

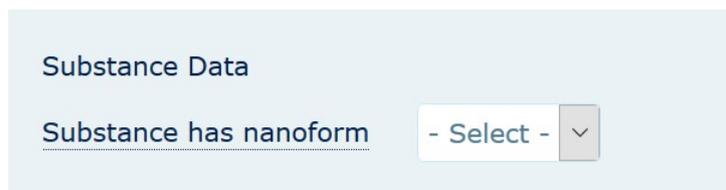
**11th meeting of the ECHA Nanomaterials Expert Group (ECHA-NMEG-11)
3-4 May 2018, Helsinki, Finland**

The representatives from the Member States, the Commission, the accredited stakeholder organisations from industry and NGOs, and ECHA are encouraged to summarize **briefly** below any **highlights/progresses** since the previous meeting in areas relevant for the work of the NMEG. The aim is to share information within the NMEG, and possibly identify **topics for future discussions**. NB: only non-confidential information should be shared.

1. IUCLID reporting**ECHA**

The ECHA registration dissemination website now has fields to search for registrations that have selected "nanomaterial" as the substance form in the available picklists in IUCLID dossiers.

See the "advanced search" option on <https://echa.europa.eu/information-on-chemicals>



Substance Data

Substance has nanoform

As of 12 April 2018, the result of the search gives **25 entries**, and include inorganic compounds such as metal oxides, metal carbonates, inorganic clays, organic pigments and carbon nanotubes.

2. Substance identity

N/A

3. Phys-chem characterisation of nanomaterials**COM (DG GROW)**

Dissolution rate and dispersion stability (new phys. chem. characteristics) -> standard measurement methods -> gathering standard data -> information system -> models -> prediction. To achieve similar reliability than for the estimation of log_p for classical substances by computational methods.

MSCA - UK

The H2020 project ACEnano started on the 1st Feb 2017 and is led by Professor Éva Valsami-Jones at the University of Birmingham, UK. The project includes a total of 26 partners and aims to introduce confidence, adaptability and clarity into nanomaterial risk assessment by developing a widely implementable and robust tiered approach to physico-chemical characterisation that will simplify and facilitate contextual (hazard or exposure) description and its transcription into a reliable NMs grouping framework. ACEnano addresses the challenge of reliable and reproducible characterisation of nanomaterials particularly in complex environments, such as within different biological, environmental and technological

compartments. Two key approaches are proposed: 1) the development of a holistic framework for reproducible NM characterisation, spanning from initial needs assessment through method selection to data interpretation and storage; the framework encompasses both new analytical techniques and assays as well as optimised existing methods; and 2) the embedding of this framework in an operational, linked-up ontological regime to allow identification of causal relationships between NMs properties, and biological, (eco)toxicological or health impacts.

MSCA – BE

Since April 2017 The Belgian National Metrology institute offers to industry and research the first accredited measurement service for nanoparticles size. FPS Economy, National Standards is accredited (ISO17025) for the measurement of mean nanoparticle diameter and size distribution of single spherical and incompressible nanoparticles measured with atomic force microscope for diameters <200 nm with a best uncertainty of 3 nm.

4. Hazard evaluation – human health**MSCA – DE**

Presentation on 'Lessons learned from Substance Evaluation on ZnO' at NMEG-11 meeting.

ASO – PETA

The PETA International Science Consortium Ltd., a member of the International Council on Animal Protection in OECD Programmes (ICAPO), is working with Health Canada on the development of an adverse outcome pathway (AOP) for lung fibrosis. The AOP titled 'Secretion of inflammatory cytokines leading to lung fibrosis' has been uploaded to AOPwiki (AOP 173: <https://aopwiki.org/wiki/index.php/Aop:173>). A manuscript on this work is currently under preparation.

