

## CURRENT POSITION

Senior scientist, toxicologist, and risk assessor

Department of Safe Technological Innovations and Circular Economy (VIC)

Centre for Safety of Substances and Products (VSP).

### 2008-present

Senior Scientist, Risk Assessor and Toxicologist

RIVM, Bilthoven, The Netherlands (<http://www.rivm.nl>)

Senior Scientist – Operationalization of safe-and-sustainable-by-design (SSbD)

- Senior scientific advisor, experienced in the development of system approaches and translating them into operational tools. She is one of the main operational developers of the Safe Innovation Approach which contains the concept of Regulatory Preparedness, Safe-by-Design and Trusted Environment. These concepts originate from the awareness that new technologies like nanotechnology have uncovered the limits of present regulatory systems and the demand for more agile governance (current Horizon2020 Gov4Nano and SAbyNA projects; past projects: NANoREG and NanoReg2 projects).
- Co-chair and Expert and co-chair of the OECD WPMN Steering Group: Moving Towards a 'Safer Innovation Approach' for Sustainable Nanomaterials and Nano-enabled Products: Overview of existing risk assessment tools and frameworks, and their applicability in industrial innovations.
- WP Leader for SSbD Supportive Roadmaps in the Horizon Europe Project IRISS ( the InteRnational ecosystem for accelerating the transition to Safe-and-Sustainable-by-design materials, products and processes).
- Task Leader for the operationalization of the JRC framework for SSbD criteria in the Horizon Europe SURPASS ( Safe-, sUustainable- and Recyclable-by design Polymeric systems - A guidance towardS next generation of plasticS)
- WP Leader for Regulatory Preparedness in the Horizon2020 Project SUNSHINE (Safe and sUustainable by designN Strategies for High performance multi-component NanomatErials) where activities include the development of the concept of safe-and-sustainable-by-design and the development of tools for regulatory preparedness.
- Scientific advisor for specific Safe-by-design inquiries commissioned by IenW and for the operationalisation of safe-and-sustainable-by-design in chemicals in the acquisition of the Horizon Europe Partnership for the Assessment of Risk from Chemicals (PARC).

Senior Scientist – Foresight strategies

- Expert scientific advisor for the development of a systematic approach for the identification of emerging safety and sustainability issues of advanced materials.
- Developer of strategies to keep up with new or emerging risks of chemicals (NERCs) and potential environmental health risks with past collaboration with ECHA to extend the NERCs methodology to a European level.

Risk Assessor – Toxicology including mixture toxicity

- Developer of strategies for the timely identification of carcinogens: Investigated the quantitative relationship between in vivo genotoxicity and carcinogenicity potency estimates and exploring the possibility

of deriving carcinogenic potency estimates from in vivo genotoxicity data using the benchmark dose approach.

- Risk assessor of complex mixtures such as novel tobacco products presumed to have a reduced risk (harm reduction products), electronic cigarettes and shisha pen. Also developed a method with risk assessors for the safety assessment of additives in tobacco smoke and aided in the generation of professional fact sheets for the Public Information Tobacco Control.
- Past risk assessor in human toxicology for CLP and REACH, and for the generation of Dutch Intervention Values for hazardous substances.
- Past advisor for the development of a strategy for defining fixed classification criteria to improve the use of in vitro test data and read-across for the classification and labeling of substances.
- Other areas of strategy development included the evaluation of human disease toxicogenomic data on skin sensitization (allergic contact dermatitis) in anchoring molecular mechanisms to an adverse outcome pathway, risk assessment issues regarding exposure of genotoxic carcinogens in susceptible groups and non-genotoxic carcinogens, and the applicability of toxicogenomics in identifying carcinogens.

#### 2003-2007

Ph.D. Candidate - Queen's University, Kingston, ON, Canada, Toxicology, Data Analysis and Risk Assessment

- Designed dose response studies with the garlic derivative diallyl sulfone to test the hypothesis that bioactivation of vinyl carbamate by CYP2E1 is central to the development of mutations and micronucleus formation, and further that inhibition of CYP2E1 by diallyl sulfone leads to a reduction in their incidences.

#### 2001-2003

M.Sc. Candidate - York University, North York, ON, Canada, Toxicology, Data Analysis and Risk Assessment

Used the lambda cII mutation assay to investigate how a western diet (high in fat and low in calcium, vitamin D, folic acid, choline, and fibre) altered spontaneous mutation rates. Investigated the protective effect of dietary restriction within various stages of development and growth against ethyl- nitrosourea-induced mutations in the lambda cII gene.

#### 1997-2000

Development Technician - Maxxam Analytics, Mississauga, ON, Canada , Analytical Chemistry

- Involved in the identification of chloramphenicol, pesticides and hormones in fruits, vegetables and meat using GC/MS and ELISA.