

«NUCLEAR POWER: DRIVER OF INNOVATIVE DEVELOPMENT»

Moscow • Manezh Central Exhibition Hall • 7-9 June 2010

CONGRESS PROGRAM

7 JUNE 2010 – Round-table sessions
13:00 – Official Opening of the Exhibition

8 JUNE 2010 – Plenary Sessions, Symposium

9 JUNE 2010 – Round-table sessions

PLENARY SESSIONS PROGRAM
8 JUNE 2010

Topic: **Innovative contribution of nuclear industry to economy modernization**

Moderator: Anil Kakodkar, Member of Atomic Energy Commission of India

10:00 – 13:00	Plenary Session I	Hall 1
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- Sergey Sobyenin, Deputy Chairman of the Russian Government, Chairman of the Supervisory Board of Rosatom.
- Alexander Torshin, First Deputy Chairman of the Council of Federation of the Federal Assembly of the Russian Federation. *Welcome Address on behalf of the Council of Federation.*
- Sergey Kirienko, Director General, Rosatom.
- Bernard Bigot, Director General, Commissariat for Atomic Energy of France.
- Takuya Hattori, President, Japan Atomic Industrial Forum. *Nuclear Energy in Japan: Innovation and Contribution to Global Society.*
- Carlos M. Gutierrez, Secretary of Commerce in the Cabinet of U.S. President George W. Bush Jr.
- Luc Oursel, Chief Operating Officer, Nuclear Operations, Group AREVA. *Nuclear industry contribution in the economic modernization of France.*
- Guy Chardon, Senior Vice President, Alstom.
- Michael Suess, Executive Director of Energy Sector, Siemens AG. *Nuclear energy as the central component of a sustainable energy mix - Siemens' contributions to this upcoming market.*
- Tony Ward, Partner, Global Nuclear Power Leader, Ernst & Young. *Nuclear prospects geared by innovations.*

14:00 – 18:00	Plenary Session II	Hall 1
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- Laurent Stricker, Chairman, World Association of Nuclear Operators.
- Sergey Yashin, Vice President, NAC Kazatomprom. *NAC Kazatomprom uranium production and delivery planning for the world nuclear industry.*
- Takahiko Iikura, Technology Executive, Toshiba Power Systems Company. *Toshiba Nuclear Activities.*
- Ron Cameron, Head of Nuclear Power Development Division, OECD/NEA. *Nuclear Power – Putting the Costs and Financing in Perspective.*
- Jeff Benjamin, Senior Vice President of CH2M HILL. *Establishing New Nuclear Power Programs.*

ROUND-TABLE SESSIONS PROGRAM

7 JUNE 2010

10:00 – 13:30	<u>Round-table session «Human Capital in Nuclear: Challenges and Solutions»</u>	Hall 1.1
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Moderator: A. Gutierrez, Director for Key Clients Development, Moscow School of Management SKOLKOVO.

- T. Kozhevnikova, Deputy Director General of SC Rosatom. *Introductory address on the strategy and best personnel management practices in SC Rosatom and its organizations;*
- Ya. Kon, Vice President, JSC TVEL. *Optimization of organizational structures of production divisions benchmarked to the world best practices;*
- A. Krupsky, Deputy Director for HR Management, Social and Administrative Issues, OJSC Concern Rosenergoatom. *Advancement of competences at enterprises: Training centers;*
- M. Strikhanov, Rector, NRNU MEPhI. *Nuclear education: Meeting the global challenges;*
- V. Artisyuk, Pro-rector, SEE DPO CATI. *HR development to build up related infrastructure in countries announced nuclear power development;*
- R. Kutsumi, Secretary General, ENEN;
- Address by an IAEA representative responsible for HR management and training;
- Dr. L. Varga-Sabjan, Director of Corporate Affairs and Human Resources. *The Maintenance Training Center of Paks Nuclear Power Plant Ltd as a unique facility of the international co-operation.*

10:00 – 13:30	<u>Round-table discussion «Evolutionary and Innovative Development of Pressurized Light-Water Reactors»</u>	Hall 2
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Moderator: V. Asmolov, First Deputy Director, OJSC Rosenergoatom Concern.

