# POST SHOW REVIEW



# V International Industry Forum

June 26–28 • Saint Petersburg • Russia







# Dear participants and guests!

I'm glad to welcome you at the V International Forum ATOMEXPO 2013. It is pleasant to note that over the past five years it has become one of the primary international venues to exchange ideas among the leading international experts in the nuclear industry.

This year our Forum is held under special circumstances: it is a part of a major event being essential for the world nuclear power industry – the IAEA High Level International Conference which is now taking place in Saint Petersburg. The key issues to be discussed are the development of the nuclear energy sector in the XXI century and its role in the progressive growth of economy.

It is a great honor for us that Russian Federation has been chosen as a venue to hold the IAEA Conference in 2013. We follow a determined line to develop nuclear generation and to materially increase its share in the energy balance of the country.

I have no doubt that the Forum ATOMEXPO 2013 will become a significant event for the nuclear industry setting out major tendencies for its further development.

I wish all participants and guests successful work, bright discussions and interesting new meetings in the beautiful city of Saint Petersburg!

General Director of State Atomic Energy Corporation "Rosatom" S.V. Kirienko





**Dear participants!** 

Nuclear power remains the best known peaceful application of nuclear energy. Despite the Fukushima Daiichi accident of March 2011, it is clear that nuclear energy will remain an important option for many countries.

Our latest projections show a steady rise in the number of nuclear power plants in the world in the next 20 years. Nuclear energy can help to improve energy security, reduce the impact of volatile fossil fuel prices, mitigate the effects of climate change and make economies more competitive.

The IAEA International Ministerial Conference on Nuclear Power in the 21st Century in St. Petersburg, Russian Federation, will provide a valuable opportunity for high-level discussions, among ministers as well as leaders from the nuclear power sector, to consider nuclear power's long-term contribution to sustainable development.

Director General of the IAEA **Yukiya Amano** 



# Dear ladies and gentlemen, guests, participants and organizers of the ATOMEXPO 2013 International Industry Forum!

Mastering nuclear energy was the greatest achievement of science and technology of XX century. The Society is moving at an increasing rate along the path of technological development, demand for generation of large quantities of energy is ever increasing.

The development of nuclear industry requires continuous safety improvement discussions about the day to day operational processes and the definition of new managerial strategies. International cooperation allows more stable basis for the implementation of long term plans and programmes of development of the nuclear power industry.

ATOMEXPO 2013 International Industry Forum is not merely a major event; it is also a confirmation of our commitment to strengthen mutually beneficial international cooperation in the nuclear power industry for the permanent improvement of nuclear safety.

WANO, as the representative of all the nuclear operators worldwide supports its members throughout the full operational cycle, from the development of their new projects, operation itself, the last unloading of fuel and finally the fuel storage and reprocessing stages. This is done through increase exchanges with suppliers and vendors in order to make sure that operators not only operate their units safely, but that they also operate safe units.

WANO untiringly promote the periodical safety reassessment of nuclear plants worldwide through mutual support and exchange of information by taking into account the operating experience and lessons learned from the Fukushima accident, and also from nuclear operators' best practices worldwide.

I wish all the participants of this event productive work, new projects, constructive interaction and unforgettable impressions of their visit to the cultural capital of Russia – Saint Petersburg.

Chairman of the WANO Board Jacques Regaldo





# Djarot S. Wishubroto Head of the National Nuclear Energy

Agency (Indonesia)

We are newcomers in nuclear energy. Moreover, Indonesia is an island country subject to seismic activity. People are afraid of a new Fukushima.

Our Government promotes and advertises nuclear energy and monitors public opinion. Before Fukushima, 60% of population were for construction of nuclear reactors, but after it – less than 50%; this winter, 53% were again positive.

But we cannot escape using nuclear energy. The country's population is 240 mln people, and it is growing. There are oil, coal and gas, but it is insufficient for national economy.

There are some directions on which we are working. First, it is safety and IAEA requirements. Second, it is the financial aspect. Nuclear fuel shall be supplied regularly and reliably, which is possible under uninterrupted funding. Third, it is a specific legislation. Under our laws, we are allowed to launch only "proven technologies". The regulators are arguing, which technologies may be proven ones. New technologies have not been tested yet; existing ones will be obsolete in a decade. So, what to do? Which technologies shall be applied?

However, despite problems, we managed to do a lot for development of infrastructure for nuclear energy. On the Java Island, where 60% of population live, and on Sumatra Island.

We are moving forward. We develop norms and rules in compliance with IAEA standards. We study foreign experience and seek for ways of its application.

# Dr. Hans-Joachim Kopp



Senior Partner of Roland Berger Strategy Consultants

It is a great pleasure for me to participate in "Atomexpo". It is one of the most famous conferences (in nuclear industry) in the world. And every time it is pleasant for me to meet partners and friends here.

What has happened after Fukushima, how did it affect the nuclear energy market? We carried out a research on what happened within past two years. I want to note that Fukushima neither stopped nor slowed down significantly the development of this market.



