



3 - 7 NOVEMBER / MINATEC - FRANCE

PROGRAMME

Monday 3 November

15:00-16:30: Conference opening

Jean Therme (*Director of CEA Grenoble, France*)

Georgios Katalagarianakis (*European Commission*)

Frédéric Schuster (*Coordinator of NANOSAFE2, France*)

16:30-18:00: Cocktail

Tuesday 4 November

Session 1: Exposure issues

(Chair: Rob Aitken)

- PL1** Exposure to nanoparticles: Importance, knowledge and needs
8:30-9:10 Rob Aitken (*Institute of Occupational Medicine, UK*)
- O1-1** Assessment of exposure and health status in workers handling titanium dioxide
9:10-9:25 Gaku Ichihara (*Nagoya University, Japan*)
- O1-2** Characterization and monitoring of biological doses from inhalation exposure to nano and fine particles in industrial workplace
9:25-9:40 Christos Housiadas, P. Papazafiri, P. Neofytou, K. Eleftheriadis, E. Demou, L. Tran ("Demokritos" National Centre for Scientific Research, Greece)
- O1-3** Use of an electrical aerosol detector (EAD) to measure nanoparticles depositions on different regions of the respiratory tract of packaging workers in a carbon black manufacturing industry
9:40-9:55 Ying Fang Wang, P.-J. Tsai (*National Cheng Kung University, Taiwan*)
- O1-4** From measurements towards estimates of exposure: development of a strategy to assess exposure to manufactured nanoparticles; preliminary results of the NANOSH-project
9:55-10:10 Derk Brouwer, B. Stuurman, M. Nieboer, C. Moehlmann, J. Welter, M. Berges, E. Jankowska, M. Posniak, D. Bard, D. Mark (*TNO Quality of Life, The Netherlands*)
- O1-5** Exposure levels of carbon nanotubes at workplaces
10:10-10:25 Frédéric Luizi (*Nanocyl SA, Belgium*)
- 10:30-11:00: Coffee break

Session 2: Characterization, Detection and Monitoring

(Chair: Jacques Vendel)

2a. Detection in air

- PL2** Environmental, health and safety studies of nanoparticles
11:00-11:40 David Y. H. Pui (*University of Minnesota, U.S.A*)
- O2a-1** On the performance of a calibrated nanoparticle generator
11:40-11:55 Ulrika Backman, J. Lyyränen, U. Tapper, A. Auvinen, J. Jokiniemi (*VTT Technical Research Centre of Finland, Finland*)
- O2a-2** Manufactured nanoparticle detection using LIBS
11:55-12:10 Tanguy Amodeo, C. Dutouquet, O. Le Bihan, C. Masquelier, M. Attoui, E. Fréjafon (*INERIS, France*)
- O2a-3** Monitor for detecting and assessing exposure to airborne nanoparticles
12:10-12:25 Johan Marra, M. Voetz, H.-J. Kiesling (*Philips Research Laboratories, The Netherlands*)

- O2a-4** Selective detection nanoparticles by elemental analysis
12:25-12:40 Sylvie Motellier, S. Bernard, Luana Golanski, F. Tardif (*CEA, France*)

13:00-14:30: Lunch

Session 3: Nanomaterials life cycle

(Chair: *Jacques Bouillard*)

- PL3** Life cycle of airborne nanoparticles and its implications for filtration and personal protection devices
14:30-15:10 Gerhard Kasper (*University of Karlsruhe, Germany*)

- O3-1** Measurement of nanoparticle removal by abrasion
15:10-15:25 Arnaud Guiot, L. Golanski, F. Tardif (*CEA, France*)

- O3-2** Safe nanotextiles from a life cycle perspective
15:25-15:40 Claudia Som, M. Halbeisen, A. Koehler, M. Heuberger (*EMPA, Switzerland*)

- O3-3** Labelling of nanoparticles by nanotracers and oligonucleotides
15:40-15:55 Francois Tardif, O. Raccurt, L. Golanski, J. Liu, A.-G. Brachet, D. Jary, C. Peponnet (*CEA, France*)

16:00-16:30: Coffee break

Session 2: Characterization, Detection and Monitoring

(Chair: *David Pui*)