- Moderator's introductory address;
- V. Sidorenko, Advisor to Director; U. Semchenkov, Deputy Director for Science and Technology, RRC Kurchatov Institute. *NPPs with the next generation power light-water reactors;*
- S. Ryzhov, Director and Chief Designer, JSC OKB Gidropress. *Evolutionary and innovative development of water-water reactors;*
- V. Pivovarov, FSUE SSC IPPE. *Vessel-type boiling water reactors;*
- I. Kopytov, First Deputy Director General and Director for Facility Design, JSC Atomenergoproekt. *Optimizing the VVER plants performance in short term and IT-supported;*
- A. Avdeev, Director General, OJSC VNIAM. *Secondary circuit optimizing for VVER plants;*
- Representative of SPAEP. *Medium power plants with VVER-600 and VBER-600 reactors: Safety and economic efficiency;*
- A. Kroshilin, Deputy Director General, JSC VNIIAES. *Information technologies to optimize plant design.*

10:00 – 13:30	<u>Round-table session «Unified APCS for NPPs with New Generation Reactors»</u>	Hall 3
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Moderator: V. Kostyukov, Director, FSUE RFNC VNIIEF.

- V. Zverkov, Head of Future Planning Division, OJSC VNIIAES. *Unified APCS for new generation reactors;*

- V. Koltsov, FSUE FRPC MSRI named after Yu.Ye. Sedakov. *Upgrades of dispatcher control equipment for reactor units;*
- V. Kishkin, First Deputy Chief Designer, FSUE VNIIA. *Hardware&software complexes of shop automation for advanced APCS NPP;*
- V. Khrobostov, RFNC VNIIEF. *APCS hard&soft sets unification at NPP units (SKVM case);*
- A. Kalinushkin, RRC Kurchatov Institute. *Experience in development and implementation of a modern system for monitoring of operation of nuclear fuel;*
- V. Zaguzov, Division Head, FSUE VNIIA. *Pressure gages TZhIU 406-M100-AS for NPP applications;*
- M. Makhnach, Leading Technical Support Engineer of the Customer Support Center, CJSC Industrial Group Metran. *Pressure gages for nuclear applications: Reliable solutions and new developments.*

13:00-13:30 - Official Opening Ceremony of the Exhibition

14:30 – 18:00	<u>Round-table session «Power Generation Equipment and Services. Development of International Cooperation»</u>	Hall 1.1
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Moderator: Vladimir Kashchenko, Director General, Atomenergomash JSC.

- R. Christie, President of Eastern Europe, Russia and CIS, GE Energy. *Power generation equipment maintenance. The importance of international cooperation.*
- O. Bernstrauch, Siemens Power Generation (Germany). *Siemens steam turbine generator sets for advanced nuclear power plants;*
- A. Tsvetkov, Director General, Alstom-Energomash LLC. *Steam turbine upgrading potential at Russian nuclear plants;*
- A. Rakhmaninov, Deputy Director of Department of Methodology and Procurement Organization, SC Rosatom. *Uniform Procurement Standard of SC Rosatom.*
- V. Skorobogatikh, Deputy General Director, CNIITMASH LLC;
- Yu. Saakyan, Director General, Institute of Natural Monopolies Research. *Potential for modernization of the Russian power generation as a basis for development of the international cooperation in power engineering;*
- V. Nedavny, Chief Engineer of the Project, OJSC Power Machines. *New designs of steam turbines for NPPs by OJSC Power Machines;*
- I. Kutuzov, Region Sales Manager, Energy, Environment and Oil&Gas Equipment Division, Alfa Laval Potok. *Experience, production development and deliveries of equipment for the Russian nuclear industry;*
- S. Shimansky, Nuclear Equipment Sales Director. *AUMA: controls for motor-driven valves at NPPs.*

14:30 – 18:00	<u>Round-table session «Information Technology as a Tool to Raise Efficiency of the Nuclear Industry»</u>	Hall 1.2
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Moderator: V. Pasyнков, Head of IT Department, SC Rosatom.

