

**International Workshop
PRODUCTION AND APPLICATION OF NANOMATERIALS IN RUSSIA:
TOXICOLOGICAL, EXPOSURE AND REGULATORY ISSUES**

**September 14-16, 2009
Marriott Tverskaya Hotel
Moscow, Russian Federation**

PROGRAM

September,14	
16:00-17:00	Registration.
17:00-19:00	Conference Opening. First Night Reception.
September,15	
Section 1. Nanomaterials production and application: Legislative regulation. Co-Chairs: Prof. Irina Berezovskaya (Russia) and Dennis Utterback (USA)	
9:00-9:20	Dennis Utterback (USA, Environment Protection Agency). <i>To be determined</i>
9:20-9:40	Peter Kearns (France, Organisation for Economic Cooperation and Development, Environmental, Health and Safety Department, OECD ENV-EHS). <i>To be determined</i>
9:40-10:00	Peter Hatto (United Kingdom, IonBond Limited). International standardization for nanotechnologies – supporting innovation, safety and responsibility.
10:00-10:20	Lyudmila Elovskaya (Russia, Moscow, RAMS Institute of Occupational Health, Russian Academy of Science). Treatment and establishing the safety standards in connection with nanotechnology.
10:20-10:40	Marine Melkonyan (Russia, Moscow, A.V. Shubnikov Institute of Crystallography). The need for a balanced approach to potential benefits and risks of Nanotechnologies
10:40-11:00	Coffee Break
11:00-11:20	Boris Filatov (Russia, Volgograd, Research Institute of Hygiene, Toxicology and Occupational Pathology at Federal Medical and Biological Agency). Sanitary and hygienic issues for ensuring safe production and use of nanomaterials.
11:20-11:40	Anna Shvedova (USA, Pathology & Physiology Research Branch/NIOSH/CDC, West Virginia University). Toxicity of carbon nanotubes to the lung: from mechanisms to regulatory consequences.
11:40-12:00	Vladimir Demin (Russia, Moscow, Russian Science Center Kurchatov Institute). Scientific-methodical aspects of risk assessment in application to impact of nanomaterials/nanoparticles on environment and public health.
12:00-12:30	Discussion
12:30-14:30	Lunch
Section 2: Nanomaterials toxicity assessment. Co-Chairs: Dr. Anna Shvedova (USA) and Prof. Boris Filatov (Russia)	
15:00-15:20	Valerian Kagan (USA, University of Pittsburg). Oxidative stress and oxidative metabolism of carbon nanotubes.
15:20-15:40	Basavaradj Madhusudhan (India, Research Center for Nanoscience and Technology, Kuvempu University). Nanotoxicology: Unforeseen health and environment safety problems.
15:40-16:00	Andrey Radilov (Russia, Saint-Petersburg, Research Institute of Hygiene, Occupational Pathology and Human Ecology at Federal Medical and Biological Agency). Methods of experimental toxicity and hazard assessment of nanosized materials.
10:20-11:00	Coffee Break
16:00-16:20	Sergey Dulov (Russia, Saint-Petersburg, Research Institute of Hygiene, Occupational Pathology and Human Ecology at Federal Medical and Biological Agency). On a classification of nanoparticles on the basis of toxicity and hazard criteria and parameters.

16:20-16:40	Alexander Maslennikov (Russia, Volgograd, Research Institute of Hygiene, Toxicology and Occupational Pathology at Federal Medical and Biological Agency). Methodological approaches to the experimental assessment of nanomaterials impact on reproductive function.
16:40-17:00	Yulia Chudoklinova (Russia, Korolev, LLC EcoBioPharm). Applying Danio rerio as a laboratory model for acute and chronic toxicity of nanoproducts estimation.
17:00-17:30	Discussion
17:30-18:30	Networking Time
19:00-21:00	Conference Dinner
September, 16	
Section 2 (cont). Nanomaterials toxicity assessment. Co-Chairs: Dr. Anna Shvedova (USA) and Prof. Boris Filatov (Russia)	
9:00-9:20	Alexander Pocheptsov (Russia, Volgograd, Research Institute of Hygiene, Toxicology and Occupational Pathology at Federal Medical and Biological Agency). Studying of gold nanoparticles distribution in organs and tissues of the experimental animals according to morphological investigation data.
9:20-9:40	Natalia Belyaeva (Russia, Moscow, A.N.Sysin Research Institute for Human Ecology and Environment Hygiene). Approaches to morphofunctional estimation of toxicity of nanoparticles.
9:40-10:00	Vladimir Baranov (Russia, Moscow, Russian Medical Academy for Postgraduate Education). Influence of nanoparticles of tungsten and its compounds on Vero cells in vitro.
10:00-10:20	Lyudmila Sycheva (Russia, Moscow, A.N.Sysin Research Institute for Human Ecology and Environment Hygiene). Genotoxicity of nanomaterials: titanium dioxide.
10:20-10:40	Vladimir Aldobaev (Russia, Moscow, Research Center for Toxicology and Hygienic Regulation of Biopreparations). Approaches to complex toxicological-hygienic safety assessment of nanostructured form of carbon- single wall carbon nanotubes (SWCN).
10:40-11:00	Coffee Break
Section 3. Nanotechnology and environment protection, human health and safety. Co-Chairs: Prof. Lyudmila Elovskaya (Russia) and Prof. Valerian Kagan (USA)	
11:00-11:20	Irina Berezovskaya (Russia, Moscow, Russian Science Center for Bioactive Substances Safety). Nanomaterials and safety of pharmaceuticals.
11:20-11:40	Ioanna Gushchina (Russia, Moscow, LLC BONASANA). Creation of independent center for preclinical studies of pharmaceutically active nanosubstances, medical nanoproducts, and nanovaccines in accordance with international and Russian standards.
11:40-12:00	Muzafar Isobayev (Republic of Tajikistan, Institute of Chemistry at Academy of Science). Nanotechnology in medicine production as a possible way to decrease their toxicity.
12:00-12:20	Andrey Sosnov (Russia, Moscow, Chemical Diversity Research Institute). Bioactive products based on nanotechnology: opportunities, challenges/ problems and risks.
12:20-12:40	Sergey Ignatov (Russia, Obolensk, State Science Center for Applied Microbiology and Biotechnology). Evaluation of bactericidal activity of multi-functional bioactive nano-structured films for load-bearing implants.
12:40-13:00	Semyen Chervonobrodov (Russia, Dolgoprudny, LLC CARBONLIGHT). Graphene-based nanocarbon materials: preparation and investigation.
13:00-15:00	Lunch
15:00-15:20	Leonid Kustov (Russia, Moscow, N.D. Zelinsky Institute of Organic Chemistry). Supported iron nanoparticles and removal of chlorinated compounds in water
15:20-15:40	Alim Aikimbayev (Republic of Kazakhstan, Republican sanitary and epidemiological station). Nanotechnology is priority direction of science of Kazakhstan.
15:40-16:00	Eugenia Sopova (Russia, Moscow, Russian Medical Academy for Postgraduate Education). Antiviral effect of nano-Ag in the model of Vero cells, infected by Herpes simplex virus 2.
16:00-16:30	Discussion
16:30-17:00	Workshop Closing Ceremony