PROGRAMME

Monday 12 November

16:30-19:30 **Registration**

Tuesday 13 November

MINATEC AUDITORIUM

8:15-8:50 Welcome by the Organizing Committee
François Tardif *(CEA, France)*

Conference opening

(Chair: Georgios Katalagarianakis)

PL0a 8:50-9:10 Innovation perspectives through nanomaterials: the integrated approach at CEA
Frédéric Schuster *(CEA, France)*

PL0b 9:10-9:30 Codes, Standards and Regulations in preparation at World-wide Level
Françoise Roure *(French Department of finance, economy and Industry, France)*

PL0c 9:30-9:50 Regulation, risk and the global nanotechnology workplace
Cassandra Engemann (*UCSB, U.S.A)*

PL0d 9:50-10:10 Are specific regulations for nanomaterials efficient?
Daniel Bernard *(Arkema, France)*

PL0e 10:10-10:30 Innovation Governance: Challenges in the field of Nanotechnologies
Antje Grobe *(University of Stuttgart, Switzerland)*

10:30-11:00 Coffee-break

Session 1: Exposure assessment

(Chair: Derck Brouwer)

1a. Workplace and release studies

PL1 11:00-11:35 Engineered nanomaterials: from source to dose and the role of measurement devices and measurement strategies
Derck Brouwer *(TNO Quality of Life, The Netherlands)*

O1a-1 11:45-12:00 Observatory of nanoaerosol release from electronic household products
Gwi-Nam Bae, S-H Park, S-B Lee *(Korea Institute of Science and Technology, Korea)*

O1a-2 12:00-12:15 Aerosol emission assessment during soldering process
Virginia Gómez, S. Irusta, F. Balas, J. Santamaría *(INA, Spain)*

O1a-3 12:15-12:30 Exposure to aerosols associated with cleanout operations of a reactor producing nanocomposite thin films embedded with silver nanoparticles
Olivier witschger, S. Bau, B. Bianchi, R. Wrobel, V. Matera (*INRS, France)*

O1a-4 12:30-12:45 Characterization of nano-aerosols during thermal imaging of nanopolymer coated plates in a workplace
E. Frijns, P. Berghmans *(VITO NV, Belgium)*

13:00-14:00 Lunch

Session 2: Detection and identification of engineered nanoparticles

(Chair: David Y.H. Pui)

2a. Synthesis, aerosolization, and tracing of nanoparticles

PL2
14:00-14:35 Detection and Identification: Instrumentation and Calibration for Air/Liquid/Surface-borne Engineered Nanoparticles
David Y.H. Pui *(Laboratory University of Minnesota, U.S.A)*

O2a-1
14:45-15:00 Towards the efficient and versatile syntheses of nanomaterials for nanosafety investigation
Aurélien Auger, V. Barthes, N. Wartenberg, S. de Sousa Nobre, L. Golanski, H. Perche, O. Poncelet, P. Capron (*CEA, France)*

O2a-2
15:00-15:15 Metal impurities provide useful tracers for identifying exposures to airborne single-walled carbon nanotube particles released from work-related processes
Pat E. Rasmussen, I. Jayawardene, H. David Gardner, M. Chénier, C. Levesque, J. Niu (*Health Canada, Canada*)

O2a-3
15:15-15:30 Strategies for radiolabelling of carbon nanoparticles
Stefan Schymura, I. Cydzik, A. Bulgheroni, F. Simonelli, U. Holzwarth, J. Kozempel, K. Franke, N. Gibson *(HZDR, Institute of Resource Ecology, Germany)*

O2a-4
15:30-15:45 Generation and characterization of dry nanopowders and carbon nanotubes using a shaker-atomizer type disperser
Shi-Nian Uang, S-M. Hung, C-J. Tsai (*Institute of Occupational Safety and Health,Taiwan)*

O2a-5
15:45-16:00 Carbon nanotubes suspension study by vortex shaker: sampling and mass analysis
Aurélien Ustache, O. Le Bihan, D. Bernard, E. Peyret, O. Aguerre-Chariol *(INERIS, France)*

16:00-16:30 Coffee-break

Session 6/7: Secure industrial production and protection technology

(Chair: Luana Golanski)

6a.Secure industrial production

PL6
16:30-17:05
Developments in nano protection
Luana Golanski, A. Guiot, S. Motellier, S. Clavaguera, C. Brouard, N. Wartenberg, H. Perche, F. Tardif, P. Capron, S. Artous, C.Durand, V. Mossuz, C. Desvergnes, M. Dubosson *(CEA, France)*

O6a-1
17:15-17:30
Towards large scale aligned carbon nanotube composites: an industrial safe-by-design and sustainable approach
Pascal Boulanger, L. Belkadi, M. Pinault, J. Descarpentries, M.P. NGhiem C. Reynaud, M. Mayne-L'Hermite *(CEA, France)*

O6a-2
17:30-17:45
Detection and identification of airborne multi-walled carbon nanotubes in arc discharge production
Christina Isaxon, L. Ludvigsson, P. Nilsson, M. Hedmer, H. Tinnerberg, Maria E. Messing, J. Rissler, V. Skaug, M. Bohgard, J. Pagels *(Lund University,Sweden)*

O6a-3
17:45-18:00
Plasma polymerized coating as a protective layer of carbon nanotubes grafted on carbon fibers
Antinéa Einig, P. Rumeau, J. Maguin, Y. Magga, S. Desrousseaux, J.Bai (*Ecole Centrale Paris, France)*

O6a-4
18:00-18:15
Silica-coating as protective shell for the risk management of nanoparticles
Davide Gardini, M. Blosi, C. Delpivo, S. Ortelli, A. Costa *(CNR-ISTEC,Italy)*

O6a-5
18:15-18:30
Pilot-scale platform for nanopowder synthesis by laser/plasma hybrid processes
Yann Leconte, A. Quinsac, D. Porterat, O. Sublemontier, N. Herlin-Boime, C. Reynaud, J-P. Dufour, L. Boufendi, F. Schuster *(CEA, France)*

Panel discussion: Governance

(Moderator: Françoise Roure)

18:30-19:30 **Governance: what will change in the near future regarding the different actors: managers, workers and safety managers?**
Françoise Roure (*French Department of finance, economy and Industry, France*), Elvio Mantovani *(Nanotec),* Antje Grobe *(University of Stuttgart)*

18:30-21:00 Poster Exhibition/Evening event

ROOM B

Session 1: Exposure assessment

(Co-chair: Catherine Durand)

1b. Methodology

O1b-1 14:45-15:00
A modular tool for analyzing cascade impactors data to improve exposure assessment to airborne nanomaterials
Sébastien Bau, O. Witschger *(INRS, France)*

O1b-2 15:00-15:15
Exploratory study on two statistical methods to analyse time resolved data obtained during nanomaterial exposure measurements
Frédéric Clerc, G.H. Njiki-Menga, O. Witschger (*INRS, France*)

O1b-3 15:15-15:30
Assessment of nanoparticle agglomeration energy via rheological routes: a key parameter for control banding exposure assessment
François Henry, J. Bouillard, A. Vignes, O. Dufaud, L. Perrin, P. Marchal *(INERIS, France)*

O1b-4 15:30-15:45
Approach to the exposure assessment of MWCNT by considering size distribution and oxidation temperature of elemental carbon
Mariko Ono-Ogasawara, M. Takaya, H. kubota, Y. shinohara, S. koda, E. Akiba, S. Tsuruoka, T. Myojo (*Japan national institute of occupational safety and health, Japan)*

O1b-5 15:45-16:00
Is exhaled breath condensate representative of deep lung and suitable for exposure assessment to nanoparticles?
Muriel Dubosson, C. Desvergne, V. Mossuz, M. Cottier J. Pourchez, J-M. Vergnon *(CEA, France)*

16:00-16:30 Coffee-break

Session 1: Exposure assessment

(Co-chair: Olivier Witchger)

1c. Tools and non-occupational exposure

O1c-1 17:15-17:30
Pro et con analysis of occupational exposure assessment tools and concepts for nanomaterials
Biase Liguori, S. F. Hansen, K. Alstrup Jensen, A. Baun (*Technical University of Denmark, Denmark)*

O1c-2 17:30-17:45
Urban air pollution of Ostrava region by nanoparticles
Zdeňka Kaličáková, P. Danihelka, K. Lach, V. Míčka., L. Karel *(VŠB–Technical University of Ostrava, Institute of Public Healt Ostrava, Czech Republic)*

O1c-3 17:45-18:00
Nanoproduct simplified direct exposure assessment toolkit
Yves Sicard, F. Tardif, J. Vendel *(CEA, France)*

18:30-21:00 Poster exhibition/ Evening event

ROOM C

Session 13: Satellite meeting

13a. SCAFFOLD

11:45- 13-00

13b. TRIMATEC

(Chair: Claudine Colin)

O13b-1 14:00-14:20 Trimatec competitiveness cluster: management of controlled environment for nano fields
Claudine Colin *(TRIMATEC, France)*

O13b-2 14:20-14:40 Treatment of liquide effluents containing nanomatérials
Jérôme Labille, J-Y. Bottero, J. Rose *(CEREGE, France)*

O13b-3 14:40-15:00 Safe ecodesign and sustainable research Applied to Nanomaterial Development (SERENADE consortium)
Jean-Yves Bottero, J. Rose, A. Masion (*CEREGE, France)*

O13b-4 15:00-15:20 Synthesis of active TiO_2 nanopowders and thin layers using supercritical carbon dioxide processes - Application to effluent treatment
Audrey Hertz, J. Cruiz, L. Schrive, Y. Barre, F. Charton *(CEA, France)*

O13b-5 15:20-15:40 Examples of system engineering for nanoparticles handling and studies.
Pierre Bombardier *(FAURE QEI, France)*

O13b-6 15:40-16:00 Personal Protective Equipment against Nanoparticle-Selection evaluation and future standard to be built.
Samuel Ozil *(Honeywell Protective Clothing, France)*

16:00-16:30 Coffee-break

Session 2: Detection

(Co-chair: Charles Motzkus)

2b. Nanoparticles for biological application

O2b-1 17:15-17:30 Study of Nanoparticles localization in organs and tissues of rats after intraperitoneal and intragastrical administration
Boris B. Dzantiev, S.G. Klochkov, O. D. Hendrickson, A. V. Zherdev, S.O. Bachurin *(A.N. Bach Institute of Biochemisty, Russia)*