The PETA International Science Consortium is funding the development of a three-dimensional in vitro system to predict the potential of manufactured nanomaterials to cause lung fibrosis in humans. The project is led by Professor Dr. Barbara Rothen-Rutishauser of the Adolphe Merkle Institute at the University of Fribourg and MatTek Corporation. The results of the project were presented in 2017 at several international conferences including the Society of Toxicology, EUROTOX, and the 10th World Congress on Alternatives and Animal Use in the Life Sciences. A manuscript focusing on the dose and dose metrics of nanomaterials used in the study was recently submitted to a peer-reviewed journal, and another publication is expected to be submitted in 2018. The progression of this project can be followed on our website: <http://www.piscltd.org.uk/nanoworkshop/>

In September 2016, the PETA International Science Consortium co-hosted a webinar series and workshop with the US NTP Interagency Center for the Evaluation of Alternative Toxicological Methods (NICEATM), focusing on the use of alternative methods for acute inhalation toxicity testing. To implement recommendations from the workshop, four working groups were formed, each focussing on a specific area: 1) developing a database of existing acute inhalation toxicity data; 2) preparing a state-of-the-science review on mechanisms, dosimetry considerations, and assays for acute inhalation toxicity; 3) developing

in silico models; and 4) conducting a proof-of-concept study to optimize an integrated approach comprised of in vitro and in silico methods. Updates from the work were presented in 2017 at EUROTOX, the American Society for Cellular and Computational Toxicology, and the 10th World Congress on Alternatives and Animal Use in the Life Sciences. The workshop report has been published in Toxicology In Vitro (available here: <https://www.ncbi.nlm.nih.gov/pubmed/29277654>) and another review article is in preparation. More information regarding this work is available on our website: <http://www.piscltd.org.uk/acute-inhalation-toxicity/>

ECHA

In relation to CLP

Subsequent to the CLH opinion adopted by RAC on titanium dioxide (as Carc. 2 via the inhalation route) being submitted to COM, the CLH outcome has been discussed in CARACAL meetings in November 2017 and in March 2018. Further discussion on the nature of the entry in Annex VI of CLP is planned in April 2018, prior to discussion at the REACH committee, in the context of the relevant ATP, in June 2018.

At its meeting in March 2018, based on a proposal from NL, RAC adopted an opinion on the CLH for silicon carbide fibres as Carc. 1B (via the inhalation route). The Annex VI entry for the Silicon Carbide fibres covered by the opinion involves those meeting the WHO definition (diameter <3 µm, length >5 µm and aspect ratio ≥ 3:1), hence nanoforms of these fibres are implicitly included.

ECHA has received a CLH dossier for Pyrogenic, synthetic amorphous, nano, surface treated silicon dioxide (classification proposal is for STOT RE 2).

In relation to BPR

The Biocides Unit has received three dossiers for the approval of the active substance "Silver, as a nanomaterial" for the following product types:

- PT02: Disinfectants and algacides not intended for direct application to human or animals;
- PT04: Food and feed area;
- PT09: Fibre, leather, rubber and polymerised materials preservatives.

Sweden is the evaluating competent authority (eCA).

MSCA - UK

The UK Public Health England (PHE) has an ongoing nanotoxicology programme, which is focussed on research into the effects of inhaled nanoparticles on public health. It includes in vivo and in vitro studies and associated biophysical investigations of interactions between nanomaterials and lung surfactant. Research is focussed on the deposition, clearance, biodistribution and biological effects of inhaled nanomaterials in normal and compromised (e.g. asthma) lungs. Nanomaterials currently being investigated include ceria, iron oxides, silver and carbon nanotubes. Some of the work is supported by external funding, including EU FP7 and UK NIHR (National Institute for Health Research). A study to explore individual exposures to engineered nanomaterials in consumer products is also currently being undertaken. Recent papers include published studies on translocation of nanoparticles and review on asthma and nanoparticles:

- Buckley A, Warren J, Hodgson A, Marczylo T, Ignatyev K, Guo C, Smith R. (2017) Slow clearance and limited translocation of four sizes of inhaled iridium nanoparticles. Particle and Fibre Toxicology 14:5.

