlands)

11.40-12.00 caLIBRAte: An upcoming EU project for establishment of the next generation risk governance of manufactured nanomaterials

Keld Alstrup Jensen, National Research Centre for the Working Environment (Denmark)

12.00 – 12.30 Panel Discussion with Speakers

12.30-13.30 Lunch

13.30-15.30 Breakout sessions

15.30-16.30 Presentations from break-out sessions and final discussion