O2b-2
17:30-17:45
Risk Assessment of Released cellulose nanocrystals–mimicking inhalatory exposure
Carola Endes, S. Mueller, O. Schmid, D. Vanhecke, S. Camarero Espinosa, E. Johan Foster, A. Petri-Fink, B. Rothen-Rutishauser, C. Weder, Martin J.D. Clift *(University of Fribourg, Germany)*

O2b-3
17:45-18:00
Colloidaly stable, polymer encapsulated quantum dots for biological applications
Isaac Ojea-Jimenez, J. Piella, P. Mulvaney, V. F. Puntes (*Catalan Institute of Nanotechnology, Spain)*

O2b-4
18:00-18:15
Membrane model as a new methodology for nanotoxicology Investigation
Juliana Cancino, T. M. Uemura, Paula Lins, P. B. Miranda, V. Zucolotto *(University of São Paulo, Brazil)*

O2b-5
18:15-18:30
Engineered nanomaterial quantification in complex matrices: PIXE case studies
Omar Lozano, J. Mejia, J. Laloy, O. Toussaint, J. Dogné, S. Lucas (*Research Centre for the Physics of Matter and Radiation, France)*

18:3019:30
Panel discussion: governance

18:30-21:00
Poster exhibition/Evening event: governance

Posters session: 18:30-21:00

P1b-1 Occupational exposure assessment facility at Vito
Evelien Frijns, I. Nelissen, P. Berghmans *(Vito nv, Belgium)*

P1b-2 Risk assessment of nanomaterials
Javad Malakootikhah, A. A. Razaghi *(University of Tehran, Iran)*

P1c-1 Application of current available models for the exposure assessment of nanoparticles from consumer products
Anja köth, A.Luch, and M. Enrico Götz
(Federal institute for risk assessment ,Germany)

P1c-2 Development of a nano exposure and contextual information database (NECID)
Wouter fransman, J. Pelzer, W. Stoppelmann, D. Brouwer, I. Koponen, D. Bard, O. Witschger, A. Zugasti Makazaga, E. Jankowska, T. Kanerva, M. Berges
(TNO, The Netherlands)

P2a-1 Effective and selective extraction of silver nanoparticles from environmental water by an ionic exchange resin
Lingxiangyu Li, K. Leopold, M. Schuster
(Technische universität München, Germany)

P2a-2 CNT-detect: personal sampler and corresponding portable reading device
Markus Keller, G. Kreck, Y. Holzapfel *(Fraunhofer institute for manufacturing engineering and automation, Germany)*

P2a-3 Application of enzyme immunoassay for fullerene c_{60} detection in rats' organs
Olga d. Hendrickson, N. Fedyunina, A. Zherdev, P.Sveshnikov, B. Dzantiev
(Russian Academy of Sciences, Russia)

P2a-4 New perspectives in manufactured nanoparticles characterisation: over the size limits
Gaëtane Lespes &C. Henault *(University of Pau, France)*

P2a-5 Quantitation of carbon nanotubes on filters using a laser-induced breakdown spectroscopy system. Laboratory and onsite measurements
J.-B.Sirven, C. Quéré, S. Motellier, A. Guiot, F. Gensdarmes *(CEA, France)*

P2a-6 Differentiated anthropogenic ambient particle size spectra with a new U-SMPS set-up
Jürgen Spielvogel, M. Weiss *(Ppalas® gmbh, Germany)*

P2a-7 Nanoparticle dosimeter for exposure measurement and tem sampling
Martin Fierz, D. Meier, P. Steigmeier and H. Burtscher
(Naneos particle solutions gmbh, Switzerland)

P2a-8 Particle sampling by tem grid filtration
O.L.C. Le bihan, B. R'Mili, C. Dutouquet, O. Aguerre-Charriol, E. Frejafon
(INERIS, France)

P2a-9 Aerosol size distribution estimation and associated uncertainty for measurement with a SMPS
Loic Coquelin, N. Fischer, T. Mace, C. Motzkus, F. Gensdarmes, G. Fleury, L. Le Brusquet *(INE, France)*

P2a-10 Radiolabelling of engineered silver and titania nanoparticles as a tool for sensitive detection of nanoparticle release from surface coatings
Heike Hildebrand, K. Franke, N. Gibson, I. Cydzik, F. Simonelli, A. Bulgheroni, U. Holzwarth, E. Bilz, A. Freyer *(Helmholtz-Zentrum, Germany)*

P2a-11 Comparison of methodolgies to measure number based size distribution on polydisperse nanoparticles
Samuel Legros, V. Barthes, A. Guiot, S. Motellier, P. Capron, L. Golanski *(CEA, France)*

P2a-12 Non destructive and fast method for the detection of superparamagnetic iron oxide nanoparticles (SPION) biodistribution based on their magnetic properties
Lionel Maurizi, V. Bernau, U. Sakulkhu, A. Gramoun, G. Coullerez, H. Hofmann *(Ecole polytechnique fédérale de Lausanne, Switzerland)*

P3a-1 Silver doped hydroxyapatite composites for long-term bone teraphia
Olena Ivashchenko, I. Uvarova, N. Ulianchych
(National Academy of Sciences of Ukraine, Ukraine)

P3a-2 Cytotoxic effects of polyethylcyanoacrylate/chitosan nanoparticles
Brenda Cecilia Gasca Zacarías, R. Díaz Torres, P. Ramírez Noguera
(National University of Mexico, México)

P3a-3 Reactivity of nanoaluminum in physiological solutions
Karepina E.E., G.A.Yu *(Tomsk Polytechnic University, Russia)*

P3a-4 Determination of SPIONS nanoparticles biosafety: problems of interferences with cytotoxic assays
Lyes Tabet, L. Barhoumi, M. Welman, L. Ben Taher, L. Smiri, H. Abdelmelek, K. Maghni (*Research Center HSCM, Université de Montréal, Canada)*

P3a-5 Renal metallothionein expression by nano zinc particles in cadmium-treated rats
Mohammad Kazem Koohi, F. Asadi, M. Abas Ali Pour Kabire, G. Sadeghi Hashtjin, M. Hejazy *(University of Tehran, Iran)*

P3a-6 Differences in nanotoxicity responses between human bronchial smooth muscle cells (HBSMC) of normal and asthmatic subjects following exposure to quantum dots (QDS) nanoparticles
Lyes Tabet, M. Welman, L. Castellanos, K. Maghni.(*Sacre-Coeur Hospital of Montreal, Canada)*

P3a-7 Comparative evaluation of cytotoxicity and DNA damage induction by carbon nanotubes, cerium dioxide, titanium dioxide and silver nanoparticles in mammalian cells
Leonardo Pereira Franchi, T. AJ Souza, E. Y Matsubara, J M Rosolen, C. Satie Takahashi, CS *(Department of Genetics, FMRP-USP, Brazil)*

P3a-8 Genotoxicity in RTG-2 fish cell line upon exposure to different dimensions of silver nanoparticles detected by the comet assay
Mahmoud Ghobadi, H. Farahmand, A. Mirjalili *(University of Tehran, Iran)*

P3a-9 Two "faces" of carbon nanotubes
Aneta Fraczek-Szczypta, E. Menaszek, S. Blazewicz
(University of Science and Technology, Poland)

P3a-10 Study of biocompatible and hemocompatible properties of amorphous hydrogenated carbon coatings produced by pulsed magnetron discharge.
Julie Laloy, C. Lopez-Garcia, J. Colaux, F. Mullier, M. Fransolet, C. Michiels, JM Dogné & S. Lucas *(Department of Pharmacy, NAMEDIC, NTHC, Belgium)*

P3a-11 Effect of nano-filler particles and methacrylate monomers, separate and in combination, on the secretion of cytokines
V Ansteinsson, J.T. Samuelsen, J.E. Dahl and N.R. Gjerdet
(*University of Bergen, Norway*)

P3a-12 *In vivo* genotoxicity of titanium dioxide nanoparticle
Charlène Relier, F. Robidel, B. Trouiller *(INERIS, France)*

P3a-13 Insights into titanium dioxide nanoparticle and fine genotoxicity in human lymphocytes
Andrea Zijno, C. Andreoli, F. Barone, P. Degan, B. De Berardis, G. Leter, R. Crebelli *(Istituto Superiore di Sanità, Roma)*

P3a-14 Highly concentrated silica nanoparticles affect the activities of neural stem cell line
Kouki Fujioka, S. Hanada, Y. Inoue, F. Kanaya, K.Shiraishi, Y. Manome (*The Jikei University School of Medicine, Japan)*

P3a-15 Toxicological influence of giving the silica nanoparticles on cultured central nerves cells
Yuriko Inoue, K. Fujioka, S. Hanada, F.Kanaya, K. Shiraishi, Y.Manome, M.Takayanagi *(Toho University, Japan)*

P3a-16 Effect of surface modification on zn ions and ros production of ZnO nanoparticles
Mu Yao Guo, Y.Hang Leung, Alan M. C. Ng, Fang Zhou Liu, Yip Hang Ng, Aleksandra B. Djurišić, Wai Kin Chan *(The University of Hong Kong, Hong Kong*)

P3a-17 Cytotoxicity and genotoxicity of silver nanoparticles with different sizes in mammalian cells
Tiago A. Jorge de Souza, L. Pereira Franchi and C. Satie Takahashi,
(Department of Genetics, FMRP-USP, Brazil)

P3a-18 *In vivo* toxicity of enoxaparin encapsulated in mucoadhesive nanoparticles: topical application in a wound healing model
S.C Huber, P.D. Marcato, N. Durán, J.M Annichino-Bizzacchi *(Unicamp, Campinas, Brazil)*

P3a-19 Phytotoxic and genotoxic effects of PVP coated ZnO nanoparticles on garlic

(allium sativum l.) root tip cells
Changshan Xu, K. Eit, M. Wang, Y. Li, B. Sun,
(*Centre for Advanced Optoelectronic Functional Materials Research, Northeast Normal University, P. R. China)*

