



# RAPID CHANGES IN PROCESSES

Which occupational risks  
for which prevention?

Nancy - France

11 & 12  
october  
2022

## PROGRAMME

**Tuesday, 11 October 2022**

**09:30 - 10:00**      **Opening**

### Session 1: New modes of production

**10:00 - 10:35**      **How to deal with occupational health in process engineering – From the inherently safer design perspective**

**Dr Mimi Hassim - Universiti Teknologi Malaysia**

**10:35 - 11:10**      **Impacts of process developments on the risks of explosive atmospheres**

**Agnès Janès - Cramif, France**

**Olivier Dufaud - ENSIC, University of Lorraine, France**

**11:10 - 11:35**      **Break**

**11:35 - 11:55**      **PAHs in low pressure gas cementation - Prevention and reduction of risk "at source"**

**Hubert Monnier - INRS, France**

**11:55 - 14:00**      **Lunch**

### Session 2: Limitation of resources consumed, emergence of a circular economy

**14:00 - 14:35**      **Circular economy and occupational risks**

**Philippe Duquenne - INRS, France**

**14:35 - 14:55**      **Assessment of exposure to ammonia and biological agents during the methanisation process**

**Patricia Dirrenberger - INRS, France**

**14:55 - 15:15**      **HBM4EU occupational biomonitoring study on e-waste**

**Paul .T.J. Scheepers - Radboud Institute for Health Sciences, The Netherlands**

**15:15 - 15:40**      **Break**

**15:40 - 16:00**      **Assessment of exposure to a mixture of metals during the recycling of batteries and accumulators**

**Ogier Hanser - INRS France**

**16:00 - 16:20**      **Foresight Study on the Circular Economy and its Effects on OSH**

**Annick Starren - EU-OSHA**

### Special session

**16:20 - 16:55**      **Process supervision - What can we learn from nuclear industry ?**

**Francois Jeffroy - IRSN, France**



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## Session 3: Use of new materials

- 09:00 - 09:35 **Artificial intelligence and «advanced materials»**  
[Jay Vietas - NIOSH, USA](#)
- 09:35 - 09:55 **Prevention-through-design in nanomaterials production processes**  
[Fabio Bocconi - INAIL, Italy](#)
- 09:55 - 10:15 **Impact of powders flowability improvement on their dustiness generation**  
[Maria Camilla Jiménez-Garavito - INRS, France](#)
- 10:15 - 10:40 Break
- 10:40 - 11:00 **Advanced Materials - A United Kingdom perspective and initiatives**  
[Delphine Bard - HSE, United Kingdom](#)
- 11:00 - 11:20 **Measurement of emissions from a powder fusion additive manufacturing**  
[François-Xavier Keller - INRS France](#)

## Special session

- 11:20 - 11:55 **Future challenges and demands in Working conditions along the supply chain. First consequences of the new GERman supply chain act.**  
[Dr Helmut Nold - BG RCI, Germany](#)
- 11:55 - 14:00 Lunch

## Session 4: Limitation of environmental impacts

- 14:00 - 14:35 **Safe Net Zero & Implications for Occupational Safety**  
[Stuart Hawkwort - HSE, United Kingdom](#)
- 14:35 - 15:10 **Green solvents and substitution**  
[Maximilien Debia - University of Montreal - Canada](#)
- 15:10 - 15:30 **Original approach to trap Nitrogen Oxides Application to the exhaust gas of non-road engine**  
[Michael Badawi - CNRS, University of Lorraine, France](#)
- 15:30 - 15:50 **Intensification of low-concentration VOC removal from air by coupling membrane gas separation and oxidation**  
[Fabien Gérardin - INRS, France](#)
- 15:50 - 16:10 Conclusion