- Meldrum, K, Guo C, Marczylo EL, Gant TW, Smith R., Leonard MO (2017) Mechanistic insight into the impact of nanomaterials on asthma and allergic airway disease. Particle and Fibre Toxicology 14:45

5. Hazard evaluation – environment

MSCA – DE

A Scientific Stakeholder Meeting on Nanomaterials in the Environment took place on the 10th and 11th October 2017 at the headquarters of the German Environment Agency (UBA) in Dessau-Rosslau, Germany. The meeting was hosted by UBA and financed by the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety. The meeting focused on regulatory relevant results of German and European research projects on nanomaterials in the environment which are carried out or finalised in the current years. By this, it gave a forum to present the state of the knowledge on environmental nanosafety in a regulatory context as well as to discuss the scientific results and their regulatory relevance between affected stakeholders. Therefore, the meeting particularly addressed representatives of science, industry, risk assessors, regulatory experts, and NGOs. It included key note talks, invited platform presentations as well as poster presentations. A Knowledge Café provided the opportunity to discuss selected topics with regard to environmental safety of nanomaterials in smaller groups. The meeting was closed with a discussion on the lessons learned highlighting the outcomes of the meeting by the views of different stakeholders.

The meeting report and available presentations is published at the workshop webpage: <https://www.umweltbundesamt.de/en/scientific-stakeholder-meeting-on-nanomaterials-in>.

The report is available on the UBA webpage on nanotechnology: <https://www.umweltbundesamt.de/en/topics/chemicals/nanotechnology/good-to-know>.

The OECD Test Guideline (TG) 318 (“Dispersion stability of nanomaterials in simulated environmental media”) which was developed under the lead of Germany was published in October 2017. It features the first standardized test method particular for nanomaterials adopted by OECD. The method determines the dispersion stability of nanomaterials in aqueous media in dependence of varying environmental conditions. The TG was developed by the Department of Environmental Geosciences at the University of Vienna on behalf of the German Environment Agency and financed by the German Federal Ministry for the Environment, Nature Conversation, building and Nuclear Safety. It is available for download at the webpage on the OECD Guidelines for the Testing of Chemicals: http://www.oecd-ilibrary.org/environment/test-no-318-dispersion-stability-of-nanomaterials-in-simulated-environmental-media_9789264284142-en

MSCA - UK

The fate and transport of metals and metallic oxide engineered nanoparticles are undergoing research at Cranfield University through a Commonwealth Scholarship Commission award and a NERC research grant TINE (Transatlantic Initiative for Nanotechnology and the Environment). This is led by Professors Bruce Jefferson and Frederic Coulon. Collectively their research here has improved understanding of the environmental fate of engineered nanoparticles as a non-dissolved pollutant and on how ENPs interact in complex functioning ecosystems such as wastewater treatment and anaerobic digestion plants. To date, Coulon and Jefferson have provided the most complete assessment of engineered

nanoparticles on wastewater treatment at pilot scale, enabling revised design guidance to be established for associated technologies (Eduok et al., 2015). Such knowledge is critical to our understanding of the resilience of these systems to ENPs as environmental hazards. The work will enable improved management strategies and models to be developed to better cope with the impacts and fate of engineered nanoparticles in the environment.

- Eduok S, Ferguson R, Jefferson B, Villa R, Coulon F. 2017. Aged-engineered nanoparticles effect on sludge anaerobic digestion performance and associated microbial communities. *Science of the Total Environment*. 609: 232-241
- Eduok S, Coulon F. 2017. Engineered nanoparticles in the environment: interactions with microbial systems and microbial activity. Part II Concepts and Case studies, Chapter 5. In *Microbial Ecotoxicology*, Cravo-Laureau C., Cagnon C., Lauga B., Duran R. (eds), Springer International Publishing . DOI 10.1007/978-3-319-61795-4, pp 63-108
- Eduok S. and Coulon F. 2017. Microbiological toxicity of nanoparticles. Chapter 6. In: *Emerging Nanotechnologies in Food Science, A volume in Micro and Nano Technologies*, 1st edition, Busquets R. (ed), Elsevier; <https://doi.org/10.1016/B978-0-323-42980-1.00006-6>; pp 97-117.
- Eduok S., Hendry C., Ferguson R., Martin B., Villa R., Jefferson B., Coulon F. 2015. Insights into the effect of mixed engineered nanoparticles on activated sludge performance. *FEMS Microbiology Ecology*. 91: 1-9.