P3a-20 Internalisation of aluminium oxide nanoparticles into human cells: impact of particle size on the quantitative uptake
Steffi Böhme, H-J. Stärk, T. Meissner, D. Kühnel, W. Busch *(UFZ - Helmholtz-Centre for Environmental Research, Germany)*

P3a-21 Immunological assays as an opportunity of assessment of health risks of airborne particle mixture including nanoparticles
Táňa Brzicová, I. Lochman, P. Danihelka, A. Lochmanová, K. Lach, V. Mička (*VŠB –Faculty of Safety Engineering,* Czech Republic*)*

P3a-22 Altered characteristics of differently functionalized silica nanoparticles in various environments with possible implications for biological impacts
Emilia Izak, M. Voetz, S. Eiden, A. Duschl and V.F. Puntes *(Bayer Technology Services GmbH, Germany)*

P3a-23 Enhanced antiproliferation of cancer cells by biocompatible multifunctional microbial exopolysaccharide stabilized magnetic nanoparticles
Balasubramanian Sivakumar, R. Girija Aswathy, R. Sreejith, Y. Nagaoka, M. Suzuki, Y. Yoshida, T. Maekawa, D. Nair Sakthikumar (*Bio Nano Electronics Research Center Graduate School of Interdisciplinary New Science Toyo University,Japan)*

P3a-24 Copper(ii) oxide nanoparticles penetrate into HEPG2 CELLS, exert cytotoxicity via oxidative stress and induce proinflammatory response
Jean-Pascal Piret, D.Jacques, J.-N. Audinot, J. Mejia, E. Boilan, F. Noël, M. Fransolet, C.Demazy, S. Lucas, C. Saout and O. Toussaint (*URBC, Namur Nanosafety Center (NNC), Belgium)*

P3a-25 Electrical measurement of the interactions between gold nanoparticles and biological membrane
Young-Rok Kim, M-C. Lim, K-P. Lee (*Department of Food Science and Biotechnology, Kyung Hee University, Republic of Korea)*

P3a-26 Metal homeostasis interferences in hepatocytes cells treated by CuO nanoparticles
Martine Cuillel, M. Chevallet, C. Fauquant, P. Charbonnier, D. Cassio, I. Pignot-Paintrand, E. Mintz and I. Michaud-Soret *(CNRS CEA, France)*

P3a-27 Transnational access at vito through the fp7 qnano research infrastructure
Evelien Frijns, I. Mertens, K. Tirez, G. Vanermen, S. Voorspoels, R. Persoons, S. Mullens, I. Nelissen *(VITO NV, Belgium)*

P3a-28 Source, activity and toxicity of nanomaterials for biological systems
Ghassem Amoabediny, J. Malakootikhah, I. Alahdadi, F. Yazdian
(University of Tehran, Iran)

P3a-29 TiO_2 nanoparticles and bulk material stimulate human peripheral blood mononuclear cells
Dietmar Fuchs, S. Schroecksnadel, N. Herlin, M. Carriere,

(Biocenter, Innsbruck Medical University, Austria)

P3a-30 In vitro testing of nanoparticles dissolution
Anna Godymchuk, E.Yunda *(Tomsk Polytechnic University, Russian Federation)*

P3a-31 Toxicokinetics of zinc oxide nanoparticles in rats
Soo-Jin Choi, Hae-Eun Chung, Jin Yu, Miri Baek, Jeong-A Lee, Min-Seok Kim, Su-Hyon Kim, Eun-Ho Maeng*(Department of Food Science and Technology, Seoul Women's University, South Korea)*

P3a-32 Effects of physicochemical properties, exposure doses and cell types on cytotoxicity of zinc oxide nanoparticles
Yan (Mary) Zhang, Kathy C. Nguyen, David E. Lefebvre, Philip S. Shwed, Jennifer Crosthwait, Genevieve S. Bondy, Azam F. Tayabali *(Environmental Health Sciences and Research Bureau, Health Canada, Canada)*

P3a-33 Proteomic study of the molecular responses of mouse macrophages to copper oxide nanoparticles
Thierry Rabilloud, S. Triboulet, C. Aude-Garcia, M. Carrière, H.Diemer, F. Proamer, A. Habert, M. Chevallet, V. Collin-Faure, D. Hanau, A. Van Dorsselaer, N. Herlin-Boime *(CNRS, France)*

P3a-34 Toxicological evaluation of tic nanoparticles orally administered in a rat model
Julie Laloy, Omar Lozano, Lütfiye Alpan, Jorge Mejia, Olivier Toussaint, Jean-Michel Dogné & Stéphane Lucas *(NNC, NARILIS, University of Namur, NAMEDIC Belgium)*

P3a-35 *In vitro* toxicity assessment of gold nanoparticles in biological media
Sadequa SULTANA, N. Djaker, M.Salerno, S. Boca, S. Astilean, H. Hlawaty, M.Lamy De La Chapelle *(Université Paris 13, France)*

P3a-36 Comparison cytotoxic potency of zinc oxide nanoparticles on five cellular lines.
Lidia Zapór, M. Szewczyńska (*Central Institute for Labour Protection – National Research Institute, Poland)*

P3a-37 Respiratory effects of repeated instillations of iron, manganese, and chromium oxides nanoparticles in mice
Mirlande Présumé, A. Simon-Deckers, G. Beaune, O. Durupthy, J. Boczkowski, S. Lanone, *(INSERM, France)*

P3a-38 Morphological and cytohistochemical evaluation of renal effects of cadmium-doped silica nanoparticles given intratracheally to rat.
Teresa Coccini, E. Roda, S. Barni, L.Manzo (*Toxicology Division, Salvatore Maugeri Foundation IRCCS, and European Centre for Nanomedicine, University of Pavia, Italy)*

P3a-39 Titanium oxide nanoparticles toxicity causes functionality and dna damage in buffalo (bubalus bubalis) sperm *in vitro.*
Gautam Kaul and Kamlesh Pawar *(Biochemistry Department, National Dairy Research Institute, Government of India Lab., India)*

P3a-40 Cytotoxicity and genotoxicity of zinc oxide nanoparticles in human neuroblastoma cells
Carla Costa, V. Valdiglesias, G. Kılıç, B. Laffon, J. P. Teixeira *(Portuguese*

National Institute of Health, Portugal)

P3a-41 Innovative nano-qsar technology for early detection of nanoparticles' toxicity
Natalia Novoselska, V. Kuzmin, A. Artemenko *(I.I.Mechnikov Odessa National University, Ukraine)*

P3a-42 In vitro toxicity of carbon nanotubes: impact of acid functionalization
Agathe Figarol, J. Pourchez, D. Boudard, D. Bernache-Assolant, M. Cottier, and P. Grosseau *(Ecole Nationale Supérieure des Mines, LINA, France)*

P3a-43 Role of metal oxide nanoparticle in welder's lung injury
A. Simon-Deckers, P. Andujar, B. Fayard, B. Clin, J. Boczkowski, J-C. Pairon, J. Doucet, F. Gallateau-Sallé, S. Lanone *(INSERM, CNRS, France)*

P3a-44 MTT and LDH interlaboratory assays for assessing in vitro cytotoxicity of engineered nanomaterials
Carla Costa, João Paulo Teixeira, Alok Dhawan, Alok Pandey, Blanca Laffon, Juan Fernandez Tajes, Vanessa Valdiglesias, Dietmar Fuchs, Sebastian Schroecksnadel, Marie Carrière, Stefano Bonassi, Ayse Basak Engin, Erdem Coskun, Bensu Karahalil, Nathalie Herlin-Boime
(*Environmental Health Dept., National Institute of Health Dr. Ricardo Jorge, Porto, Portugal)*

P3a-45 Understanding the impact of np physicochemical properties in biological fluid and their resultant cellular interaction *in vitro*
Vera Hirsch, C. Kinnear, B. Rothen-Rutishauser, Martin J. D. Clift, A. Petri-Fink (*Adolphe Merkle Institute, University of Fribourg, Switzerland*)

P3a-46 Biocompatibility evaluation of medical devices incorporating nanomaterials
Sylvie Framery *(NAMSA Europe, France)*

P3a-47 Genotoxicity and proinflammatory effects of nanosilica via oral route: *in vitro* and *in vivo* approaches
Adeline Tarantini, K. Hogeveen, S. Huet, G. Jarry, R. Lanceleur, L. Le Hegarat, A. Mourot, M. Poul, J-G. Rolland, V. Fessard. *(Anses, France)*

P3a-48 In vitro evaluation of cellular response induced by ZnO nanoparticles, zinc ions and non-nano ZnO in fish cells
Mar Babin, C. del Rio, José L. Pareja, C. García-Gómez, D. Fernández *(INIA. Department of Environment, Spain)*

P3a-49 Genotoxicity of cerium dioxide nanoparticles (CeO_2 nps) on mice oocyte.
Raphaël Rollais, M. Auffan, J. Perrin, V. Tassistro, T. Orsière, A. Botta, J. Rose, B. Courbiere (*Institut Méditerranéen de Biodiversité et d'Ecologie, Faculté de Médecine de l'Université d'Aix-Marseille, France)*

P3a-50 Effects of amorphous silica nanoparticles on human alveolar epithelial cells
Mathilde Delaval, R. Guadagnini, S. Vranic, F. Marano, A. Baeza-Squiban, S. Boland *(Sorbonne Paris Cité,CNRS France).*

P3a-52 How do carbide enm dispersions evolve in an *in vitro* assessment?
Jorge Mejia, O. Lozano, J-P. Piret, D. Jacques, C. Saout, J.M. Dogné, O. Toussaint, S. Lucas, *(Research Centre for the Physics of Matter and Radiation, Laboratory of Biochemistry and Cellular Biology (URBC), Belgium)*

P3a-53 Stability of SiC and TiC nanoparticles during *in vitro* assessment
Jorge Mejia, V. Valembois, J-P. Piret, C. Saout, Jean-Michel Dogné, Olivier Toussaint, Stéphane Lucas *(Research Centre for the Physics of Matter and Radiation, Laboratory of Biochemistry and Cellular Belgium)*

P3a-54 Cytotoxicity of MWCNT and SiO_2 nanoparticles at different stages of their life cycle as nanocomposite fillers
Ezequiel Mas del Molino, Gemma Vilar, G. Janer, E. Fernández-Rosas, S. Vázquez-Campos *(LEITAT Technological Center, SPAIN)*