2a. Detection in air

- O2a-5** Experimental study of the response functions of direct - reading instruments measuring surface - area concentration of airborne nanostructured particles
16:30-16:45 Sébastien Bau, O. Witschger, F. Gensdarmes, D. Thomas (*INRS, France*)

- O2a-6** Electrical Nanoparticle Monitor with Non - collecting Operating Principle
16:45-17:00 Kauko Janka, A. Ukkonen, R. Reinivaara, E. Lamminen, V. Niemelä (*Dekati Ltd, Finland*)

- O2a-7** Photoluminescent Silicon nano particles for biological applications: passivation and functionalization
17:00-17:15 Julien Vincent, O. Raccurt, V. Maurice, X. Paquez, O. Sublemontier, Y. Leconte, O. Guillois, F. Tardif, N. Herlin-Boime (*CEA, France*)

Posters session

17:30-19:00

- P1-1** Nanoparticles monitoring in workplaces devoted to nanotechnologies
Laura Manodori, A. Benedetti (Associazione CIVEN, Italy)
- P1-2** Experimental investigation on blood magnetic contamination in the presence of drug molecules
D.E. Creangă, Gh. Iacob, Claudia Nădejde ("Al. I. Cuza" University, Romania)
- P1-3** Dustiness testing of engineered nanomaterials
Isamu Ogura, H. Sakurai, M. Gamo (National Institute of Advanced Industrial Science and Technology (AIST), Japan)
- P1-4** Nanoinventory: a representative survey of nanoparticle usage in Suisse industry
Kaspar Schmid, B. Danuser, M. Riediker (University of Lausanne, Switzerland)
- P1-5** Workplace exposure at nanomaterial production processes
Carsten Möhlmann, J. Welter, M. Klenke, J. Sander (BGIA-Institute for Occupational Health and Safety, Germany)
- P2-1** On - line monitoring of composite nanoparticles synthesized in a pre - industrial laser pyrolysis reactor using Laser - Induced Breakdown Spectroscopy
Tanguy Amodeo, C. Dutouquet, O. Le Bihan, F. Tenegal, B. Guizard, H. Maskrot, E. Fréjafon (INERIS, France)
- P2-2** An overview of the characterization of occupational exposure to nanoaerosol in workplaces
Paola Castellano, R. Ferrante, S. Canepari (National Institute for Occupational Safety and Prevention, ISPESL, Italy)
- P2-3** Specific response of SMPS particle counter to CNT
Luana Golanski, S. Bernard, A. Guiot, O. Poncelet, F. Tardif (CEA, France)
- P2-4** A size selective nanoparticle collection device based on diffusion and thermophoresis.
J. Lyyränen, U. Backman, A. Auvinen, U. Tapper, J. Jokiniemi (VTT Technical Research Centre of Finland, Finland)
- P2-5** Luminescent nanotracer as a probe to qualified the nanoparticle emission during a friction of a polymer nanocomposite.
Olivier Raccourt, J. Samuel, O. Poncelet, L. Golanski, A. Guiot (CEA, France)
- P2-6** Characterization of inorganic magnetic nanoparticles produced by the laser pyrolysis method
Sophie Giraud, H. Maskrot, P. Bonville, L. Boulanger (CEA, France)
- P2-7** Suspension characterization as the important key for toxicological investigations
Tobias Meißner, A. Potthoff, V. Richter (Fraunhofer Institute for Ceramic Technologies and Systems, Germany)
- P2-8** Dispersion and stability of TiO₂ nanoparticles synthesized by laser pyrolysis in aqueous suspensions
Carole Sentein, B. Guizard, S. Giraud, C. Yé, F. Ténégéral (CEA, France)

