RUSNANO
Russian Corporation of Nanotechnologies

S T A T E   U N I V E R S I T Y
HIGHER SCHOOL OF ECONOMICS

**ISSEK Institute
for Statistical Studies
and Economics of Knowledge**

**ISSEK/HSE
International Foresight
Centre**

Foresight, Roadmaps and Indicators for Nanoindustry

INTERNATIONAL WORKSHOP
7-8 October 2009
Central Exhibition Complex EXPOCENTER
(14 Krasnopresnenskaya nab., Moscow)

PROGRAMME

	7 October
9:30-10:00	***Registration of participants***
	Panel discussion: the future of nanoindustry
10:00	Issues to be discussed: • Nanotechnology in the context of the present global problems • The future of nanoindustry: trends and priorities • Nanoindustry markets: prospects for Russia • Nanotechnology sector – a model for S&T modernization • S&T and innovation policies for nanotechnology **Mikhail ALFIMOV,** *Director, Photochemistry Centre of Russian Academy of Sciences, Chair of Science and Technology Board of Russian Corporation of Nanotechnologies* **Andrey MALYSHEV,** *Deputy Director General, Russian Corporation of Nanotechnologies* **Leonid GOKHBERG**, *First Vice-Rector, Higher School of Economics, and Director, HSE Institute for Statistical Studies and Economics of Knowledge, Russia* **Mikhail RYCHEV**, *Deputy Director, Kurchatov Institute, Russia* **Ian MILES,** *Institute for Innovation Research, Manchester University, UK* **Hans PEDERSEN**, *DG Research, European Commission*

	Session 1: Trends and policies for emerging technologies
	Chairs: **Mikhail RYCHEV**, *Deputy Director, Kurchatov Institute, Russia, and* **Ian MILES**, *Institute for Innovation Research, Manchester University, UK*
10:40	President's Initiative "Strategy of Nanoindustry Development in the Russian Federation" and its implementation **Alexander NAUMOV**, *Department for S&T and Innovation Policy, Ministry of Education and Science of the Russian Federation*
11:00	Technology intelligence and impact of Foresight on government technology policy **Jonathan CALOF**, *University of Ottawa, Canada*
11:20	Where the Nanoworld is Heading: A Global Perspective **Paras N. PRASAD**, *Institute for Lasers, Photonics and Biophotonics, US*
11:40 – 12:00	Coffee break
12:00	Future technology trends in the Russian industry **Stanislav NAUMOV**, *Ministry of Industry and Trade of the Russian Federation*
12:20	Global Challenges in Energy and the Environment – and Nanotechnology's Role in Addressing Them **Michael HOLMAN**, *LUX Research, US*
12:40	EU policies for converging technologies **Hans PEDERSEN**, *DG Research, European Commission*
13:00	Policy agenda for nanotechnology: an international comparison **Pavel RUDNIK**, *HSE Institute for Statistical Studies and Economics of Knowledge, Russia*
13:20	Nanotechnology in the German industry: nanoDE-Report **Gerd BACHMANN**, *VDI Technologiezentrum GmbH, Germany*
13:40	Risk governance and industry: The Austrian approach **Alexander POGANY**, *Federal Ministry of Transport, Innovation and Technology, Austria*
14:00–15:00	LUNCH
	Session 2: Nanotechnology Foresight and roadmaps Chairs: **Boris SALTYKOV**, *Non-profit Association "Russian House of International S&T Co-operation" and HSE, and* **Jonathan CALOF,** *Professor, University of Ottawa, Canada*
15:00	A Delphi study of future nanotechnology markets in Russia **Alexander SOKOLOV**, *HSE Institute for Statistical Studies and Economics of Knowledge, Russia*
15:20	Use of weak signals for nanotechnology Foresight **Rafael POPPER**, *Institute for Innovation Research, Manchester University, UK*
15:40	Foresight and roadmaps in the system of RUSNANO strategy implementation **Anatoly AFANASIEV, Mikhail CHUCHKEVICH**, *Russian Corporation of Nanotechnologies*
16:00	Prospective convergence applications **Jack SMITH,** *Federal Foresight & Innovation Strategy, Defence R&D, Canada*
16:20	Roadmapping of industrial nanotechnology applications **Oleg KARASEV**, *HSE Institute for Statistical Studies and Economics of Knowledge, Russia*

16:45–17:00	Coffee break
17:00	NIA Forecast of Emerging Technologies **Steffi FRIEDRICHS,** *Nanotechnology Industry Association, Belgium*
17:20	Skills for nanotechnology: assessing future demand for the UK **Ian MILES,** *Institute for Innovation Research, Manchester University, UK*
17:40	Foresight of demand for human resources and competences in the Russian nanotechnology sector **Alexander ABROSKIN, Natalia SHMATKO, Dinara YUSIPOVA,** *HSE Institute for Statistical Studies and Economics of Knowledge, Russia*
18:00	The Resource Sharing Approach to Nanotechnology Workforce Development **Stephen FONASH,** *Center for Nanotechnology Education and Utilization, Pennsylvania State University, US*
18:20	Future studies of nanotechnologies through the expert-citizen nanoplatform **Ozcan SARITAS,** *Institute for Innovation Research, Manchester University, UK*
18:40-19:00	*Discussion*
	8 October
Session 3: Integrated statistical framework for measuring emerging/enabling technologies *Chairs:* **Yakov URINSON**, *Deputy Director General, Russian Corporation of Nanotechnologies, and* **Alexander KEVESH,** *Federal State Statistics Service, Russia*
10:00	Indicators of high-tech industries in the European Union **Veijo-Ismo RITOLA**, *Section of Science, Technology and Innovation, Eurostat*
10:20	Nanotechnology statistics in Russia: the first results **Leonid GOKHBERG**, *Higher School of Economics, Russia*
10:40	Development of classifications for nanotechnology statistics in Russia **Konstantin FURSOV**, *HSE Institute for Statistical Studies and Economics of Knowledge, Russia*
11:00	Dynamics in science-based markets: two phases of development **Inna HALLER**, *Fraunhofer Institute for Systems and Innovation Research, Germany*
11:20	RUSNANO practices in monitoring commercialization of nanotechnology projects **Mikhail CHUCHKEVICH**, *Russian Corporation of Nanotechnologies*
11:45 – 12:00	Coffee break
12:00	Guidelines for a prosperous industrialisation of nanomaterials **Marcel van de VOORDE**, *Delft University, the Netherlands*
12:30-13:15	*Discussion*
13:15-13:30	*Wrapping-up / Conclusions*
13:40-15:00	*LUNCH*

Working languages – English and Russian (simultaneous translation)