P3a-55 Iron oxide nanoparticles show no toxicity in terms of comete assay in lymphocytes: a promising vehicle for nitric oxide releasing nanocarrier in biomedical applications
R. de Lima, J. Luiz Oliveira, P. Sayuri Kaneko Murakami, M. A. M. Molina, R. Itri, P. Haddad, Amedea B. Seabra *(Universidade de Sorocaba, Brazil)*

P3a-55 Cytotoxicity and genotoxicity of biogenic silver nanoparticles
R. De Lima, D. Ballottin, Priscyla D. Marcato, L. Tasic, Nelson Durán (*Osasco University,Brazil)*

P3a-56 Biocompatibility and cytotoxicity study of nanophotonic contact lens material
Marija Tomic, J. Muncan, D. Stamenkovic, M. Jokanović, L. Matija *(Faculty of Mechanical Engineering, University of Belgrade, Serbia)*

P3a-57 Nanoparticles in paints; a new strategy to protect façades and surfaces?
Jean-Pierre Kaiser, L. Diener and P. Wick (*EMPA, Switzerland)*

P3a-58 Pulmonary toxicity after inhalation of silicon carbide nanoparticles in rat.
Julie Laloy, O. Lozano, L. Alpan, O. Toussaint, B. Masereel, J-M. Dogné & S.Lucas (*NNC, NARILIS, University of Namur, NAMEDIC, NTHC Belgium)*

P3a-59 Development and validation of a whole-body inhalation exposure model for the exposition of rats to nanoparticles aerosol
Julie Laloy, O. Lozano, L. Alpan, O.Toussaint, S. Rolin, B. Masereel & S. Lucas (*NNC, NARILIS, University of Namur, NAMEDIC, NTHC Belgium)*

P3a-60 Functionalized double walled carbon nanotubes (DWCNTS) for targeted drug release
T. Somanathan, N. Gokulakrishnan, *(Vels University, Chennai, India)*

P3a-61 Biodistribution studies on nanoparticles are so far of limited use for PBPK modeling
Gunnar Johanson, U. Carlander *(Karolinska Institutet,Sweden)*

P4a-1 Evaluation of toxicity of the nanoscale materials for mammalians and environment
Rostyslav Stoika, N. Boyko, Y. Senkiv, Y. Shlyakhtina, R. Panchuk, R. Bilyy, Y. Filyak, Y. Kit, N. Skorohyd, O. Klyuchivska, H. Falfushinska, L. Gnatyshyna, O. Stoliar, A. Zaichenko, N. Mitina, A. Ryabceva.

(Institute of Cell Biology, Ukraine)

P4a-2 Metal oxide nanoparticle transport in porous media – an analysis about (un)certainties in environmental research
Ilona Heidmann *(University of Koblenz-Landau, Germany)*

P4a-3 Assessing the heteroaggregation of manufactured nanoparticles with naturally occuring colloids in a typical surface water
Jérôme Labille, A. Praetorius, C. Harns, J-Y. Bottero, J. Brant, M. Scheringer (*Aix-Marseille Université, CNRS, IRD, CEREGE, France)*

P4a-4 Potential safety implications of nanoformulation of agrochemicals in crops production
Haixin Cui, X. Zhao *(The Chinese Academy of Agricultural Sciences, China*)

P4b-1- Environmental dissemination of silver nanoparticles: which impact on crops?
Camille Larue, L. Cécillon, H. Castillo-Michel, S. Sophie, J. Bourguignon, M.Carrière, S. Bureau, V. Magnin, G. Sarret*(Isterre, UMR 5275, CNRS and Univ. J. Fourier, France)*

P4b-2- Bio-interactions between proteins and CeO_2-nps with similar hydrodynamic radius
Françoise Rollin-Genetet, E. Artells, C. Seidel, W. Liu, J. Rose, A.Thiéry, C. Vidaud *(CEA, France*)

P4b-3 Carbon nanotubes enhanced the lead toxicity on the freshwater fish
Diego Stéfani T. Martinez, Oswaldo L. Alves and E. Barbieri *(University of Campinas – UNICAMP, Brazil)*

P4b-4 Colloidal stability of modified carbon nanotubes
Stefan Schymura, K. Franke *(HZDR, Institute of Resource Ecology, Germany)*

P4c-1 Behavioural responses of *hediste diversicolor* (polycheta)
to Ag, CdS, OR CuO nanoparticles using the multispecies freshwater biomonitor® (MFB)
Hanane Perrein-Ettajani, P. Emmanuel Buffet, P. Wu, Douglas Gilliland, P.Reip, E. Valsami-Jones, C. Mouneyrac *(LUNAM université, UCO, MMS, France)*

P4c-2 Combined effect of ZnO nanoparticles on zebrafish early development
Eugene Krysanov, T. Demidova *(Russian Academy of Sciences, Russia)*

P4c-3 Effect of metal oxide nanoparticles on embryotoxicity of doxorubicin
Tatiana Demidova, E. Krysanov *(Russian Academy of Sciences, Russia)*

P4c-4 Evaluation of multi walled carbon nanotubes ecotoxicology using standardized procedures on aquatic organisms
Florence Mouchet, C.Gancet, E. Pinelli, A.Perrault, F.Bourdiol, E.Flahaut, L. Gauthier, J-C. Boutonnet (*CNRS UPS INPT, NAUTILE, Laboratoires ecolab/CIRIMAT/GRL, France)*

P4c-5 Adverse effect of surface modified nanoparticles on the aquiatic environment
Younjung Jung, J-sung Ra, and S. Kim (*KIST-Europe, Campus E, Germany)*

P4c-6 Application of mara eco-toxicity test system to nano-safety assessment
Y. Jung, Jin-sung Ra, and S.Kim (*KIST-Europe, Campus E, Germany)*

P4c-7 Acute aquatic toxicity of photoactive TiO_2 nanoparticles anchored on kaolinite matrix to freshwater green algae
Kristina Čabanová, P. Peikertová, V. Matějka, J.Kukutschová *(VŠB – Technical University of Ostrava, Czech Republic*)

P4c-8 Monitoring technique for the acute effect of TiO_2 nanoparticles from the behaviour of rice fish *orizias latipes* in vivo.
Masaru Irie, K. Kosuge, K.Shida, M.Kubo-Irie, .Takeda(*Waseda Univ, Japan)*

P4c-9 Antifungal and antibacterial activities of silver nanoparticles
Mohd Faiyaz Anwar, D. Yadav, R. Arora, J.Chandara, M. Samim *(Department of Chemistry, Jamia Hamdard University, India)*

P5a-1 Carbon nanotubes sorbents and their potential risks to aquatic organisms
Daniela Plachá, A. Matlochová, K. Čabanová, P.Peikertová *(VŠB-Technical University of Ostrava, Czech Republic)*

P5a-2 Ecologicaly friendly intermatrix synthesis of polymer stabilized silver nanocomposites: dealing with nanomaterial release.
Julio Bastos-Arrieta, M. Muñoz, Dmitri N Muraviev, P. Ruiz *(Autonomous University of Barcelona, Spain)*

P5a-3 Characterization of nanoparticulate emissions from the incineration of wastes containing manufactured nanomaterials
Dinh-Trinh Tran, D. Fleury, D. Venditti, S. Durecu, A. Joubert, G. Ounoughene, E. Fiani, T. meunier, O. Le Bihan, L. Le coq (*INERIS, Ecole des mines de Nantes, France)*

P5a-4 Investigation of nanoparticle release from uv-curable polymeric nanocomposites
A.Freyer, E. Bilz, H. Hildebrand, K. Franke, R. Mehnert, E. Mai, (*Leibniz Institute for Surface Modification, Germany)*

P5a-5 Characterization of released particles during abrasion test of nano-charged construction materials
C. Bressot, O. Aguerre-chariol, A. Plassais, F. Rousseau,C. Haehnel, O. Le Bihan (INERIS, France)

P5a-6 Release of nanomaterials from paint waste
Stefano zuin, M. Gaiani, A. ferrari, L. Golanski, F. Tardif *(Venice Research Consortium, Italy)*

P5a-7 Potential release of carbon nanotubes from cnt composites during grinding process
Isamu ogura, M. Kotake, M. Shigeta, M. Uejima, K. Saito, N. Hashimoto, A. kishimoto, *(national institute of advanced industrial science and technology (aist) technology research association for single wall carbon nanotubes, Japan)*

P5a-8 Nanomaterials for controlled drug delivery system
T. Somanthan *(Vels university, india)*

P6a-1 Release characteristics of single-wall carbon nanotubes during manufacturing and handling
Isamu Ogura, M. Kotake, Nao Hashimoto, K. Gotoh, A. Kishimoto, *(National Institute of Advanced Industrial Science and Technology (AIST), Technology Research Association for Single Wall Carbon Nanotubes (TASC), Japan)*

P6a-2 Towards a nanosecured plateform to assess risks along the industrial lifecycle of nanomaterials
Dominique Fleury, E. Frejafon, B. Debray, O. Aguerre-Chariol, A. Vignes and J. Bouillard *(INERIS, France)*

P6a-3 Mapping the use of nanoparticles in Quebec's industries and research laboratories
Claude Emond, Claude Ostiguy, Inès Dossa, Yasmina Malki, Chantale Boily, David Roughley, Anton Plavski et Charles-Anica Endo (*University of Montreal, Department of Environmental and Occupational Health Department, Canada)*

P8a-1 Life cycle and destination of silver nanoparticles in environment
Ghassem Amoabediny, I. Alahdadi, J. Malakootikhah *(University of Tehran, Iran)*

P9a-1 Towards nanoresponsibility
Dorothée Benoit Browaeys, Jean-Jacques Perrier *(VivAgora, France)*

P9a-2 Nanosafety - risk governance of manufactured nanoparticles -- challenges of substance regulation under scientific uncertainty
Stefanie B. Seitz, J.Jahnel, and T. Fleischer *(Karlsruhe Institute of Technology (KIT), Germany)*

Wednesday 14 November

MINATEC AUDITORIUM

Session 3: Toxicology

(Chair: Günter Oberdörster)

3a. Nanoparticle biotransformation and degradation

PL3 8:00-8:35
Concepts of safety assessment of engineered nanomaterials (ENM)
Günter Oberdörster *(University of Rochester, U.S.A.)*