- N. Solomon, Deputy Director General, SC Rosatom. *Opening address: Information technologies as a tool to improve effectiveness;*
- V. Pasyнков, Head of IT Department, SC Rosatom. *Brief description of SC Rosatom's program of transformation of information technologies in 2010-2014;*
- E. Luanco, Vice President for Nuclear Solutions, Ventix. *Financial advantages of the common management system in nuclear;*

- Ye. Demianova, Rosatom. *ERP-strategy of SC Rosatom*;
- M. Yermolaev. Shared Services Center, SC Rosatom. *Experience in the Shared Services Center implementation*;
- A. Popov, Rosatom. *Uniform industry-wide document management system*;
- T. Rodina, IT Department Director, OJSC Concern Rosenergoatom. *Development of an integrated system for centralized operative production planning and management in OJSC Concern Rosenergoatom*;
- A. Koroid, Rosatom. *Engineering projects complex*;
- Ye. Fedotov, Deputy Director General, LLC AVEVA. *A power generation facility life-cycle: Though a prism of engineering IT solutions*;

14:00 – 18:00	<u>Round-table session «Prospects of Kaliningrad Power System Development in Light of the Baltic NPP Commissioning»</u>	Hall 2
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Moderator: A. Reznichenko, Head of Section for Science and Ecology, «RIA Novosti News Agency».

- A. Lokshin, Deputy Director General, SC Rosatom. *Opening address*;
- S. Boyarkin, Deputy Director General, OJSC Concern Rosenergoatom. *Technical parameters of Baltic NPP*;
- M. Kozlov, Head of Project Group “Baltic NPP, INTER RAO UES. *Project features: Financing scheme and location of Baltic NPP*;
- N. Stepanov, Head of Department of Foreign Economic Activity, On-line & Technical Support, Trading Unit INTER RAO UES, JSC. *Potential options of electricity release by Kaliningrad Region Grid after the commissioning of Baltic NPP. Technical feasibility of export*;
- A. Aleko, a representative of Kaliningrad Region. *Kaliningrad Region strategy on the construction of Baltic NPP and the related grid infrastructure*;
- Y. Borisov, Head of International Department, NP Sovet Rynka. *EU electricity market strategy until 2025. Cooperation between the Russian, the Baltics and European power grids*;
- A. Lokshin, Deputy Director General, SC Rosatom. *Closing Remarks*.

14:30 – 18:00	<u>Round-table session «Closed Fuel Cycle with Fast Neutron Reactors»</u>	Hall 3
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Moderator: O. Sarayev, Deputy Director General, OJSC Concern Rosenergoatom.

- A. Bychkov, Director, JSC SSC NIAR. *CFC technologies and fuel reprocessing*;
- V. Rachkov, Director General, FSUE SSC RF IPPE. *CFC development system*;
- D. Zverev, Director, JSC OKBM Afrikantov. *BN reactor technologies: Progress and development*;
- M. Bakanov, Director, Beloyarsk NPP. *BN-600 operating experience*;
- V. Yershov, Director of Department for NPP Design, JSC SPAEP. *Design bases of NPPs with commercial BN reactors*;
- V. Troyanov, Senior Deputy Director, JSC VNIINM. *Development of fuel for BN reactors*;
- H. Funasaka, Senior Advisor for Research; K. Ishii, Senior Research Engineer, JAEA. *Current state and prospects of fast reactor fuel cycle in Japan*;
- P.R.Vasudeva Rao, Director of Chemistry Group, Indira Ghandi Institute of Atomic Research (Kalpakkam).

8 JUNE 2010

10:00 – 13:00	<u>Symposium: «Topical Issues of International Nuclear Law»</u>	Hall 3
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Chairperson: M. Lysenko, Director of the International Cooperation Department, SC Rosatom.