6. Read-across and grouping for nanomaterials

COM (DG GROW)

Read-across also for new phys. chem. properties.

MSCA – ES

The work carried out on NanoReg2 by the groups working on ecotoxicity on grouping of nanomaterials. First, it was very difficult to find appropriate data in the bibliography. So, we have generated our own data, in three different laboratories, using the same nanomaterials and the same dispersions protocols. We have in this way filled a number of data gaps. We have also generated data on physico-chemical properties. At the moment we are in the process of modelling the data to determine how they group.

MSCA – DE

In autumn 2017 the project "Grouping of nanomaterials regarding a joint testing of environmental effects for regulatory purposes" launched by UBA and performed by Fraunhofer Institute for Molecular Biology and Applied Ecology (IME) together with Helmholtz Centre for Environmental Research (UFZ) Leipzig and Institute of Energy and Environmental Technology (IUTA e.V.) was finalized. The project aimed at the development of a concept for the grouping of engineered nanomaterials (NMs) with regard to their ecotoxicological effects on algae, daphnids and fish embryos. Therefore, fourteen nanomaterials were selected and tested regarding their ecotoxicity and physical-chemical properties which were different nanoforms of Ag, ZnO, TiO₂, CeO₂ and Cu. Based on the results of the measurements and expert knowledge, morphology, stability (ion release, crystalline structure) were identified as relevant PC-parameters. A grouping scheme and procedure was proposed considering these parameters and the ecotoxicity of the chemical composition itself. It was realized that it is impossible to build meaningful grouping hypotheses based on one physico-chemical parameter. Rather, sets of parameters, and probably also additional physico-

chemical parameters next to those investigated in this project need to be considered.

In order to further advance grouping concepts for regulatory testing, future developments with respect to research on grouping concepts should include (i) surface modifications which were excluded in the present project, (ii) the substitution of the fish embryo test which reveals to be of low sensitivity, (iii) adaptation of the methods for the determination of the reactivity as no relationship between ecotoxicity and the results of the applied methods on reactivity were observed, (iv) a detailed analysis of the kinetic of selected PC-parameters during the tests such as agglomeration behavior, zeta-potential, reactivity and solubility. Furthermore, (v) the number of effect values per NM and test organism has to be increased to achieve more robust datasets for statistical analyses.

The final report "Considerations about the relationship of nanomaterial's physical-chemical properties and aquatic toxicity for the purpose of grouping." is published at: https://www.umweltbundesamt.de/publikationen/Considerations_about_the_relationship_of_nanomaterial's_physical-chemical_properties_and_aquatic_toxicity_for_the_purpose_of_grouping

MSCA - UK

The H2020 project GRACIOUS (Grouping, Read-Across and ClassIficatiOn framework for regUlatory risk assessment of manufactured nanomaterials and Safer design of nano-enabled products) started on 1st January 2018. It is led by Professor Vicki Stone at Heriot-Watt University, UK and includes 23 partners. The project goal is to generate a science-based Framework to enable practical application of grouping and read-across of nanomaterials, whilst working continuously with stakeholders to ensure that it effectively meets the needs of both regulators and industry. Application of the Framework will allow movement away from the case-by-case risk assessment paradigm, thereby improving the efficiency of risk analysis and decision making for safer design of quality nanomaterials

7. Exposure assessment

N/A

8. Risk assessment

ASO – PETA

The PETA International Science Consortium's Director is the Guest Editor of a special issue of Applied In Vitro Toxicology on 'Implementing Alternative Approaches for Inhalation Toxicity Testing'. The issue will cover topics relevant to the risk management of nanomaterials and other substances including in vitro test methods, non-testing methods (e.g., quantitative structure activity relationships, grouping, or read-across), AOP development and dosimetry considerations.