O3a-1 8:45-9:00
How do oxide nanomaterial dispersions evolve in an in vitro assessment?
Omar Lozano, J. Mejia, J-P. Piret, D.Jacques, C.Saout, J-M. Dogné, O. Toussaint, S. Lucas (*Research Centre for the Physics of Matter and Radiation, Belgium)*

O3a-2 9:00-9:15
Interaction of fibrinogen and albumin with titanium dioxyde nanoparticles of different crystalline phases
Arianna Marucco, I. Fenoglio, F. Turci, B. Fubini (*University of Torino Dip, Italy)*

O3a-3 9:15-9:30
An effective photothermal therapy against cancer cells and deep tissue imaging with targeted NIR QD
Ravindran Girija Aswathy, B. Sivakumar, Y. Nagaoka, Y. Yoshida, T. Maekawa, D. Sakthi Kumar *(Bio Nano Electronics Research Center, Japan)*

O3a-4 9:30-9:45
Safety of nanovectors: Cytotoxicity assessment of New self-emulsifying multiple w/o/w nanoemulsions
Estelle Sigward, N. Mignet, P. Rat, M. Dutot, D. Scherman, D. Brossard, S. Crauste-Manciet *(INSERM, France)*

O3a-5 9:45-10:00
Surface ligand dependent fate and toxicity of ZnO np in HEPG2 cells
Dorota Bartczak, M-O. Baradez, H. Goenaga-Infante, D. Marshall (*LGC,UK)*

10:00-10:30 Coffee-break

Session 12: Regulation and standardization and in nano-products

(Chair: Maila Puolamaa)

12a. Regulation

PL12a 10:30-11:05
Regulatory aspects of nanomaterials in REACH
Maila Puolamaa *(DG Enterprise and Industry, European Commission, Brussel)*

O12a-1 11:15-11:30
Legal issues of the environmental safety regulation in the sphere of nanotechnology in Russian federation
Ekaterina Belokrylova (*Udmurt State University, Russia)*

O12a-2 11:30-11:45 Regulation and safety implementation of nanotechnology for chemical enterprises in the Central Europe space
Andreas Falk, S. Hartl, F. Sinner *(BioNanoNet Forschungsgesellschaft mbH, Austria)*

O12a-3 11:45-12:00 Defining occupational and consumer exposure limits for nanomaterials - first experiences from reach registrations
Karin Aschberger, F. M. Christensen *(European commission-JRC, Italy)*

O12a-4 12:00-12:15 Development of an integrative program of Nanosafety: Promote the Coordination Between Industries and Risk Assessor
Claude Emond, S. Kouassi, F.Schuster (*BioSimulation Consulting Inc, U.S.A, University of Montreal, Canada)*

13:30-13:30 Lunch

Session 8: Life cycle analysis, recycling, waste management and disposal

(Chair: Bernd Nowack)

PL8 13:30-14:10 Life cycle considerations for assessing environmental risks of nanomaterials
Bernd Nowack *(*EMPA *,Switzerland)*

O8a-1 14:15-14:45 Incineration of nanowastes: The implications from a life cycle perspective
Tobias Walser, L.K. Limbach, R. Brogioli, E. Erismann, L. Flamigni, B. Hattendorf, M. Juchli, F. Krumeich, C. Ludwig, K. Prikopsky, M. Rossier, D. Saner, A. Sigg, S. Hellweg, D. Günther, W. J. Stark *(Institute of Environmental Engineering, Switzerland)*

O8a-2 14:45-15:00 Preliminary evaluation of risks related to waste incineration of polymer nanocomposites
Lex Roes, M. K. Patel, E. Worrell, C. Ludwig *(Utrecht University, The Netherlands*)

O8a-3 15:00-15:15 Safe and environmentally-friendly management and final elimination of wastes harbouring nano-objects, or likely to release nanoparticles
Thierry Meunier, D. Venditti & S. Durecu (*Groupe Séché Environnement, France)*

O8a-4 15:15-15:30 Environmental exposure modelling of Engineered Nanomaterials and comparison to their corresponding bulk/total material flows
Tianyin Sun, F. Gottschalk, K. Hungerbühler, B. Nowack *(EMPA, Switzerland)*

15:30-16:00 Coffee-break

Session 10: Commercial equipment

(Chair: Robert Muir)

O10a-1 16:00-16:15
Optical instrumentations for Nanosafety
Nathalie Vollmer *(HORIBA Scientific, France*)

O10a-2 16:15-16:30
NanoScan SMPS - a Novel, Portable Nanoparticle Sizing and counting Instrument
Torsten Tritscher, T.J. Krinke, A. F. Zerrath, E. Filimundi, O. F. Bischof *(TSI GmbH, GTSI Incorporated, Germany, U.S.A)*

O10a-3 16:30-16:45
Detecting & characterizing nanomaterials in complex matrices & airborne
Byron J. Cheatham (*CytoViva, USA)*

O10a-4 16:45-17:00
High Resolution Portable Scanning Mobility Particle Sizer Designed for best practice nano exposure measurements
Brian Steer, B. Gorbunov, R. Muir *(Naneum Ltd., UK)*

O10a-5 17:00-17:15
Nanoparticle Tracking Analysis (NTA): A tool in toxicology and environmental fate assessment of nanomaterial
Phil Vincent, P. Hole, P. Peotta, S. Capracotta, B. Carr *(NanoSight Ltd.,UK)*

O10a-6 17:15-17:30
Magellan: innovative detection, traceability and characterization of Nanoparticles traces in liquid media
Stéphane Aït Oumeghar, P. Nagtegaele, D. Jacob *(Cordouan Technologies, France)*

20:00-23:00 Cocktail Party at La Bastille

ROOM B

Session 2: Detection and identification of nanoparticles

(Co-chair: Olivier Le Bihan)

2c. Detection and measurement of nanoparticles in water

O2c-1 8:45-9:00
Measuring particle size distributions of nanoparticles in aqueous media using FFF and LIBD
Nataliya Fedotova, K. Ralf, B. Sinnet,G. Detlef *(ETH Zurich, Switzerland)*

O2c-2 9:00-9:15
Lab-on a chip *µTAS* (Micro Total Analysis Systems) for the High-throughput Measurement of Nanomaterial Solubility
Ratna Tantra *(National Physical Laboratory, United Kingdom)*

O2c-3 9:15-9:30
Species selective pre-concentration and quantification of Ag, Au and Pd nanoparticles using cloud point extraction and graphite furnace atomic absorption spectrometry
Georg Hartmann, M. Schuster *(Technische Universität München, Germany)*

O2c-4 9:30-9:45
Quantitative Analysis of Engineered Nanoparticles in Food and Environment
Frank Von der Kammer, S. Wagner, S. Legros, B. Meisterjahn, E. H. Larsen, K. Loeschner,J. Navratilova & T. Hofmann *(Univ. of Vienna, Austria*)

O2c-5 9:45-10:00
Detection of nanoparticle heavy metal Pollutants in water BY laser-induced breakdown spectroscopy (LIBS)
Cheikh-Benoit Faye, C. Dutouquet), T. Amodeo, E. Frejafon, P. Delalain, O. Aguerre-Chariol, N. Gilon-Delepine *(INERIS, France)*

10:00-10:30 Coffee-break

Session 2: Detection and identification of nanoparticles

(Co-chair: Simon Clavaguera)

2d. Detection and measurement of nanoparticles in air

O2d-1 10:30-10:45
NanoBadge, a Tool for Engineered Nanoparticles Exposure Assessment.
Simon Clavaguera, M. Amdaoud, S. Jacquinot, S. Motellier, A. Guiot, L. Golanski, P. Capron *(CEA, France)*

O2d-2 10:45-11:00
Measurement methods for the EC definition of nanomaterials
Luigi Calzolai, D. Gilliland, and F. Rossi *(European Commission - DG Joint Research Centre, Italy)*

O2d-3 11:00-11:15
NANODEVICE - Novel Concepts, Methods, and Technologies for the Production of Portable, Easy-to-use Devices for the Measurement and Analysis of Airborne Engineered Nanoparticles in Workplace Air
Markus Keller, K. Savolainen *(Fraunhofer IPA – Germany)*

O2d-4 11:15-11:30
Detection of Nanoparticle agglomerates trapped in a low pressure RF (Radio-Frequency) plasma discharge using LIBS (Laser-induced Breakdown spectroscopy)
Christophe Dutouquet, G. Wattieaux, L. Meyer, E. Frejafon and L. Boufendi *(INERIS France)*

O2d-5 11:30-11:45
Characterization of manufactured TiO_2 nanoparticles
Charles Motzkus, J. Idrac, T. Macé, S. Vaslin-Reimann, P. Ausset et M. Maillé *(LNE, France)*

Session 3: Toxicology

(Co-chair: Sophie Lanone)

3a. Nanoparticle biotransformation and degradation

O3a-6 11:45-12:00
ECSIN's methodological approach for hazard evaluation of engineered nanomaterials
Lisa Bregoli, F. Benetti, E. Sabbioni, *(ECSIN, ITALY)*

O3a-7 12:00-12:15
Degraded nanocomposites: a combined physico-chemical and toxicogenomics approach in caco-2 cells
Odette Prat, M. Fisichella, F. Berenguer, G. Steinmetz, M. Auffan, J. Rose *(CEA, France)*

O3a-8 12:15-12:30
Pristine graphene activates macrophages to produce cytokines/chemokines via TLR- and NF-kappa B-related signalling pathways
Taotao Wei, H. Zhou, K. Zhao and C. Chen (*Chinese Academy of Sciences, China*)

12:30-13:30 Lunch

Session 3: Toxicology

(Co- chair: Claude Emond)

3b. Nano bio interactions modeling

O3b-1 13:30-13:45
Assessment of different methods studying the impact of carbon nanomaterials on platelet function
Julie Laloy, F. Mullier, S. Robert, L. Alpan, J. Mejia, J-P.Piret, N. Bailly, S. Lucas, B. Chatelain, O.Toussaint, B. Masereel, S. Rolin & J-M. Dogné *(University of Namur, Belgium)*