- V. Kuchinov, Advisor to Director General of SC Rosatom;

- A. Iorysh, Ph.D. (law), Head of the Group for Legal Issues on the uses of Atomic Energy, Institute of State and Law, RAS. *Legal and regulatory framework for nuclear material management in the Russian Federation;*
- A. Fatianov, Head of Department for General Law and Legal Bases of Security, National Nuclear Research University MEPhI. *Topical issues of regulating interagency interaction at detection of illegal trafficking of nuclear materials and radioactive substances;*
- Ye. Artemova, Head of Corporate and Legal Issues, JSC Techsnabexport. *Legal aspects of quoting Russian uranium products in EU;*
- A. Dedusenko, Head of International Law Division of the Legal Department, JSC Atomstroyexport. *International legal aspects of attraction of investments in NPP construction abroad;*

Break

- J. Handrlica, Assistant, Law Department, Karlovsky (Prague) University. *Topical issues of the international nuclear law;*
- J. Hues, Managing Partner, Freshfields Bruckhaus Deringer LLP. *Development of relevant legal regimes for nuclear in new markets;*
- T. Aitkulov, Partner, Clifford Chance CIS Ltd. *Settlement of nuclear disputes by international arbitrators;*
- M. Beradze, Teacher of the International Law Department of the RF MFA Diplomatic Academy. *International legal liability of legal entities for lawful acts in the international nuclear law;*

14:00 – 15:30	Joint Plenary: <u>Round-table session «Topical Issues of Nuclear Law and Legislative Support of Nuclear Industry Development» and Symposium «Topical Issues of International Nuclear Law»</u>	Hall 3
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Chairperson: T. Yelfimova, Deputy Director General, SC Rosatom.

Co-chairs: A. Torshin, First Deputy Chairman of the Federal Council; K. Zaitsev, Deputy Chairman of the State Duma Energy Committee; M. Lysenko, Director of the International Cooperation Department of SC Rosatom.

- T. Yelfimova, Deputy Director General, SC Rosatom. *Legislative support of Russia's nuclear industry development: topical issues;*
- A. Torshin, *Activities of the Expert and Advisory Board on the Legislative Support of the Safe Development of Nuclear Power within the Federal Council;*
- K. Zaitsev, *Activities of the Expert Board on Legislative Support of Nuclear Industry within the State Duma's Energy Committee;*
- A. Weatherall, Law Expert of Legal Office, IAEA. *Trends of international nuclear law;*
- M. Lysenko, *Legal aspects of the international cooperation of SC Rosatom;*
- A. Matveev. *Some aspects of multilateral cooperation in nuclear area with participation of the international organizations;*
- V. Pitel, Head of Nuclear Material Department, SC Rosatom. *Right of ownership of nuclear materials.*

16:00 – 18:00	<u>Round-table session: «Legislative Support of Russia's Nuclear Industry Development»</u>	Hall 2
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Chairperson: T. Yelfimova, Deputy Director General, SC Rosatom.

Co-chairs: A. Torshin, First Deputy Chairman of the Federal Council; K. Zaitsev, Deputy Chairman of the State Duma Energy Committee

- K. Zaitsev, Deputy Chairman of the State Duma Energy Committee. *Opening address;*
- A. Agapov, Director of Department for Nuclear and Radiation Safety, Organization of Licensing and Approval. *Legal support of safety of innovative development of nuclear technologies in the Russian Federation;*

- O. Supataeva, Leading Researcher, Institute of the State and law of RAS; G. Novikov, Deputy Director General for Methodology, FSUE Emergency Technical Center of Minatom of Russia. *Concept of nuclear law development in the current conditions in Russia;*
- B. Gordon, Director, FSU SEC NRS (Rostechnadzor). *Enhancement of terminology of legal, regulatory and technical acts in the field of the use of atomic energy;*
- A. Zrodnikov, Scientific Supervisor, SSC RF IPPE named after A.I. Leipunsky; Yu. Rudnev, CATI of SC Rosatom. *Technology complex of an enterprise as a real estate object;*
- M. Lizikova, Researcher, Institute of the State and Law of RAS. *Prospects of nuclear power development in Russia;*
- D. Lozovsky, Deputy Head of Department for Property and Social Aspects, NTNU MEPHI. *Legal aspects of the state regulation of safety in the uses of atomic energy;*
- *Discussion;*
- *Summing up*

16:00 – 18:00	<u>Symposium: «Topical Issues of International Nuclear Law»</u>	Hall 3
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Chairperson: M. Lysenko, Director of the International Cooperation Department, SC Rosatom.