- P2-9** Dispersion and stability of SiC nanoparticles synthesized by laser pyrolysis in aqueous suspensions
Carole Sentein, B. Guizard, S. Giraud, A. Coupé, H. Maskrot, A. Réau, F. Ténégal (*CEA, France*)
- P2-10** Nanoparticle detection and measurement in consumer products
Monica Ratoi, A.J.A. Crossley, P. J. Dobson (*University of Oxford, UK*)
- P2-11** Size Selective Particle Sampling for Direct Biological Exposure Studies of Diesel Nanoparticles
Eleni Papaioannou, A. Asimakopoulou, A.G. Konstandopoulos (*CERTH/CPERI, Greece*)
- P3-1** Assessment of nanoparticles emission from manufactured product: feasibility study
Olivier Le Bihan, K. Schierholz (*INERIS, France*)
- P3-2** Optimisation of carbon nanotube paper production: a life cycle oriented approach
Marcel Weil, S. Crizeli, S. Forero (*Forschungszentrum Karlsruhe, Germany*)
- P3-3** Aging of nanomaterials used in sunscreen cosmetics: fate, bioavailability and toxicity of their nanometric byproducts
Jérôme Labille, J. Feng, M. Auffan, J. Rose, J. Garric, B. Vollat, K. Abbaci, P. Noury, A. Masion, J.-Y. Bottero (*CEREGE, France*)
- P4-1** Possibility to use magnetically operated liposome composite encapsulated with cytostatic and nanoscaled ferromagnets
G.T. Dambaev, Sergey A. Antipov, T.A. Fedushchack, A.E. Ermakov, M.A. YUymin, A.B. Shashkin, D.V. Mitrichenko, O.V. Kokorev, T.V. Petrenko (*Siberian State Medical University, Russian Federation*)
- P4-2** Toxicological impact of TiO₂ nanoparticles and carbon nanotubes on two environmental bacteria
A. Simon-Deckers, S. Barillet, M. Laye, N. Herlin-Boime, M. Mayne-l'Hermite, C. Reynaud, Marie Carrière, B. Gouget (*CEA, France*)
- P4-3** Magnetic particle effects on the red blood cells
Dorina E. Creangă, M. Culea, C. Nădejde, S. Oancea, L. Curecheriu (*University "Al. I. Cuza", Romania*)
- P4-4** Speculations on the toxicological scenario created by nanoparticles
Antonietta Gatti (*Università di Modena e Reggio Emilia, Italy*)
- P4-5** Interfering factors in cytotoxicity studies with nanomaterials: role of vehicle and cell density
Jorina Geys, B. Nemery, P.H.M. Hoet (*K.U.Leuven, Belgium*)
- P4-6** C₆₀ fullerene a powerful antioxidant or a damaging nanono? The importance of an in - depth material characterization prior to cytotoxicity assays
Jean-Pierre Kaiser, P. Spohn, F. Hasler, H.F. Krug, A. Bruinink, P. Wick (*Empa, Switzerland*)

- P4-7** Respiratory symptoms and pulmonary function of toner manufacturing workers: results of the first three years of a follow up study in Japan
Hiroaki Kuga, T. Uchiyama, T. Matsushita, T. Kohchi, H. Kitamura, M. Zaqout, N. Kakiuchi, S. Kurosaki, M. Masuda, K. Yoshizumi, T. Higashi (*Institute of Industrial Ecological Sciences, Japan*)
- P4-8** Cytotoxicity of various industrial relevant nanomaterials: carbon nanotubes, titanium dioxide and carbon black
Ghislaine Lacroix, F. Rogerieux, J. Geys, A. Dupont, E. Maillot-Maréchal, P. Hoet, J. Boczkowski, S. Lanone (*INERIS, France*)
- P4-9** Antibacterial activities of PHU - AgNO₃ nanocomposite
Carmen Panzaru, S. Mihailovici, M. Danciu, C. Ciobanu (*University of Medicine and Pharmacy "Gr.T.Popa", Romania*)
- P4-10** Quantum Dots: proteomics characterization of the impact on biological system
Stefano Pozzi Mucelli, F. Boschi, L. Calderan, A. Sbarbati, F. Osculati (*European Centre for the Sustainable Impact of Nanotechnologies, Italy*)
- P4-11** Cell toxicity and release of inflammatory cytokines in epithelial lung cells after exposure to aluminium particles of different sizes
Françoise Rogerieux, D. Elgrabli, G. Lacroix (*INERIS, France*)
- P4-12** Adverse effects of industrial multi-walled carbon nanotubes on human pulmonary cells
Lyes Tabet, C. Bussy¹, N. Amara, A. Setyan, A. Grodet, M.J. Rossi, J.-C. Pairon, J. Boczkowski, S. Lanone (*INSERM, France*)
- P4-13** Cytotoxicity of titanium and silicon dioxide nanoparticles
Stefanie Wagner, C. Kasper, T. Scheper, D. Bahnemann (*Leibniz Universität Hannover, Germany*)
- P4-14** Multidisciplinary approach to study particles biological activity
N. Boumahdi, Philippe Grosseau, B. Guilhot, M. Cottier, D. Boudard, J. -M. Vergnon (*Ecole Nationale Supérieure des Mines of Saint - Etienne, France*)
- P6-1** Nanoparticles filtration by leaked fibrous filters
G. Mouret, Sandrine Callé-Chazelet, D. Thomas, D. Bémer (*Nancy-Université, France*)
- P6-2** Carbon nanotubes, from laboratory to industrialisation: a safe production
Serge Bordere, P. Gaillard (*ARKEMA, France*)
- P7-1** Visualization of nano risk research field to clarify domains year by year
Yasuto Matsui, T. Hayashi, H. Tomobe, Y. Kajikawa, K. Matsushima, Y. Yamaguchi (*University of Tokyo, Japan*)
- P7-2** The NANOFEU project: objectives and tools
Didier Calogine, Stephane Duplantier, Carine Chivas, Eric Guillaume, José-Marie Lopez-Cuesta, C. Longuet, B. Minisini, F. Gensous, L. Chesné (*INERIS, France*)