O3b-2 13:45-14:00
Iron oxide nanoparticles show no toxicity in terms of comete assay in lymphocytes: a promising vehicle for nitric oxide releasing nanocarrier in biomedical applications
Paula Haddad, A. B. Seabra, R. de Lima, J. Luiz Oliveira, Miguel A. M. Molina, R. Itri *(Universidade de Sorocaba, Brazil)*

O3b-3 14:00-14:15
Translocation of SiO_2 nanoparticles across human bronchial epithelial cells
Isabelle George, S.Vranic, S. Boland, F. Marano, A. Baeza-Squiban *(Université Paris Diderot, France)*

O3b-4 14:15-14:30 Development of a dose-controlled multiculture cell exposure chamber for efficient delivery of airborne and engineered nanoparticles.
Akrivi Asimakopoulou, Emmanouil Daskalos, N. Lewinski, M. Riediker, E. Papaioannou, A. G. Konstandopoulos (*Aerosol and Particle Technology Laboratory, CPERI/CERTH, Greece)*

Panel discussion: Toxicology

(Moderator: Claude Emond)

14:30-15:30 **Toxicology: what is the time-scale to identify hazard classes for the engineered nanoparticles? Application to nanomaterials safe by design**
Claude Emond *(University of Montreal),* Gunnar Johanson *(Karolinska Institutet)*

15:30-16:00 Coffee-break

Session 3: Toxicology

(Co-chair: Peter Hoet)

3b. Nano bio interactions modeling

O3b-5 16:00-16:15 In vitro, ex vivo and in vivo translocation of titanium dioxide nanoparticles through the gastrointestinal barrier, toxicological consequences
Emilie Brun, Nathalie Herlin-Boime, G. Veronesi, B.Fayard, A-M. Flank, M. Carrière *(CEA-CNRS, France)*

O3b-6 16:15-16:30 Variation in silver nanoparticles toxicity in the presence of phenolic compounds
Alina Martirosyan, A. Bazes & Y-J. Schneider *(Institute of Life Sciences, Belgium)*

O3b-7 16:30-16:45 Development of a PBPK model for ionic and nanoparticulate silver
Gerald Bachler, N. von Goetz, K. Hungerbühler *(ETH Zurich, Switzerland)*

O3b-8 16:45-17:00 Predictive tests to evaluate oxidative potential of engineered nanomaterials.
Mara Ghiazza, E. Carella, S. Oliaro Bosso, M. Tomatis, I. Corazzari, M. Cristina Paganini, S. Livraghi, F. Viola, A. Marucco, B. Fubini, I. Fenoglio *(University of Torino, Italy)*

O3b-9 17:00-17:15 Comparison of Toxicity of Uncoated and Coated Silver Nanoparticles
Kathy C Nguyen, P. Rippstein, J. Tan, A. F. Tayabali *(Health Canada, Canada)*

O3b-10 17:15 -17:30 Nano-titanium dioxide modulates the dermal sensitization potency of DNCB
Stijn Smulders, V. De Vooght, S. Hussain, S. Boland, B. Nemery, P. HM. Hoet, J. AJ Vanoirbeek *(KU Leuven, Belgium*)

O3b-11 17:30-17:45 Using a PBPK model to study the influence of different characteristics of nanoparticles on their biodistribution
Dingsheng Li, C. Emond, G. Johanson, O. Jolliet *(School of Public Health, University of Michigan,U.S.A)*

O3b-12
17:45-18:00 Cytotoxicity of solid lipid nanoparticle and nanostructured lipid carriers with local anaesthetic dibucaine for topical application.
Nelson Durán, R. de Melo Barbosa, C. Moraes G. da Silva, T. dos Santos Bella, D. Ribeiro de Araújo, P. D. Marcato, E. de Paula *(State University of Campinas, Brazil)*

20:00- 23:00 Cocktail Party at La Bastille

ROOM C

Session 6/7: Secure industrial production and protection technology

(Co-chair: Jesús López de Ipiña Peña)

6a. Secure industrial production

O6a-6
8:45-9:00
In situ synthesis of anti-bacterial nanocomposite coatings by nanosafe-by-design sputtering process
Alain Billard, E. Monsifrot, I. Sayah, F. Sanchette, F. Schuster *(DEPHIS sàrl, France)*

O6a-7
9:00-9:15
Secure Process through functionnalisation: elaboration of organic composites reinforced with aligned carbon nanotubes grown on carbon fibers
Stéphanie Patel, Y. Magga, M.Pinault, D. Porterat, G. Deniau, C. Reynaud, M. Mayne-L'Hermite *(CEA, France)*

O6a-8
9:15-9:30
Criteria and guiding principles for the precautionary design and for improved recyclability of engineered nanomaterials
Michael Steinfeldt *(University of Bremen, Germany)*

O6a-9
9:30-9:45
From Safe Nanomanufacturing to Nanosafe-by-Design processes
Frédéric Schuster, F. Lomello (*CEA, France)*

10:00-10:30 Coffee-break

Session 11: Risk management for OHS experts

(Chair: Paul Schulte)

(Co-chair: Olivier Witchger and Eric Drais)

PL11
10:30-11:05
Risk management for OHS experts
Paul A. Schulte (*National Institute for Occupational Safety and Health, USA)*

O11a-1
11:15-11:30
Horizon-scanning and Identification of emerging risks among nanotech-companies
Steffen Foss Hansen, H. V. Kristensen, A. Baun (*Technical University of Denmark, Denmark)*

O11a-2
11:30-11:45
Risk assessment of nanomaterials and nanoproducts – adaptation of traditional approaches
Jutta Jahnel, T. Fleischer, S. B. Seitz (*Karlsruhe Institute of Technology, Germany*)

O11a-3
11:45-12:00
OHB based risk assessment method for powders and nanomaterials
Malcom Staves, Laurent Gridelet, P. Delbecq, L. Hervé, G. Fayet, D. Fleury, S. Kowal (*SOPROREAL, France)*

O11a-4
12:00-12:15
French approach for characterizing potential emissions and exposure to aerosols released from nanomaterials in workplace operations
Catherine Durand, O. Witschger, O.Le Bihan, E. Zimmermann, A. Marchetto, M. Reynier, D. Charpentier (*CEA, France)*

O11a-5 12:15-12:30 Concerns related to Safety Management of Engineered Nanomaterials
Amela Groso, T. Meyer (*Ecole Polytechnique Fédérale de Lausanne, Switzerland)*

12:30-13:30 Lunch

Session 11: Risk management for OHS Experts

(Co- chair: Eric Drais)

O11a-6 13:30-13:45 Design of a prevention approach: from representations to action the case of nanomaterials
Catherine L'Allain, S. Caroly, E. Drais *(Laboratoire PACTE, Université de Grenoble, INPG, France)*

O11a-7 13:45-14:00 From nanomaterials risk perception to risk management: last literature survey lessons
Eric Drais *(INRS, France)*

O11a-8 14:00-14:15 French registry of workers handling engineered nanomaterials as an Instrument of integrated system for surveillance and research
Irina Guseva Canu, O. Boutou-Kempf, L. Delabre, S. Ducamp, Y. Iwatsubo, J-L. Marchand, and E. Imbernon (*French Institute for Public Health Surveillance, France)*

Session 12: Regulation and standardization

(Co-chair: Olivier Salvi)

12 b. Standardization

PL12b 14:30-14:45 NanoSTAIR project: Establishing a process and a platform to support standardization for nanotechnologies
Olivier Salvi, E. Fréjafon *(EU-VRi, Germany)*

O12b-1 14:45-15:00 Current International Standardization in particle characterization and release testing
Michael Stintz, L. Hillemann (*Institute of Process Engineering and Environmental Technology, Germany)*

O12b-2 15:00-15:15 Overview of standardization activities in Europe (CEN) and in relation with ISO and OECD
Jean-Marc Aublant *(LNE, France)*

O12b-3 15:15-15:30 Managing Operation Procedures in collaborative projects
Marie-Gabrielle Ollivier Beuzelin, A. Hool *(Ecole Polytechnique Fédérale de Lausanne, Switzerland)*

15:30-16:00 Coffee-break

Session 8: Life cycle analysis

(Co- chair: Mickael Riediker)

O8a-5 16:00-16:15
LCA Modelling of Engineered Nanomaterials: a framework for establishing sound inventory data of production & releases of nano objects along the life cycle.
Roland Hischier (*EMPA, Switzerland)*

O8a-6 16:15-16:30
LCA case studies of nanotechnology-based applications in the project NanoSustain
Michael Steinfeldt *(University of Bremen, Germany)*

O8a-7 16:30-16:45
Life cycle assessment of a self-cleaning coating based on nano TiO_2-polyurea resin applied on aluminum panel
Martina Pini, A. M. Ferrari, R. Gamberini, P. Neri, B. Rimini *(EN & TECH - Italy)*

O8a-8 16:45-17:00
Impact assessment of nano activated polymeric membranes
Stefano Zuin, P. Scanferla, W. Wennekes, J. E. Wong, K. De Sitter, C. Dotremont, I. Genne *(Venice Research Consortium, Italy)*

O8a-9 17:00-17:15
Investigation of the life cycle of nanoparticles by means of $[^{44,45}Ti]TiO_2$ and $[^{110m}Ag]Ag^0$ – Research Project nanoTrack
Heike Hildebrand, K. Franke, A. Freyer, E. Bilz, R. Mehnert, E. Mai, C. Isaacson, K. Schirmer, A. Ammann, L. Sigg *(Helmholtz-Zentrum Dresden, Germany)*

Session 6/7: Secure industrial production

(Co- chair: Frédéric Shuster)

6b. Protection technology

O6b-1 17:15-17:30
Evaluating performance of containment equipment designed for handling manufactured nanomaterials by use of nanoparticle marker
Sébastien Artous, P. Bombardier, S. Derrough, D. Locatelli, P. Nobile, C. Durand *(CEA, France)*

O6b-2 17:30-17:45
Experimental and numerical comparative study of the containment of airborne nanoparticles and gas released inside a safety cabinet
Vincent Cesard, E. Belut, C. Prévost *(INRS, France)*

O6b-3 17:45-18:00
Experimental evaluation of the resistance of protective gloves against titanium dioxide nanoparticles in solution under conditions simulating occupational use
Ludwig Vinches, P. Dolez, K. J. Wilkinson, S. Hallé *(Université de Montréal, Canada*)