9. Guidance or good practice documents for registrants and stakeholders

ECHA

A presentation at NMEG-11 will address the future update of ECHA guidance documents for nanomaterials.

EFSA

EFSA guidance (human and animal health) for endorsement end of May 2018, publication over summer, pilot phase starting in September 2018 to work on cases with respective EFSA panels and units.

For the environment: possible launch of a call for tender as from June 2018.

10. Relevant new research projects or strategies on nanomaterials**MSCA – UK**

Aside from ongoing EU-funded research projects, the UK Natural Environment Research Council (NERC) has funded three projects relevant to nanomaterials and nanoplastics under the title 'Pathways, impacts and fate of nanomaterials':

1. Tracking relevant nanomaterial transformations, exposure, uptake and effects in freshwater and soil systems.
2. Distinguishing realistic environmental risks of nanoplastics by investigating fate and toxicology in real-world scenarios.
3. Multimodal characterisation of nanomaterials in the environment.

Further detail can be provided on request to UK MSCA at NMEG.

ASO – PETA

The PETA International Science Consortium awarded VITROCELL® systems to four international laboratories:

- ScitoVation (United States)
- VITO NV (Belgium)
- Professor Vicki Stone at Heriot-Watt University (Edinburgh)
- Institute for In Vitro Sciences (United States)

More details can be found on our website: <http://www.piscltd.org.uk/vitrocell-prize/>

MSCA – DE

UBA launched a new research project for supporting the development of a new OECD Guidance Document (GD) on interpretation of data regarding dissolution rate and dispersion stability of nanomaterials in the environment. This GD is aimed as an overarching and accompanying GD to the OECD Test Guideline for dissolution rate of nanomaterials (currently under development by US) and the currently published OECD TG on dispersions stability of nanomaterials in simulated environmental media (TG 318), which was developed under the lead of Germany. The activity to develop such a GD is already included in the WNT POW. The project started in autumn 2017 and will run spring 2020. Aim of the GD under development is to serve as support tool for both the Test Guideline on dispersion stability (OECD TG 318) and the developing OECD TG for dissolution rate of nanomaterials in the environment by providing guidance on the influence of various experimental conditions and materials on the performance and outcomes of these tests and to give support for the interpretation of results towards further fate and eco-toxicological testing or modelling. Furthermore, the GD should give explanation how the method of OECD TG 318 can be used to investigate hetero-agglomeration and to derive an attachment coefficient. A project related international expert group was founded which will support the development of the draft GD. First draft for WNT Expert Group is anticipated for spring 2019.

<https://www.umweltbundesamt.de/en/topics/chemicals/nanotechnology/research-development-projects>

In April 2017, a new research project was launched on appropriate measurement techniques and concepts of particle size and particle size distribution of nanomaterials by UBA. This project addresses the endpoint of particle size and particle size distribution which was a still open activity mentioned in the work plan of the WPMN. The project will run from 2017 to 2020. Goal of the project is the development of an OECD TG on particle size and size distribution for manufactured nanomaterials. In the project various methods will be examined and assessed in theory and experiment under the aspects of practicability, reproducibility and validity. The assessment will indicate if a method needs or can be used without further adaptations. These first assessed methods will be further tested in an international Round-Robin test which is one prerequisite for a draft guideline to be accepted. The project will be pursued under the coordination of BAuA together with the BAM. The focus of BAuA in this project is the development and establishment of test methods for fibres, including nanofibres. The results of the project, including those for spherical like particles by BAM, are basis for drafting a guideline document for size distributions of primary particles and fibres in the size range of around 1-1000 nm. Furthermore, the document will provide recommendation for other shapes. A draft for 1st WNT commenting is anticipated for June 2019. The development of the TG on particles size and size distribution of manufactured nanomaterials is accompanied by an international advisory group taking into account recent progress in relevant European and international research projects as well as standardisation activities of ISO and CEN. In November 2017, a Standard Project Submission Form (SPSF) describing the objectives and procedures of the activity was submitted to OECD WNT for approval.

