

BAuA workshop on Safe handling of nanomaterials at workplaces

27-28 November 2012

## Working Session 3

### Practical guideline – What do we expect?

Chair:

Rolf Packroff

Bundesanstalt für Arbeitsschutz und Arbeitsmedizin / Federal Institute for  
Occupational Safety and Health (BAuA)

## Where do we need guidance?

- Risk Assessment
  - **Hazards of nanomaterials** (REACH fails for low production volumes, in-vitro-tests for comparative assessment)
  - Exposure from different activities
- Substitution, **Safer-by-design** (use of toxicological knowledge)
- Bridge the gap between scientific knowledge and practical OSH
- **Selection of efficient (performance) and cost-effective controls**
- **Motivation of management to accept and to pay for controls (regulatory basis)**
- **Awareness and Motivation of workers/scientists to protect their own health** (practical support, training, test, voluntary certification,
- Nanomaterials vs. other (new developed / existing) chemicals used in laboratories and start-ups

## What is required for a good guidance?

Specification of:

- Relevant activities (dust-generating procedures, spraying)
- Groups of nanomaterials (GBP, fibers, specific toxicity, soluble)
- **Relevant exposure routes** (inhalation – general dust, alveolar dust)
- Standards for exposure assessment (measurement techniques, reference values, control banding)
- Education, training, workers participation (also working session 2)
- Recommendations for cleaning, storage and disposal
- Recommendations for health surveillance
- Risk mitigation techniques
- **Updatable to new results from Science, that influence control strategies**