20:00-23:00 Cocktail Party at La Bastille

Thursday 15 November

MINATEC AUDITORIUM

Session 4: Environmental interactions

(Chair: Jérôme Rose)

4a. Transport, transformations and trophic transfer

PL4
8:00-8:35
Environmental Interactions
Jérôme Rose, M. Auffan, P. Chaurand, J. Labille, D. Borschneck, A. Masion, H. Miche, C. Botta, C. Geantet, E. Puzenat, P. Afanasiev, E. Lecelrc, Jeanne Garric, F. Manuela, B. Vollat; P. Noury; K. Abbaci, J-Y Bottero (*CEREGE, France)*

O4a-1
8:45-9:00
Effect of TiO_2 nanoparticles on larval development of swallowtail within a food chain
Miyoko Kubo-Irie, M. Yokoyama, K. Takeda, M. Irie *(Tokyo University of Sciences, Japan)*

O4a-2
9:00-9:15
Role of water temperature in the fate, transport, bioavailability of engineered nanoparticles in aquatic environments
Seyed Mohammad Majedi, H. K. Lee, B. C. Kelly *(National University of Singapore, Singapore)*

O4a-3
9:15-9:30
MWCNT accumulation during hydroponic exposure of wheat and rapeseed: quantification and distribution
Camille Larue, M. Pinault, B. Czarny, D. Georgin, E. Flahaut, N. Bendiab, M. Mayne-L'Hermite, V. Dive, F. Taran, M. Carrière *(CEA-CNRS, France)*

O4a-4
9:30-9:45
Benthic Food Chain studies with TiO_2 nanoparticles.
Carl W. Isaacson, L. Sigg', A. Amman, and K. Schirmer *(EAWAG, Switzerland)*

O4a-5
9:45-10:00
Modeling the fate of nano-TiO_2 in the Rhone river – the importance of hetero aggregation with natural colloids
Antonia Praetorius, J. Labille, M. Scheringer, J-Y. Bottero, K. Hungerbühler *(ETH Zürich, Switzerland)*

10:00-10:30 Coffee-break

Session 5: Nanomaterial release

(Chair: Tinh Nguyen)

5a. Release by environmental stress

PL5
10:30-11:05
Quantitative Studies of Photo-induced Surface Accumulation and Release of Nanoparticles in Polymer Nanocomposites
Tinh Nguyen, D. Stanley, S. Rabb, D. Banerjee, X. Gu, L. L. Yu, L. Sung, and J. W. Chin *(NIST, USA)*

O5a-1
11:15-11:30
Scenarios and methods that induce protruding or released CNT's after degradation of composite materials
Wendel Wohlleben, L. Cena, S. Hirth, G. Cox, Ž. Tomović, T. Peters *(BASF SE, Germany)*

O5a-2
11:30-11:45
Monitoring migration and transformation of nanomaterials in polymeric composites during climatic aging
Gemma Vilar, E. Fernández-Rosas, G. Janer, E. Mas del Molino, M. Busquets-Fité, V. Puntes, S.Vázquez-Campos *(LEITAT Technological Center, SPAIN)*

O5a-3
11:45-12:00
Release of nanoparticles from textiles during washing
Bernd Nowack, Lena Windler, C. Lorenz, N. von Goetz, K. Hungerbühler, M. Heuberger *(EMPA, Switzerland)*

O5a-4
12:00-12:15
Release of TiO_2 particles from paints containing pigment TiO_2 and/or nano-TiO_2 by weathering experiments
Ahmed Al-Kattan, A. Wichser, R. Vonbank, S. Brunner, A. Ulrich and B. Nowack *(EMPA, Switzerland)*

O5a-5
12:15-12:30
Release of CeO_2 nanoparticles upon aging of acrylic wood coating
Lorette Scifo, P. Chaurand, A. Masion, M. Auffan, M-A. Diot, J. Labille, J-Y. Bottero and J. Rose (*Tecnalia,France)*

12:30-13:30 Lunch

Session 4: Environmental interactions

(Co-Chair: Jean-Yves Bottero)

4b. Biodegradation/ biointeractions

O4b-1
13:30-13:45
Aged TiO_2-based nanomaterial used in sunscreens: implications on *ESCHERICHIA COLI* sensitization to toxic metal
Catherine Santaella, B. Allainmat, F. Simonet, J. Labille, C. Geantet, J. Rose, W. Achouak *(CNRS-CEA, France)*

O4b-2
13:45-14:00
Characterizing nanoparticles reactivity: structure-Photocatalytic activity relationship
Jordi Piella, N. Bastus, V. Puntes *(ICN, Spain)*

O4b-3
14:00-14:15
TiO_2 nanoparticles in cosmetic sunscreen: effect of aging on physico-chemical and cytotoxic properties of both plain formulation and extracted nanoparticles
Manon Rossano, N. Hucher C. Picard, M. Grisel, F. Le Foll *(URCOM, CNRS, France*)

O4b-4
14:15-14:30
Assessment of Environmental Exposure to Nanomaterials through mesocosms experiments
Mélanie Auffan, M. Tella, L. Brousset, J. Issartel, C. Pailles, B. Espinasse, E. Artells, A. Thiery, C. Santaella, W. Achouack, A. Masion, J. Rose, J-Y. Bottero *(CEREGE-CNRS, France)*

O4b-5 14:30-14:45
Biotransformation of Carbon Nanotubes and Fullereness by Horseradish Peroxidase.
Deborah Xanat Flores-Cervantes, J. Hollender, Hans-Peter E. Kohler (*EAWAG, Switzerland)*

O4b-6 14:45-15:00
Cobalt, titanium dioxide and nanosilver nanoparticles cause skeletal damages in sea urchins at pluteus stage
Antonietta Morena Gatti, C. Gambardella, S. Ferrando, L. Gallus, P. Ramoino, C. Falugi *(University of Genoa, Italy)*

O4b-7 15:00-15:30
Comparison of effects on crustaceans: carbon nanoparticles and molybdenum nanowires
Anda Baumerte, G. Sakale, J. Zavickis, M. Knite, L. Putna, M. Balode, A. Mrzel (*University of Latvia, Slovenia)*

15:30-16:00 Coffee-break

Session 4: Environmental interactions

(Co-chair: Laurent Charlet)

4c. Biologicals effects of NMs

O4c-1 16:00-16:15
Concerns over aluminum oxide nanoparticle based applications: an ecologically inspired study using environmentally relevant isolates and medium
Sunandan Pakrashi, N. Chandrasekaran, A. Mukherjee (*VIT University, India)*

O4c-2 16:15-16:30
The role of silver and vanadium to the ecotoxicity of silver vanadate nanowires decorated with silver nanoparticles
Gisela de Aragão Umbuzeiro, M. Coletty Artal, F. Kummrow, R. Dias Holtz, O. Luiz Alves *(State University of Campinas, Brazil)*

O4c-3 16:30-16:45
Adsorption of organic pollutants to aqueous suspensions of carbon nanomaterials
Berit Glomstad, A. Booth, B. M. Jenssen, L. Sørensen, J. Liu, M. Shen *(Norwegian University of Science and Technology, Norway)*

Session 3: Toxicology

(Co-chair: Marie Carriere)

3d. Tissues and environnement

O3d-5 17:00-17:15
Violacein/poly-ε-caprolactone/chitosan nanoparticles against bovine mastistis: antibacterial and ecotoxicity evaluation
Gisela A. Umbuzeiro, E. Berni, G. Nakazato, F. I. Vacchi, N. Durán *(UNICAMP, Brazil)*

O3d-6
17:15-17:30
Evaluation of multi walled carbon nanotubes eco(geno)toxicity using the amphibian larvae of *xenopus laevis*
Laury Gauthier, F. Mouchet, C. Gancet, A. Perrault, F. Bourdiol , E. Flahaut, P. Puech, E. Pinelli, J-C. Boutonnet *(CNRS, NAUTILE, France)*

O3d-7
17:30-17:45
Molecular interference between titanium from NP-TiO_2 nanoparticles and iron homeostasis in E. coli
Caroline Fauquant, Isabelle Michaud-Soret, A-N. Petit, N. Herlin-Boime, P.-H. Jouneau, S.Ollagnier de Choudens *(CEA-CNRS, France)*

O3d-8
17:45-18:00
Fullerene nanoparticles C_{60} and $C_{60}(OH)_{18\text{-}22}$: Assessment of biological activity using bacterial cells and rat liver mitochondria as model systems
Sandra M. Santos, R. A. Videira, L. Ferreira, A. M. Dinis, F. Peixoto, A. S. Jurado *(University of Coimbra, Portugal)*

ROOM B

Session 3: Toxicology

(Co-chair: Naohide Shinohara)

3c. Nanoparticles translocation and barrier

O3c-1
8:00-8:15
Tissue Distribution and clearance of Titanium Dioxide nanoparticles after intravenous administration and Intratracheal instillation
Naohide Shinohara, H. Fukui, N. Danno, T. Ichinose, K. Honda, M. Gamo *(AIST, Japan)*

O3c-2
8:15-8:30
A dynamic co-culture model resembling the alveolo-capillary barrier to study toxicity and translocation of nanoparticles
Katrien Luyts, B. Nemery and P. H.M. Hoet (*K.U.Leuven, Belgium)*

O3c-3
8:30-8:45
Communicating Nanotoxicology: three Evaluations using *in vitro* central nerve models
Fumihide Kanaya, S. Hanada, Y. Inoue, Y. Manome, K. Fujioka, *(National Center for Global Health and Medicine, Japan)*

O3c-4
8:45-9:00
Comparative study of neurologic effects of nano-TiO_2 versus SiO_2 after direct intracerEbral exposure in mice
Aurélie Balvay, N. Thieriet, L. Lakhdar, A. Bencsik *(ANSES, France)*

O3c-5
9:00-9:15
Interactions of functionalized MWCNTs with primary neural cells from different brain regions: site-specific effects
Cyrill Bussy, J. Boczkowski, S. Lanone', M. Prato, A. Bianco, and K. Kostarelos (*Centre for Drug Delivery Research, UK)*