P7-3

Nanotechnologies: Risk assessment model

Francesco Giacobbe, L. Monica, D. Geraci, (ISPESL, Italy)

P8-1

Preparing for the future: proposal for an International Nanomaterial Exposure Registry (INER)

Fabio Praolini, M. Guilhem, D. Mundt, K. Mundt, A. Santamaria (ENVIRON International Corp., France)

Wednesday 5 November

Session 4: Toxicology

(Chair: Jorge Boczkowski)

4a. Methodological issues in nanotoxicology

- PL4** Nanotoxicology: What we have learned from toxicological studies of manufactured nanomaterials.
9:00-9:40 Yuliang Zhao (*Lab for Biomedical Effects of Nanomaterials and Nanosafety, China*)
- O4a-1** Integration of a microfluidic device to test the toxicity of nanoparticles
9:40-9:55 Abhay Andar, N. Gadegaard, M.O. Riehle, M. Liley, P. Niedermann, T. Overstolz (*University of Glasgow, UK*)
- O4a-2** Dosimetry of mono-disperse silica nanoparticles in cytotoxicity assays
9:55-10:10 D. Lison, L.C. Thomassen, V. Rabolli, L. Gonzalez, J. Geys, D. Napierska, M. Kirsch-Volders, C.E. Kirschhock, J.A. Martens, Peter H.M. Hoet (*KULeuven, Belgium*)
- O4a-3** PBPK models to assess nanoparticles kinetics and distribution in humans and rats
10:10-10:25 Alexandre R.R. Péry, R. Beaudouin, C. Brochot, E. Fabian, R. Landsiedel, P. Hoet, F. Bois (*INERIS, France*)
- O4a-4** Nanotoxicology studies within the “Nanoscience” CEA program
10:25-10:40 F. Taran, Marie Carrière, V. Dives, N. Herlin, M. Mayne, J.-P. Bourgoin (*CEA, France*)
- 10:40-11:10: Coffee break

Session 2: Characterization, Detection and Monitoring

(Chair: Martha Liley)

2b. Characterization

- O2b-1** Nanotomography of silica nanospheres functionalized for medical applications
11:10-11:25 W.L. Ling, Peter Cherns, J. Samuel, O. Raccurt, O. Poncelet, D. Imbert, M. Mazzanti (*CEA, France*)
- O2b-2** From nanoparticles to large aerosols: Ultrafast measurement methods for size and concentration
11:25-11:40 L. Keck, Jürgen Spielvogel, H. Grimm (*Grimm Aerosol Technik GmbH, Germany*)

2c. Detection in liquids

- O2c-1** Environmental parameters that control the fate of C₆₀ fullerenes in aquatic system
11:40-11:55 Jérôme Labille, J. Rose, A. Masion, J.-Y. Bottero (*CEREGE, France*)

