





# Work debate spaces for transforming representations and building work rules: a collective tool for preventing risks related to nanomaterials

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# **CONTENT**

# Discussion around work debate spaces

- Context
- Problematic
- Methods
- Results
- Discussion

#### THE ERGONOMICS APPROACH

- Nanomaterials
  - Important scientific and economic issues
  - Partial scientific knowledge
- → Industry facing difficulties in implementing prevention, despite of best practice guides
- The ergonomics approach, the approach of the working activity
  - A comprehensive approach
  - Focused on working activities observations
  - Complementary to other methods (exposure measurement)
  - To highlight regulation processes
  - To produce action rules, adjusted to the work context

### **2 CASE STUDIES**

- Case A: a R&D laboratory in an industrial company
  - Valuation of agricultural materials rich in starch for the production of cardboard
  - 4 workers



- Case B : a scale-up facility pooling platform
  - Development of innovative organic nanostructured composite and coating technologies
  - 15 workers



 Objective: implementation of a prevention approach for risks associated with nanomaterials

# **QUESTIONING**

- How to implement prevention in a context of uncertainty?
- → Need of places where employees can confront and discuss their professional practices and risk representations

- Problematic
  - How the setting up of work debate spaces facilitates prevention as part of socalled risk "uncertain"?
- → Work debate spaces

Places of explicit contradictions and repeated offs between employees (Detchessahar, 2011)

# **2 PHASES**

# 1<sup>st</sup> phase

2<sup>nd</sup> phase

Individual comprehensive interviews



To gather employees' perceptions of risks associated with nanomaterials

Observations of work activities



To understand professional practices (especially in terms of risk protection)

Work debate spaces



To support the construction of a prevention approach

# 2ND PHASE: THE WORK DEBATE SPACES

- Case A
  - 2 working groups
    - Operational committee
    - « Expert » committee
- Case B
  - 4 working groups
    - Maintenance
    - Flow
    - PPE
    - Waste
- Seeking solutions from the traces of the work activity
  - Method of collective confrontation
    - A form of collective reflexive activity

# **DEBATE DYNAMIC**

Inspired of Daniellou, 1998

# Debate

- To be able to debate
- What they share

# Rule

- To be able to act
- What they build

# Representation

- To be able to think
- What they think

# CASE A: SEPARATION OF OFFICE SPACES FROM HANDLING SPACES

#### Debate

- · To be able to debate
- · What they share

#### Rule

- · To be able to act
- What they build

#### Representation

- To be able to think
- What they think









# **CASE B: EFFECTIVENESS OF A MOBILE CAPTURE HOOD**

#### Debate

- · To be able to debate
- What they share

#### Rule

- · To be able to act
- What they build

#### Representation

- To be able to think
- What they think





## **DISCUSSION**

- The work debate spaces, a collective tool for prevention
  - Transformation of representations of nanomaterial-related risks
  - Collective construction of rules for prevention
- In this context of so-called risk « uncertain »
  - A meeting place for various corporate stakeholders
  - A place of collective work
  - A place of cross learning through sharing individual experiences
- → A place of social construction of risk prevention







# Thanks for your attention

**Questions?** 

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