O3c-6
9:15-9:30
Specific uptakes and damages induced by polystyrene nanobeads according to surface chemistry
Vincent Paget, S. Dekali, T. Kortulewski, R. Grall, S. Chevillard, A. Braun P. Rat & G. Lacroix (INERIS, France)

O3c-7
9:30-9:45
Application of *in vitro* BBB model to measure permeability of nanoparticles
Sanshiro Hanada, K. Fujioka, Y. Inoue, F. Kanaya, Y. Manome, K. Yamamoto *(National Center for Global Health and Medicine, Japan)*

O3c-8
9:45-10:00
3D model of air-blood barrier for the study of nanoparticles translocation
Samir Dekali, V. Paget, C. Gamez, P. Rat and G. Lacroix *(INERIS/ C-TAC, France*)

10:00-10:30 Coffee-break

Session 3: Toxicology

(Chair: Shuji Tsuruoka)

3c. Nanoparticles translocation and barrier

O3c-9 11:15-11:30
Assessment of cytotoxicity, intracellular uptake and intestinal absorption of amorphous silica nanoparticles in the Caco-2 in vitro human intestinal barrier model
Agnieszka Kinsner-Ovaskainen, C. Uboldi, I. Cydzik, F. Simonelli, E. Alloa, M. Ceridono, D. Gilliland, N. Gibson, J.Ponti, F.Rossi *(JRC, Italy)*

O3c-10 11:30-11:45
Influence of the length of imogolite-like nanotubes on their cytotoxicity and genotoxicity towards human dermal cells
Wei Liu, P. Chaurand, C. Di Giorgio, M. De Méo, A. Thill, M. Auffan, A. Masion, D.Borschneck, F. Chaspoul, P. Gallice, A. Botta, J-Y. Bottero, J. Rose *(CEREGE–CNRS, France)*

O3c-11 11:45-12:00
Effect of Different surface charge based superparamagnetic iron oxide nanoparticles (SPION) on Biodistribution in Rat and *Ex vivo* Protein fishing
Usawadee Sakulkhu, L. Maurizi, A. Gramoun, M-G. Beuzelin, J-P Vallée, G. Coullerez, H. Hofmann (*École Polytechnique Fédérale de Lausanne, Switzerland)*

O3c-12 12:00-12:15
An Impedance-based High-throughput Method for Evaluating the Cytotoxicity of Nanoparticles
Mihaela Roxana Cimpan, T. Mordal, J. Schölermann, U.Pliquett, E. Cimpan *(IKO, Faculty of Medicine and Dentistry, Norway)*

O3c-13 12:15-12:30
The use of differentiated human respiratory epithelial cells in inhalation toxicology of nanomaterials
Frieke Kuper, A. Reus, M. Gröllers, F. van Acker, I. Kooter *(TNO Quality and Safety, The Netherlands)*

12:30-13:30 Lunch

Panel discussion

(Moderator: Alexei Grinbaum)

13:30-14:30 **The opinion of the Civil Society: international NGO and european labor unions regarding nanomaterials approaches**
Alexei Grinbaum *(CEA),* Aida Ponce Del Castillo *(ETUI),* Luisa Filipponi *(Nanopinion),* Jean-Jacques Perrier *(VivAgora)*

Session 3: Toxicology

(Co-chair: Frédéric Bois)

3d. Tissues and environment

O3d-1
14:30-14:45
ROS evaluation for A series of CNTs and their derivatives using ESR method with DMPO
Shuji Tsuruoka, K.Takeuchi, K. Koyama, M. Endo, H. Matsumoto, N. Saito, Y. Usui, D. W. Porter, V. Castranova *(Shinshu University, Japan)*

O3d-2
14:45-15:00
Toxicity towards lung cells and Escherichia Coli: Impact of nanoparticle dispersion status
Nathalie Herlin-Boime, Marie Carrière, S. Pigeot-Rémy, A. Casanova, C. Guillard, J-C. Lazzaroni, D. Atlan *(CEA-UJF, France)*

O3d-3
15:00-15:15
Noteworthy Interaction of TiO_2 Nanoparticles (Anatase) with Bacterial Cells under Dark Conditions
Swayamprava Dalai, N. Chandrasekaran, A. Mukherjee (*VIT University, India)*

O3d-4
15:15-15:30
Determination of endotoxin concentration by different test methods: influence of sample preparation and particle interference on test reliability
Stijn. Smulders, J.-P. Kaiser, P. Wick, P. Hoet *(K.U.Leuven, Belgium)*

15:30-16:30 Coffee-break

18:00 Conclusion

18:15 End of the conference

ROOM C

Session 9: Ethics and societal issues

(Chair: Alexei Grinbaum)

PL9 10:30-11:15	Nanotechnology and the narratives of responsibility **Alexei Grinbaum** (*CEA, France)*
O9a-1 11:15-11:30	Nanotechnology, responsibility and responsible innovation Christopher Groves *(ESRC, Cardiff University, United Kingdom)*
O9a-2 11:30-11:45	The social context of nanotechnology and Regulating its uncertainty: a nanotechnologist approach Vincent Jamier, I. Gispert, V. Puntes *(Centre for NanoBioSafety and Sustainability, Spain)*
O9a-3 11:45-12:00	The Nano@School project: a new pedagogical initiative to increase the awareness of nanosciences and nanotechnologies in the classrooms Francine Papillon, E. Excoffon, A. Bsiesy, J. Chevrier *(CEA Grenoble, France)*
O9a-4 12:00-12:15	Latest research results on the effects of nanomaterials on humans and the environment: DaNa - Knowledge Base Nanomaterials Clarissa Marquardt, K. Nau, H.F. Krug, D. Kühnel, B. Mathes, V. Richter, S. Scholz, Christoph (*KIT,Germany)*
12:30-13:30	Lunch

Session 5: Nanomaterial release

5b. Release by mechanical stress

(Co- chair: Francois Tardif)

O5b-1 13:30-13:45	Release-ability of nano fillers from different nanomaterials (Toward the acceptability of nanoproduct) Luana Golanski, A. Guiot, S. Motellier, A. T. Saber, F. Tardif, P.Capron *(CEA-Liten, France)*
O5b-2 13:45-14:00	Nanomaterial release from nanocomposites during reworking process Virginia Gómez, M. Levin, S. Irusta, M. Dal Maso, J-M. Santamaría, K. A. Jensen and I. K. Koponen (*INA, Spain)*
O5b-3 14:00-14:15	Nanoparticle release from Nanocomposites due to mechanical treatment at two stages of the life-cycle Daniel Göhler, A. Nogowski, P. Fiala, M. Stintz *(Institute of Process Engineering and environmental Technology, Germany)*

O5b-4 14:15-14:30
On character of coarse, fine and ultrafine particles in automotive brake wear debris
Jana Kukutschová, P. W. Lee, V. Matějka, K. Malachová, E. Veselá, Pavlína Peikertová, K.Čabanová, M.Vaculík, P. Filip *(Nanotechnology Centre at VŠB, Czech Republic)*

O5b-5 14:30-14:45
Abrasion tests on MWCNT composites: influence of CNT dispersion state and filler/matrix interface
Maxime Pras, J. Duchet-Rumeau, J-F. Gerard, L. Golanski, A. Guiot *(UMR CNRS, France)*

O5b-6 14:45-15:00
Generation of aerosols during the mechanical solicitation of materials: development of an experimental set-up and applications
Christophe Bressot, N. Shandilya, O. Aguerre-Chariol, M. Morgeneyer, O. L. C. Le Bihan *(INERIS, France)*

O5b-7 15:00-15:15
On nanoparticles release from polymer nanocomposites for applications in lightweight automotive components
James Njuguna, S. Sachse, F. Silva, S. Michalowski and K. Pielichowski (*Centre for Automotive Technology, Cranfield University, UK)*

O5b-8 15:15-15:30
Abrasion behavior of an epoxy-based nanocomposite with raw- and functionalized carbon nanotubes
Lukas Schlagenhauf, Bryan T.T. Chu, J. Buha, F. Nüesch, J. Wang (*Swiss Federal Institute for Materials Testing and Research, Switzerland)*

15:30- 16:00 Coffee-break

Session 5: Nanomaterial release

5c. General and other release mechanisms

(Co-chair: Wendel Wohlleben)

O5c-1 16:00-16:15
Nanomaterial dustiness - a comparison between three methods
Keld Alstrup Jensen, M. Levin, I. K. Koponen, D. Bard, A. Kelley, G. Burdett, S. Bau, O. Witschger *(National Research Centre for the Working Environment, Denmark)*

O5c-1 16:00-16:15
NanoRelease – Developing Methods to Measure Release of Nanomaterials from Solid Consumer Products
Lie Chen, M. Hill, R. Canady *(Health Canada, Canada*)

O5c-2 16:15-16:30
Nanomaterial release from products is not related to hazard data: Methods and data lacking
Steve Froggett, S. Clancy, D. Boverhof, R. Canady *(Froggett & Associates, U.S.A)*

O5c-3 16:30-16:45
Characterization and quantification of nanoparticle release from commercial available spray products containing engineered nanoparticles
Sabrina Losert, M. Lattuada, K. Hungerbühler, A. Ulric *(EMPA, Switzerland)*

O5c-4
16:45-17:00
Behavior of nanoparticles during high temperature treatment (incineration type)
Samir Derrough, G.Raffin, D. Locatelli, P. Nobile, C. Durand *(CEA, France)*

O5c-5
17:00-17:15
Fate of CNT-epoxy composite during incineration
Ulrika Backman, J. Lyyränen, T. Kettunen, J.Leskinen, O.Sippula, A. Auvinen, J. Jokiniemi *(VTT Technical Research Centre of Finland, Finland)*

O5c-6
17:15-17:30
Release of TiO_2 nanoparticles from cement during their life cycle: step of use
Nathan Bossa, J. Rose, P. Chaurand, O. Aguerre-Chariol *(INERIS, iCEINT, France).*

O5c-7
17:30-17:45
Exploring release and recovery of nanoparticles from polymer nanocomposites using commercial polyamide-based nanocomposites as a model
Martí Busquets-Fité, R. Zanasca, C. Citterio, L. Mercante, E. Fernández , Gemma J. Socorro Vázquez-Campos, V. Puntes (*ICN, Spain)*

15:30-16:30 Coffee-break

18:00 Conclusion

18:15 End of the conference