- O2c-2** Characterisation of nanoparticle size and state prior to nanotoxicological studies
11:55-12:10 Patrick Hole, I. Montes-Burgos, I. Lynch, A. Malloy, J. Smith, P. Nelson, B. Carr, K. Dawson (*NanoSight Limited, UK*)
- O2c-3** Lung toxicity determination by *in vitro* exposure at the air liquid interface with an integrated online dose measurement
12:10-12:25 Sonja Mühlhopt, S. Diabaté, T. Krebs, C. Weiss, H.-R. Paur (*Forschungszentrum Karlsruhe GmbH, Germany*)
- O2c-4** Using inductively coupled plasma mass spectrometry (ICP - MS) to determine the fate of inorganic nanoparticles
12:25-12:40 Silvia Angeloni, V. Matera, M. Liley (*CSEM, Switzerland*)
- O2c-5** New sampling technique and characterization of nanoparticles in liquids
12:40-12:55 Monica Ratoi, A.J.A. Crossley, P.J. Dobson (*University of Oxford, UK*)
- 13:00-14:30: Lunch

Session 4: Toxicology

(Chair: *Yuliang Zhao*)

4b. *In vitro* studies

- O4b-1** Comparative cytotoxicity of 27 manufactured nanomaterials in human alveolar epithelial and macrophage cell lines
14:30-14:45 Sophie Lanone, F. Rogerieux, J. Geys, A. Dupont, E. Maillot-Maréchal, J. Boczkowski, G. Lacroix, P. Hoet (*INSERM, France*)
- O4b-2** TiO₂, SiC nanoparticles and multi-walled carbon nanotubes cyto- and genotoxicity
14:45-15:00 A. Simon-Deckers, S. Barillet, M. Laye, N. Herlin-Boime, M. Mayne-l'Hermite, C. Reynaud, B. Gouget, Marie Carrière (*CEA, France*)
- O4b-3** Analysis of the toxicity of nanoparticles on the immune system using their capacity to perturb dendritic cells functions
15:00-15:15 Christian L. Villiers, H. Freitas, R. Couderc, M.-B. Villiers, P.N. Marche (*INSERM, France*)
- O4b-4** Exposure of human lung cells to industrial scale produced multi walled carbon nanotubes: effects on cell physiology *in vitro*
15:15-15:30 P. Wick, D. Su, Jean-Pierre Kaiser, X. Maeder-Althaus, T. Thurnherr, A. Bruinink (*Empa, Switzerland*)
- O4b-5** Antifibrosant effects of TiO₂ particles on pulmonary fibroblasts
15:30-15:45 Lucie Armand, C. Tarabhat, E. Bellade, S. Lanone, J.-C. Pairon, J. Boczkowski (*INSERM, France*)
- O4b-6** Interactions between inorganic nanoparticles and NIH-3T3 living cells
16:00-16:15 H. Sarrouj, J. Fresnais, Jean-François Berret (*Université Denis Diderot Paris-VII, France*)
- 16:15-16:45: Coffee break

Session 5: Commercial equipments related to safe production and use of nanomaterials

(Chair: Frédéric Schuster)

- O5-1** Nanosight: Systems For characterisation of nanoparticle dispersions
16:45-17:00 Andrew Malloy, P. Hole, J. Warren (*NanoSight Ltd., UK*)
- O5-2** The first solution for nanoparticles handling designed by Faure Ingénierie:
Description of the PSPN (Poste de Sécurité pour Particules Nanostructurées)
17:00-17:15 Jean-Marie Reinwalt and Pierre Bombardier (*Faure Ingénierie S.A., France*)
- O5-3** CORDOUAN Technologies: Solutions for particle size measurements in
dispersion: the DL135.
17:15-17:30 Stéphane Aguy, D. Frot (*CORDOUAN Technologies, France*)
- O5-4** TSI: Measurement, monitoring and exposure assessment of nanoparticles
17:30-17:45 Eric Filimundi (*TSI France Inc., France*)
- O5-5** Sperian Protection Clothing
17:45-18:00 Olivier Gougeon (*Sperian Protection Clothing, France*)
- O5-6** Grimm Aerosol Technik GmbH, ECOMESURE:
New methods and standards for fine dust monitoring
18:00-18:15 Jürgen Spielvogel, S. Hartstock, H. Grimm (*Grimm Aerosol Technik GmbH, Germany*)
- O5-7** Philips Aerasense: Monitoring of airborne nano particles at industrial workplaces
by means of a portable device will enable strategies to reduce exposure levels
and improve the health and safety of workers
18:15-18:30 Willem van den Brink (*Philips Aerasense, The Netherlands*)
- 19:00 Banquet at the *Europole*