<https://www.umweltbundesamt.de/en/topics/chemicals/nanotechnology/research-development-projects>

In spring 2018 UBA awarded a survey on the detection of nanomaterials in the different environmental compartments. Content of the survey is the analyses of recent scientific studies and research projects regarding the availability and development of detection method. Furthermore, the survey will provide a gap analysis and deduce short term, midterm and long term actions required for method development and standardisation. The project was awarded to Helmholtz-Zentrum Dresden-Rossendorf e.V. (HZDR) and will run from June 2018 to February 2019.

MSCA – SWE

In addition to Finland-CA project on CLP and nanoforms, Sweden-CA has a project also under the Nordic Chemical Group (NKG) on developing an eTool for NM based on an existing tool called eReach (<http://ereach.dhigroup.com/>), This would help small and middle sized companies deal with NFs. SWE-CA and FIN-CA use the same consultants, i.e. DHI.

If there is interest, Greg can provide more specific info, and/or briefly inform NMEG on this. This is timely now with the vote on the updated REACH annexes.

MSCA – UK

1) The H2020 project PATROLS (Physiologically Anchored Tools for Realistic nanOMaterial hazard aSSessment) started on 1st Jan 2018. The project is led by Professor Shareen Doak at Swansea University, UK and includes a total of 24 partners. The project aims to establish and standardise a battery of next generation physiologically anchored, hazard assessment tools that more

accurately predict adverse human health and environmental effects caused by long-term, low dose ENM exposure to support regulatory risk decision-making. PATROLS will develop: 1) more realistic in vitro 3D lung, gastrointestinal tract and liver models for mechanism-based hazard assessment, which will be anchored against chronic in vivo exposure outcomes and will report on mechanistic endpoints linked to adverse outcome pathways (AOPs). 2) Novel methods to evaluate long-term exposure hazard endpoints in ecologically relevant test systems and organisms, selected according to their position in the food chain; these endpoints will be based on key events associated with AOPs. 3) Robust in silico methods for exposure and dosimetry modelling, as well as in vitro-to-in vivo extrapolation (IVIVE) and hazard prediction.

2) Swansea University has recently published several papers that have highlighted good practice and future developments required to support standardisation of in vitro approaches:

- Burden N, Aschberger K, Chaudhry Q, Clift, MJD, Fowler P, Johnston H, Landsiedel R, Rowland J, Stone V, Doak SH (2017). Aligning nanotoxicology with the 3Rs: What is needed to realise the short, medium and long-term opportunities? *Reg Toxicol Pharmacol*, 91, 257-266.
- Burden N, Aschberger K, Chaudhry Q, Clift, MJD, Doak SH, Fowler P, Johnston H, Landsiedel R, Rowland J, Stone V (2017). The 3Rs as a framework to support a 21st century approach for nanosafety assessment. *Nano Today*, 12, 10-13.
- Wills JW, Summers HD, Hondow N, Soorash A, Meissner KE, White PA, Rees P, Brown AP, Doak SH (2017) Characterising Nanoparticles in Biological Matrices: Tipping Points in Agglomeration State and Cellular Delivery In Vitro. *ACS Nano*, 11 (12), pp 11986–12000 (DOI: 10.1021/acsnano.7b03708).

MSCA - BE

Since April 2017 The Belgian National Metrology institute offers to industry and research the first accredited measurement service for nanoparticles size. FPS Economy, National Standards is accredited (ISO17025) for the measurement of mean nanoparticle diameter and size distribution of single spherical and incompressible nanoparticles measured with atomic force microscope for diameters <200 nm with a best uncertainty of 3 nm.

