

2nd NanoDefine Industry-focused Workshop
“Measurement and classification of nanomaterials according to
the EU definition”
DECHEMA, Frankfurt, 24 October 2017

WORKSHOP VENUE: DECHEMA, Theodor-Heuss-Allee 25, 60486 Frankfurt am Main

THE PROGRAM

09:00-10:00 Coffee and registration

OPENING AND INTRODUCTION SESSION (Plenary Session) (Max-Buchner-Hörsaal, Ground floor, EG)

10:00-10:10 Opening
Rudolf Reuther, NOMI

10:10-10:15 Welcome
Heike Liewald, VdMi and Martin Reuter, VCI

10:15-10:30 NanoDefine - background, goals, challenges and outcome
Hans Marvin, RIKILT

10:30-10:45 Experiences and needs of industries to meet the analytical challenges of the EU Nano-Definition
Uwe Hempelmann, Lanxess

SESSION 1: PRESENTATIONS (Plenary Session) (Max-Buchner-Hörsaal, Ground floor, EG)

10:45-11:00 Applicability of widely available methods to identify nanomaterials in industrial real-life samples
Frank Babick, TUD

11:00-11:15 Sample preparation is critical both for substances and products
Katrin Löschner, Denmark Technical University

11:15-11:45 Coffee break and discussions

11:45-12:00 Screening methods for rapid and cost-effective identification of nanomaterials as substances (powders, suspensions) or in products (formulations)
Michael Stintz, Technical University of Dresden

12:00-12:15 Confirmatory methods to identify nanomaterials in complex real-life samples (industrial / consumer products)
Frank von der Kammer, University of Vienna

12:15-12:30 The challenge of validating methods for nanoparticle analysis
Robert Koeber, JRC

- 12:30-12:45 The NanoDefiner Decision Support Flow Scheme and e-Tool: a practical guide to the identification of nanomaterials
Hubert Rauscher, JRC-IHCP
- 12:45-13:00 Case studies to explore the applicability of developed methods and decision-support-system to industrial substances
Wendel Wohlleben, BASF
- 13:00-14:00 Poster lunch buffet (Hall close to „Max-Buchner-Hörsaal, Ground floor, EG)

SESSION 2: METHOD DEMONSTRATIONS

Poster session (Hall close to “Max-Buchner-Hörsaal”, Ground floor, EG)

- 14:00-15:00 Analytical centrifugation (AC) (screening method)
Michael Stintz, TUD
- 14:00-15:00 Volume specific surface area (VSSA) by BET (screening method)
Hubert Rauscher, JRC, and Wendel Wohlleben, BASF
- 14:00-15:00 Field flow fractionation + multi-element detection (confirmatory method)
Frank von der Kammer, University of Vienna

Screening methods (“Paul-Duden-Raum”, Second floor, 1. OG)

- 14:00-14:20 Single Particle ICP-MS for screening of nanoparticles (screening method)
Ruud Peters, RIKILT
- 14:25-14:45 Particle tracking analysis (PTA) (screening method)
Phil Vincent, Malvern Instruments
- 14:45-15:30 Discussion with the experts

Confirmatory methods (“Franz-Patat-Hörsaal”, Fourth floor, 3. OG)

- 14:00-14:20 Electron Microscope detection: auto EM toolbox, particle sizer (confirmatory method)
Ralf Kaegi, EAWAG
- 14:25-14:45 miniTEM (confirmatory method)
Martin Ryner, Vironova
- 14:45-15:30 Discussion with the experts

Screening and sample preparation method (“Treppenhausturm”, Fourth floor, 3. OG)

- 14:00-14:20 High Resolution Mobility Spectrometer (HRMS) (screening method)
Silvia Lopez, RAMEM
- 14:25-14:45 Electrospray deposition prototype (EM sample preparation method)
Silvia Lopez, RAMEM
- 14:45-15:30 Discussion with the experts

The “NanoDefiner” e- Tool (“Max-Buchner-Hörsaal”, Ground floor, EG)

- 14:45-15:45 The NanoDefiner e-Tool
Christoph Friedrich, FHD
- 15:45-16:00 Wrap up and Outlook
Martin Reuter, VCI and Rudolf Reuther, NOMI
- 16:00 End of Workshop