- N. Nikiforov, Director General, NP Union of Industrialists and Entrepreneurs of Nuclear Industry. *International aspects of technical regulation in Russia's nuclear power;*
- V. Kuznetsov, Director, Institute of Innovative Power Generation of RRC Kurchatov Institute, International INPRO Project. *Legal and institutional support of nuclear power based on transportable power reactors. Tasking and basic results of Russian studies of 2008-2009;*
- V. Shmelev, Head of Laboratory for Nuclear Material and Technology Nonproliferation, RRC Kurchatov Institute. *International INPRO Project. Legal and institutional support of nuclear power based on transportable power reactors. Nonproliferation problems;*
- A. Molchanov, Head of Underwriting Division, JSC Nuclear Insurance Broker. *Civil liability for nuclear damage: Case of transportable power reactor operations;*
- Yu. Opanasyuk, Chief Expert, Department for Nuclear Material and Technology Nonproliferation, RRC Kurchatov Institute. *International INPRO Project. Legal and institutional support of nuclear power based on transportable power reactors. Physical protection;*
- V. Makarov, Head of Laboratory of the Institute of Nuclear Reactors at RRC Kurchatov Institute, International INPRO Project. *Legal and institutional support of nuclear power based on transportable power reactors. Transportation issues;*
- A. Matveev. *Some aspects of multilateral cooperation in nuclear area with participation of the international organizations;*
- *Summing up*

10:00 – 18:30	<u>Joint closing session</u>	Hall 3
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Chairperson: Tatyana Yelfimova, Deputy Director General, SC Rosatom.

Summaries by Round-table and Symposium chairs.

Co-chairs: A. Torshin, First Deputy Chairman of the Federal Council; K. Zaitsev, Deputy Chairman of the State Duma Energy Committee; M. Lysenko, Director of the International Cooperation Department of SC Rosatom.

9 JUNE 2010

10:00 – 13:30	<u>Round-table session: «Prospects of International Cooperation in Nuclear Fuel Cycle»</u>	Hall 1
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Moderator: V. Konstantinov, Vice President, JSC TVEL.

Topic: Natural Uranium and Isotope Enrichment

- V. Korogodin, SC Rosatom. *Fuel Division of SC Rosatom: Expansion of international cooperation opportunities;*
- A. Boitsov, Deputy Director General, JSC Atomredmetzoloto. *Sustainable development of uranium mining: Challenge of the times;*
- G. Efremov, Commercial Director, JSC IUEC. *International Uranium Enrichment Center and LEU Guaranteed Reserve in Angarsk;*
- A. Tovstenko, Deputy Head of the Directorate for Strategy, Marketing and Information Policy and Director of World Markets Analysis Department. *Techsnabexport: The global supplier of nuclear materials to the world market;*

Break

Topic: Nuclear Fuel and INF

- V. Konstantinov, Vice President, JSC TVEL. *International nuclear fuel cooperation;*
- P. Jayaraj, Director of Nuclear Fuel Cycle, Department of Atomic Energy of India. *International Cooperation in manufacture of nuclear fuel components;*
- K. Purohit, Kudankulam NPP. *Development of nuclear power in India: solutions;*
- Ossi Koskivirta, Vice President, Fortum Generation. *The use of cooperation experience in bidding documents development;*
- A. Khaperskaya, Head of Project Office, SC Rosatom. *Modernization plans for INF management system in Russia;*
- Closing. Adoption of the Communiqué.

10:00 – 13:30	<u>Round-table session «Capabilities and Prospects of Controlled Nuclear Fusion: Solving Nuclear Power Problems»</u>	Hall 2
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Moderator: Ye. Velikhov, President, RRC Kurchatov Institute.

- Round-table session opening.
- Ye. Velikhov, President, RRC Kurchatov Institute. *World current trends of controlled nuclear fusion;*
- F. Romanelli, EFDA Leader and JET Leader. *The European Fusion program in the perspective of ITER and DEMO;*
- O. Filatov, Director, FSUE NIEFA named after D.V. Yefremov. *International thermonuclear experimental reactor project ITER;*
- P. Khvostenko, Deputy Director of Institute of Tokamak Physics of RRC Kurchatov Institute. *Concept of a stationary thermonuclear neutron source on the basis of a small-size tokamak for nuclear power problems;*
- V. Cherkovets, Director, FSUE SSC RF TRINITI. *Russian-Italian project of experimental tokamak IGNITOR;*
- Discussion.