11. Experience from stakeholder or public dialogues

MSCA - NL

On 17 and 18 April the Dutch Ministry of Infrastructure and Water Management and RIVM organised the international policy conference 'A Future-proof approach to Nanomaterials'. Representatives of the EU Member States and Associated countries, the European Commission, OECD and other international bodies and stakeholders attended the conference. Topics during the conference included adaptation of European regulation, development of test methods, availability of data in databases and anticipating potential risks from early on in the material design processes (Safe by Design approach).

Discussions were based on outcomes of the EU Projects NANoREG and ProSafe, in particular the recommendations laid down in the ProSafe White Paper. During the second day initiatives have been discussed among smaller groups in several rounds and elaborated into nine action plans. Alliances have been created that jointly take responsibility to implement these action plans.

Further information can be found on the website (https://rivm.nl/en/About_RIVM/Mission_and_strategy/International_Affairs/International_Projects/Completed/ProSafe/Policy_Conference_17_18_April_2018). A

report on the results and initiatives as formulated during the conference will be published at the website as well.

12. Any other scientific and technical issue

MSCA - BE

Workshop 'Nano in Belgium': 2nd edition 2018: Occupational health protection

1 October 2018

9:00 – 18:30

Room Storck, FPS Employment, Labour and Social Dialogue

Ernest Blerotstreet 1

1070 Brussels

Following the success of the 1st 'Nano in Belgium' Workshop which was focusing on the interplay between regulation and research, the FPS Employment, Labour and Social Dialogue, the FPS Health, Food Chain Safety and Environment and the FPS Economy, SMEs, Self-Employed and Energy would like to kindly invite interested parties to the 2nd edition of this event.

This edition will be organized by the Belgian EU-OSHA Focal point in the framework of the 2018-19 "Healthy Workplaces Manage Dangerous Substances" campaign that aims to raise awareness of the risks posed by chemicals in the workplace and to promote a culture of risk prevention. Within the large field of chemicals, nanomaterials are a fast expanding group with specific characteristics. This theme will be linked with the state-of-play updates on national and EU-level regulations and the findings from various Belgian research projects. The agenda will be finalized soon.

Contact: nanoevents@environment.belgium.be

Nanoregistry

The first annual report (2016) of the BE nanoregistry has been published on the website www.nanoregistration.be. The full report is available in NL and FR, the summary is available in NL, FR, DE and EN.

MSCA – PL

The Nanosafety Workshop for the Central and Eastern European Region organized by UNITAR and OECD and hosted by Government of Poland took place on 22-23.02.2018 (<http://www.unitar.org/cwm/nanosafety-regional-workshop-central-and-eastern-european-region-poland>). Presentations made at this workshop can be downloaded at this website. The workshop summary report is also available at http://www.unitar.org/cwm/sites/unitar.org.cwm/files/uploads/meeting_summary_nanosafety_cee_final.pdf.

13. General

COM – DG ENV

The adopted **text for revised REACH annexes for nanomaterials** are available on the Commission website (adopted on 26 April 2018):

- text of the updated REACH to address nanoforms of substances:
http://ec.europa.eu/transparency/regcomitology/index.cfm?do=Search.getPDF&ds_id=56122&version=2&AttLang=en&db_number=1&docType=DRAFT_MEASURE
- text of the updated Annexes I, III, VI, VII, VIII, IX, X, XI, and XII:
http://ec.europa.eu/transparency/regcomitology/index.cfm?do=Search.getPDF&ds_id=56122&version=2&AttLang=en&db_number=2&docType=DRAFT_MEASURE

14. EUON

ECHA

- ECHA has prepared new content for the EUON, which will go live by middle of June. This content covers a variety of areas, including nanomaterials in food, cosmetics, medicines, etc.
- The EUON will feature two new databases from the middle of June: NanoData, and eNanoMapper
- The results of the currently ongoing studies will be published in June, and new studies will be launched
- The EUON features a new discussion group on LinkedIn, and a news section that is regularly updated with new content/information.