



EUROPEAN COMMISSION
 ENTERPRISE AND INDUSTRY DIRECTORATE-GENERAL
 Chemicals, Metals, Forest-based & Textile Industries
 REACH

ENVIRONMENT DIRECTORATE-GENERAL
 Water, Chemicals & Cohesion
 Chemicals and Nanomaterials

JOINT RESEARCH CENTRE
 Institute for Health and Consumer Protection
 Nanobiosciences



Risk Assessment of Engineered NanoParticles



Early Harvest of Research Results on Nanosafety

Joint CASG-Nano and ENPRA Workshop

held on 14-15 April 2010 in JRC, Ispra, Italy

Final Programme

including links to Presentations (pdf )

OPENING AND PRESENTATION OF THE WORKSHOP

CHAIR: HERMANN STAMM, EUROPEAN COMMISSION (JRC)

[Welcome and Introduction](#), H. Stamm, JRC

[Objectives of the workshop](#), J. Riego Sintes, JRC

[The ENPRA Project](#), L. Tran, IOM, UK

[REACH and Nanomaterials](#), M. Puolamaa, DG ENTR

[Introduction and mandate of the RIP-oNs](#), F. Christensen, JRC

OTHER RELATED PROJECTS

CHAIR: CHRISTOPH KLEIN, EUROPEAN COMMISSION (JRC)

[HINAMOX: Health Impact of Engineered Metal and Metal Oxide Nanoparticles: Response, Bioimaging and Distribution at Cellular and Body Level](#), S. Moya, CICBIOMAGUNE, ES

[InLiveTox: developing complex in vitro models for nanotoxicity screening](#), B. Gaiser, Napier University, UK

[Nanogenotox: Safety evaluation of manufactured nanomaterials by characterisation of potential genotoxic hazard](#), A. Pochet, French Health Ministry, FR

[ENNSATOX: A unique study into the structure and biological activity of engineered nanoparticles in their transport through the aquatic environment](#), A.L. Nelson, Leeds University, UK

[NEPHH](#), J. Rose, CEREGE, FR

MEASUREMENT AND CHARACTERISATION OF NANOMATERIALS

CHAIR: HUBERT RAUSCHER, EUROPEAN COMMISSION (JRC)

[Characterisation of nanomaterials for hazard assessment](#), K.A. Jensen, NRCWE, DK

[Categorisation of Nanomaterials](#), J-Y. Bottero, CNRS, FR

EXPOSURE MEASUREMENT AND ASSESSMENT

CHAIR: ACHIM BOENKE, EUROPEAN COMMISSION (DG ENTR)

[Exposure monitoring devices and sampling methods](#), K. A. Jensen, NRCWE, DK – K. Savolainen FIOH, FI

[Exposure monitoring and mitigation in key industrial sectors](#), D. Brouwer, TNO, NL

[Simulation of Environmental Exposure from coatings - Worst case scenario](#), M. Stintz, Dresden University, DE

[NANEX and Exposure modelling](#), M. van Tongeren, IOM, UK

HUMAN TOXICITY

CHAIRS: LANG TRAN, IOM; BENGT FADEEL, KI

[Mutagenicity/Genotoxicity of Nanomaterials](#), H. Norppa, FIOH, FI

[Testing of nanomaterials](#), M. Dusinska, NILU, NO

[In vitro and In vivo Dose-Response Assessment](#), F. Cassee, RIVM, NL

[Inhalation toxicity of carbon nanotubes](#), D. Lison, ULB, BE

[Toxicity assessment of carbon nanotubes](#), J. Ragot, Bayer, DE

[Size-dependent toxicity of metal oxide nanoparticles](#), H.L. Karlsson, Karolinska Institutet, SE

[Toxicity of metal nanoparticles](#), J. Rose, CEREGE, FR

[NeuroNano](#), I. Lynch, UCD, IE

[NANORETOX](#), E. Valsami-Jones, NHM, UK / F. Rossi, JRC

ECOTOXICOLOGY & ENVIRONMENTAL FATE

CHAIR: T. FERNANDES, NAPIER UNIVERSITY

[Modelling of environmental fate of nanomaterials](#), B. Nowack, EMPA, CH

[Fate of NM in ecosystems – model systems and application](#), W. Kördel, Fraunhofer IME-AE, DE

[Current status in testing and assessment of nanoparticles in the environment](#), J. Scott-Fordsmand, DMU, DK

[Fish Toxicity of Nanomaterials](#), R. Handy - T. Henry, Plymouth University, UK

INTRODUCTION TO THE BREAKOUT SESSIONS

CHAIR: ROB AITKEN, IOM

[Learning from the ENRHES Project](#), S. Hankin, IOM UK

RISK ASSESSMENT OF NANOMATERIALS IN REACH - BREAKOUT SESSIONS

Breakout groups for

- Measurement, characterisation and categorisation
- Exposure measurement and mitigation
- Toxicity and ecotoxicity of nanomaterials

Addressing e.g.:

- Common issues for nanomaterials and "traditional" chemicals
- Nanospecific issues
- Recommendations to RIP-oNs 2 & 3

RISK ASSESSMENT OF NANOMATERIALS IN REACH – PLENARY

CHAIR: R. AITKEN, IOM

Recommendations from the breakout groups (*groups' rapporteurs*)

Conclusions and closing (*chair*)