Thursday 6 November

Session 6: Personal protection and secure industrial production

(Chair: *François Tardif*)

PL6 9:00-9:40	Stargate Sherbrooke: an example of a safe nanofactory <u>François Gitzhofer</u> (<i>University of Sherbrooke, Canada</i>)
O6-1 9:40-9:55	Experimental evaluation of individual protection devices against different types of nanoaerosols: graphite, TiO ₂ and Pt <u>Luana Golanski, A. Guiot, F. Tardif</u> (<i>CEA, France</i>)
O6-2 9:55-10:10	Lessons learnt over 30 years of air filtration in the nuclear industry <u>Jacques Vendel, J.C. Laborde, N. Michielsen, F. Gensdarmes</u> (<i>IRSN, France</i>)
O6-3 10:10-10:25	Elaboration of nanophased materials in supercritical CO ₂ : the MATCOS facility. Safety issues and scientific challenges <u>Frédéric Charton, J.C. Ruiz, S. Sarrade, B. Fournel</u> (<i>CEA, France</i>)
O6-4 10:25-10:40	Liquid recovery of TiO ₂ nanoparticles synthesized by laser pyrolysis <u>Benoit Guizard, F. Ténégéral</u> (<i>CEA, France</i>)
O6-5 10:40-10:55	Spray drying for processing of nanomaterials <u>Jesper Sæderup Lindeløv, M. Wahlberg</u> (<i>GEA Niro, Denmark</i>)
11:00-11:30:	Coffee break

Session 4: Toxicology

(Chair: *Peter Hoet*)

4c. *In vivo* studies

O4c-1 11:30-11:45	Multi walled carbon nanotubes can be eliminated by the lung: Proposition of hypothetical clearance mechanism <u>Dan Elgrably, M. Floriani, F. Rogerieux, J. Boczkowski, G. Lacroix</u> (<i>INERIS, France</i>)
O4c-2 11:45-12:00	Biokinetics and effects of titania nanomaterial after inhalation and <i>i.v.</i> injection <u>Robert Landsiedel, E. Fabian, L. Ma-Hock, K. Wiench, B. van Ravenzwaay</u> (<i>BASF, Germany</i>)
O4c-3 12:00-12:15	Nanotoxicology: Toxicological assessment of manufactured nanomaterials using <i>in vitro</i> and <i>vivo</i> models <u>Christelle Saout, S. Vankoningsloo, J.-P. Piret, J. Marijsse, F. Noël, S. Rolin, J. Laloy, B. Masereel, J. Mejia Mendoza, S. Lucas, O. Toussaint</u> (<i>University of Namur, Belgium</i>)
O4c-4 12:15-12:30	Study of the composite nanopowders dispersion in the vital organs of mice <u>M. Coman, M. Banu, Alice Tofan, O. Naidim</u> (<i>University Dunarea de Jos of Galati, Romania</i>)
O4c-5 12:30-12:45	Acute toxicity of quantum dots in mice: importance of surface charge <u>Jorina Geys, M. Ratoi, B. Nemery, P.H.M. Hoet</u> (<i>KULeuven, Belgium</i>)

- O4c-6** Evaluation of MWNT toxic effects on Daphnia magna and Zebrafish embryos
12:45-13:00 M. Olasagasti, N. Alavrez, C. Vera, Sandra Rainieri (*AZTI-TECNALIA, Spain*)
13:00-14:30: Lunch

Session 7: Safety parameters evaluation

(Chair: *Jacques Bouillard*)

