# SmartNanoTox Conference Agenda
27th – 28th May 2020
Helmholtz Zentrum München, Germany

## Wednesday 27th May

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| **Welcome by Coordinator Vladimir Lobaskin** | 9.00 – 9.10 |
| SmartNanoTox (SNT) concept and overview of accomplishments (*Vladimir Lobaskin*) | 9.10 – 9.40 |
| **Session 1. "Grouping of Nanomaterials (NMs)"** | 9.40 – 12.20 |
| Leveraging *ab initio* modelling approaches to link phys-chem nanomaterial (NM) properties to descriptors of bio-nano interaction– *(Nicholas Quirke)* | 9.40 – 10.00 |
| The role of tissue-delivered dose and dose metric for hazard grouping and risk assessment of NMs (*Otmar Schmid*) | 10.00 – 10.20 |
| *Coffee* | 10.20 – 10.40 |
| *In vitro/in vivo* correlation of dose-response data from acute/sub-acute/chronic exposure scenarios *(Laurent Gaté)* | 10.40 – 11.00 |
| Mechanisms of toxicity related to surface activity (lipophilicity, protein affinity, ROS generation, etc.) and shape-induced cell-particle interaction (aspect ratio) (*Olivier Joubert*) | 11.00 – 11.20 |
| Prediction of NM toxicity from intelligent quantitative structure-activity relations (iQSAR) (*Marc Meunier*) | 11.20 – 11.40 |
| **Invited speaker: Dario Greco** *"Bioinformatics approach to (hazard) grouping of nanomaterials"* | 11.40 – 12.20 |
| *Lunch* | 12.20 – 13.20 |
| **Session 2. "Development of AOPs and identification of KEs"** | 13.20 –17.00 |
| Five AOPs developed in SmartNanoTox (*Ulla Vogel*) | 13.20 – 13.40 |
| **Invited speaker: Sybille van den Brule** *"Nanoparticle related adverse outcome pathways (AOP)"* | 13.40 – 14.20 |
| **Invited speaker: Sabina Halappanavar** *"Specific key events and smart assays in fibrosis AOP"* | 14.20 – 15.00 |
| *Coffee* | 15.00 –15.20 |

| Session 2. "Development of AOPs and identification of KEs" (continued) | |
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| **Invited speaker: Georgios Stathopoulos** *"Cancer profiling based on exposure-specific mutation signatures: Do NM have a specific fingerprint?"* | 15.20 – 16.00 |
| Multi-omics approach for identification of key events (KEs) in NM-related AOP development (***Vadim Zhernovkov***) | 16.00 – 16.20 |
| **Invited speaker: Tomasz Puzyn** *"From transcriptomics to CNT-induced inflammation and beyond: The power of nano-QSARs"* | 16.20 – 17.00 |
| **Poster session** | 17.00 – 19.00 |
| **Dinner** | 20.00 |

# Thursday 28th May

| Session 3. "*In vivo - in vitro* mapping" | 9.00 – 11.00 |
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| Smart assays for AOP-based mechanism-aware toxicity assessment (***Tobias Stoeger***) | 9.00 – 9.20 |
| **Invited speaker: Barbara Rothen-Rutishauser** *"In vitro tests for lung fibrosis KEs"* | 9.20 – 10.00 |
| **Invited speaker: Jesus Perez Gil** *"The role of surfactant in lung homeostesis and disease"* | 10.00 – 10.40 |
| Lipid wrapping: From bio-/nano-interface modelling to inflammation (***Janez Strancar***) | 10.40 – 11.00 |
| *Coffee* | *11.00 – 11.20* |

| Session 4. "Databases/Data management" | 11.20 – 13:00 |
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| SNT data strategy and relevance for Nanoinformatics and Nanosafety projects (***Vladimir Lobaskin***) | 11.20 – 11.40 |
| Models and tools: statistical and physics-based modelling (***Alexander Lyubartsev***) | 11.40 – 12.00 |
| **Invited speaker: Iseult Lynch** *"NanoCommons Knowledge Base"* | 12.00 – 12.40 |
| *Lunch* | *12.40 – 13.40* |
| **Round Table Discussion** with the Advisory Board of the potential exploitation of the project results and further steps in toxicology research | 13:40 – 15.40 |
| **End of SmartNanoTox Conference** | |