Break

- S. Subbotin, RRC Kurchatov Institute. *Nuclear power problems: Thermonuclear neutron source solution;*
- V. Gudowsky, ISTC, Deputy of CEO (European Union). *European approach to neutron sources for transmutation;*
- S. Garanin, RFNC VNIIEF. *Pulse sources of thermonuclear neutrons in hybrid fusion systems;*
- V. Chernov, JSC VNIINM. *Radiation resistant materials for thermonuclear neutron sources;*
- E. Kruglyakov, NPI RAS. *Alternative concepts of fixed thermonuclear neutron sources;*
- Discussion and summing up.

10:00 – 13:30	<u>Round-table session «Investments in Nuclear Power. Project Management. Financial Guarantees»</u>	Hall 3
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Moderator: A. Kovalevskiy, Director, Department for Investment Policy of SC Rosatom.

- N. Solomon, Deputy Director General, SC Rosatom. *Transformation of SC Rosatom corporate structure;*

- K. Komarov, Executive Director, Directorate for Nuclear power Complex of SC Rosatom. *Prospects of interaction with foreign partners;*
- T. Ivanov, First Vice President, JSC Atomstroyexport. *Organizational and financial models of NPP construction in foreign markets;*
- M. Kozlov, Head of Project Group, JSC INTER RAO UES. *Prospects of participation of external investors in Baltic NPP project;*
- E. Konkov, Deputy Director General and Director for Economics and Finance, OJSC Concern Rosenergoatom. *Financial and operations results of Concern Rosenergoatom.*

Break

- A. Nikipelov, First Vice President, JSC TVEL. *Concerted approaches to investment project management at Fuel Company;*
- T. Khachaturov, First Deputy Director General, JSC Atomredmetzoloto. *Investments in uranium mining expansion;*
- V. Kashchenko, Director General, JSC Atomenergomash. *Nuclear machine engineering development projects;*
- A. Shvetsov, Partner, KPMG. *IAS accountancy: Tool to verify nuclear investment attractiveness.*
- S. Gorin, Leading Analyst, International Rating Agency Standard & Poor's. *Credit rating of JSC Atomenergoprom;*
- M. Yermolayev, Director General, CJSC GreenAtom. *Shared Services Center: An effectiveness enhancement tool.*

14:30 – 18:00	<u>Presentation «Atomic Energy – Information – Safety»</u>	Hall 2
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Moderator: R. Arutunyan, Deputy Director, IBRAE RAS

Topics:

- Radiation and other factors affecting health of residents in NPP siting regions,
- Guidelines – Public opinion – Safety,
- Why superstitions of nuclear survive that long.

Papers:

- R. Arutyunyan, Deputy Director, IBRAE RAS. *Comprehensive chemical and radioactive environmental release analysis in the Russian Federal Subjects (Voronezh Region case study);*
- V. Kutkov, Ph.D. (phys-math), Leading Researcher, RRC Kurchatov Institute;
- T. Shashina, Ph.D. (med), Leading Researcher, Research Institute of Human Ecology and Environmental Hygiene named after A.N. Sysin of RAS;
- R. Alexakhin, Ph.D. (bio), Professor, Director, All-Russia Institute of Agriculture radiology and Agroecology of RAAS, IAEA Expert (1980-2007);
- N. Tarasova, Ph.D. (chem.), Professor, Corresponding Member of RAS, Director, Institute of Sustainable Development of D. Mendeleev USTR;
- O. Pavlovsky, Ph.D. (tech), Deputy Head of Monitoring and Geoinformation Division, IBRAE RAS, Expert of the UNSCEAR;
- M. Savkin, Ph.D. (tech);
- V. Chernov, Corresponding Member of RAES, Ph.D. (med), Deputy Director, Child Hematology, Oncology and Immunology Institute of the Minsotzdravrazvitie of Russia;
- F. Almerico, General Manager of Intelligent Systems S.r.l. *Mathematical modelling of long-term energy sources mix dynamics.*