

Exposure assessment tools for occupational safety and health regulations: state of the art and directions for the future

To show the current status and future issues of development and implementation of exposure assessment tools. Exposure assessment tools are widely used in the EU and beyond in regulatory risk assessments for industrial chemicals and process that generate hazardous substances in workplaces. The global occupational hygiene community will never be able to collect sufficient numbers of exposure measurements to obtain exposure estimates for all workplaces. Exposure models which err on the side of caution can help in a tiered chemical management approach to prove which work scenarios are safe and unsafe. Potentially unsafe work scenarios should then be studied to clarify the true risk by e.g., release and personal exposure measurements and / or biological monitoring. To follow this principle successfully, the models used need to be externally validated through a cyclic of continuous model improvement. The integration of sensor data will create new possibilities. Furthermore the tools need to be implemented at company level in a sustainable way. - participants will have the latest overview of currently available exposure and risk assessment tools used in the EU and beyond; both on state of the art and future developments - participants will understand how these tools can be used in a tiered business wise chemical management approach

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Henri Heussen (Cosanta, Netherlands)

Variability of exposure in time and space – implications for modelling and the validation of models in OSH

Dorothea Koppisch (IFA, Germany)

Innovative approaches to integrate sensor data into exposure assessment models

Wouter Fransman (TNO, Netherlands)

MODERATOR



Henri Heussen

Dr. ir. Henri Heussen completed his MSc in Biology in 1987 and worked until 1993 as a researcher at Wageningen University & Research in environmental toxicology. In 1993 after completing his PhD he started working at Arbo Unie, an Occupational Health and Safety Service. He is a registered occupational hygienist and toxicologist with experience in different (chemical) industrial sectors, the construction and health care sector. He gives training on chemical management and is one of the developers of Stoffenmanager®, an internationally accepted Exposure Assessment and Control Banding tool (www.stoffenmanager.com). Since June 2014 he is employed at Cosanta BV, a spin-out of TNO and Arbo Unie. He is the CTO and one of the co-founders of the company. Chairman Stoffenmanager® International Scientific Advisory Board | Member RIVM Expert group on Emerging Risks | Member ECHA Stakeholder Exchange Network on Exposure Scenarios (ENES) | Associate Editor Occupational Health and Safety (specialty section of Frontiers in Public Health) | Past-member Scientific Advisory Board eteam project: Evaluation of Tier 1 Exposure Assessment Models under REACH

SPEAKERS

Dorothea Koppisch



Wouter Fransman

Dr. Wouter Fransman is senior research scientist at the department of Risk Analysis for Products in Development at TNO in The Netherlands. His main fields of interest are exposure assessment in epidemiology and exposure assessment for risk assessment / risk management. He has extensive knowledge in measuring and assessing (occupational) exposure and statistical modeling, and is involved in a wide variety of projects on modeling of exposure variability. He coordinates studies on measuring exposure in different (work) situations and designing exposure / risk assessment models based on these measurement data. He has >90 peer reviewed publications in the areas of risk assessment, occupational exposure assessment and epidemiology