- PL7** Risk of dust explosions of combustible nanomaterials
14:30-15:10 Ritsu Dobashi (*University of Tokyo, Japan*)
- O7-1** Material scientific approach to predict nanomaterials risk of adverse health effects
15:10-15:25 Yasuto Matsui, K. Miyaoi, T. Hayashi, Y. Yamaguchi (*University of Tokyo, Japan*)
- O7-2** Estimation of risks and safety margins for selected nanoparticles in occupational, consumer and environmental settings
15:25-15:40 Otto Hänninen, I. Brüske-Hohlfeld, O. Schmid, W. Kreyling, A. Peters, (*Helmholtz Zentrum München, Germany*)
- O7-3** Explosion risks from nanomaterials
15:40-15:55 Jacques Bouillard, A. Vignes, O. Dufaud, L. Perrin, D. Thomas (*INERIS, France*)
- 16:00-16:30: Coffee break

Session 8: Standardization, Regulations and Education

(Chair: *Peter Hatto*)

- PL8** Standardization in support of safe and successful nanotechnologies for all stakeholders
16:30-17:10 Peter Hatto (*IonBond Limited, UK*)
- O8-1** NanoSMILE: information and training process at CEA
17:10-17:25 Y. Sicard, C. Tardif, Hubert Jeanson (*INSTN, France*)
- O8-2** Current standardisation for nanotechnology
17:25-17:40 D. Bard, D. Mark, Carsten Möhlmann (*BGIA, Germany*)
- O8-3** Personal protective equipment against solid particles in nuclear environment
17:40-17:55 Samuel Ozil (*Sperian Protection Clothing, France*)
- O8-4** Guideline for safe handling, use and disposal of nanoparticles
17:55-18:10 Ghassem Amoabediny, J. Malakootikhah, A. Naderi, (*University of Tehran, Iran*)

Posters session

18:10-19:30

Friday 7 November

Session 9: World trend and strategies for the safe production and use of nanomaterials for the future

(Chair: *François Gitzhofer*)

- PL9** Strategy of Québec and Canada: the mission of NanoQuébec
8:30-9:10 Alain Lacourse (*NanoQuébec, Canada*)
- O9-1** Managing the health and safety risks of working with nanomaterials in CSIRO laboratories, Australia
9:10-9:25 Gregory M. Haywood (*CSIRO, Australia*)
- O9-2** European policy in Nanosafety
9:25-9:40 Jose-Lorenzo Valles (*European Commission*)

Session 10: Main projects in Europe

(Chair: *Jose-Lorenzo Valles*)

- O10-1** PARTICLE_RISK: Risk assessment of exposure to particles from new and emerging science and technology (NEST)
9:40-9:55 Lang Tran, K. Donaldson, S. Loft, W. Kreyling, A. Marcomini, G. Pojana, V. Stone, H. Wallin, S. Zuin (*Institute of Occupational Medicine, UK*)
- O10-2** The NanoCare project: a German initiative on health aspects of synthetic nanoparticles
09:55-10:10 Katja Nau, Harald F. Krug (*Forschungszentrum Karlsruhe GmbH, Germany*)
- O10-3** Development of methodology for alternative testing strategies for the assessment of the toxicological profile of nanoparticles used in medical diagnostics. NanoTEST – EC FP7 project
10:10-10:25 Maria Dusinska, L. Tran, L. Juillerat-Jeanneret, F. Marano, M. Saunders, M. Whelan, C. Housiadas, K. Volkovova, L.E. Knudsen, S. Guerrero, A. Marcomini (*Norwegian Institute for Air Research, Norway*)
- 10:30-11:00: Coffee break
- O10-4** SAPHIR Safe NanoManufacturing: Safe, Integrated & controlled production of high-tech multifunctional materials and their recycling
11:00-11:15 Christophe Goepfert (*CILAS, France*)
- O10-5** The DIPNA project: a platform for the nanotoxicological investigations
11:15-11:30 Antonietta Gatti, D. Boraschi, A. Duschl, E. Di Fabrizio, I. Nelissen, V. Puntes, F. Rossi, J. Spielvogel, H. Thielecke, G. Voirin (*Università di Modena e Reggio Emilia, Italy*)
- O10-6** NANointeract: A rational approach to the interaction between nanoscale materials and living matter?
11:30-11:45 Iseult Lynch, Kenneth A. Dawson (*University College Dublin, Ireland*)

- O10-7** NanoImpactNet - European network on the health and environmental impact of nanomaterials
11:45-12:00 Michael Riediker (*Université de Lausanne and Université de Genève, Switzerland*)

12:00-13:00 **Conclusions**