**Kristof Horvath** Deputy Director of the Agency for Atomic Energy of Hungary

While the IAEA Conference is more focused on the current situation and plans of the states, "Atomexpo" forum

shows us the guidelines for development, as well as existing technologies. Both these events will together provide a more comprehensive vision of nuclear industry in general. Position of nuclear power in global energy is a complicated issue, which is affected by numerous factors (professional, economic, environmental, political and social interests); but there is a fundamental truth – the more information and open discussion we have, the less are the fears and the better is the understanding.

# Attila Sitar-Chanadi



General Director of Ganz EEM (Hungary)

"ATOMEXPO" forum presents a very good possibility for maintaining relations with the nuclear power sector plays, establishment of new contacts and conclusion of transactions.



# Necati Yamaç

Head of Nuclear Energy Project Implementation Department, Ministry of Energy and Natural Resources of the Republic of Turkey

As you know, the Republic of Turley

plans to continue rapid economic growth till 2023 and to double electric energy consumption. Therefore, implementation of plans of production of this amount of electric energy through use of only renewable and conventional energy sources deems to be impossible; thereby, nuclear power plants are a compelling need. For this reason, international conferences like the one organized by IAEA, attract great interest in our state. The conference "Nuclear power industry in the XXI century" is not exclusion.



It is the first event of such a level after the Fukushima accident; its programme is aimed at discussing the future of nuclear energy. Result of the conference became a proof that necessary conclusions were made after Fukushima, and that the positions of nuclear energy became stronger in general. We should also note that the sector continues to retain leading positions in safety and carbon dioxide emission reduction issues.

Along with reports by national delegations, the conference will also discuss a whole range of urgent issues, including environmental protection as a decisive factor for choosing specific type of generation, as well as improvement of nuclear safety through development of international cooperation in this field. It is also planned to discuss achievements of nuclear industry in the sphere of infrastructure, technologies and organizations.

I think this discussion will further allow developing dialogue about nuclear energy and contribute to strengthening the industry's position. In parallel, a major international industry forum "Atomexpo" took place in St. Petersburg, which made the dialogue in the framework of the conference very informative and fruitful.



# Ilya Vergizaev

Director of JSC "State Specialized Design Institute"

"ATOMEXPO" is a comprehensive discussion platform for elaborating topical problems and directions of development of nuclear power sector

on the high level. Without it there would be no feedback between state corporation management and enterprise as well as on the whole between Russian and its foreign partners. Just imagine that everyone of us is obsessed only with his own company and there is no exchange of experience and knowledge. In this case there would be no further development of "Rosatom". I participated in "ATOMEXPO" several times already and I am very positive about it.



## **Alexey Dub**

General Director of JSC SPU "Central Scientific Research Institute of Machine

# Building Technologies", Doctor of technical sciences, professor

"ATOMEXPO" is the main sector event which gathers the leading specialists. The forum gives us the possibility to demonstrate our developments, to discuss with our colleagues topical issues and to hold negotiations with potential customers. It's been a number of years already that our enterprise presents its achievements on this exhibition and specialists from CNIITMASH take part in the business program events.



# **Kirill Krivosheev**

Deputy General Director for Commercial Affairs of JSC "SNIIP"

Russia has always been one of leading countries of the world in development and application of nuclear technologies. Russian equipment is

used in power-generating units in Hungary, Bulgaria, Finland and the Czech Republic.

There is a task set to gain global technological leadership of Russian nuclear industry and increase global presence of the State Atomic Energy Corporation "Rosatom" on the world nuclear energy market. Some steps in this direction have already been taken: marketing offices of "Rosatom" are open in six countries of the world (in Ukraine, the Czech Republic, Hungary Slovakia, SA and Singapore), 28 power-generating units are planned to be constructed in foreign countries by 2030.



# Yury Shakhvorostov

chairman of the Board of "Ulba Metallurgical Plant" JSC (Kazakhstan)

Participation in "ATOMEXPO" forum is of great interest for each enterprise operating in the field of nuclear power. "UMP" JSC with its extensive history of interaction with enterprises of Russia

and other participants of the forum for delivery of nuclear fuel components hopes to strengthen interaction with partners and, maybe, obtain new relationships in the field of nuclear power. The value of participation in the forum is in communication with the largest participants of the global nuclear fuel cycle which possesses extensive experience of activities for production of nuclear materials.



# STATES

Delegations from 42 countries attended the Forum.

This year, there were even more foreign participants. Angola, Belgium, Zambia, Yemen, Indonesia, Lebanon, and Pakistan joined us.



### **EXHIBITION PARTICIPANTS**

153 exhibitors took part in the "ATOMEXPO 2013" exhibition.

New participants of the exhibition: CJSC Promstroysever, CJSC KomplektEnergo Group, FSUE SNPO Eleron, CJSC Spetsialniye Materialy, OJSC Krasnaya Zvezda, and E.I. Zababakhin Russian Federal Nuclear Centre – All-Russian Scientific Research Institute of Technical Physics presented their enterprises by expositions that aroused much interest among participants.

# **CONGRESS PARTICIPANTS**

791 representatives from 275 organizations took part on the business programme of the Forum.

For the first time, the Congress participants included: OJSC Votkinsk Plant, Central Design Bureau of Marine Engineering "Rubin", OMZ Special Steel, CJSC AV Engineering, OJSC ChelPipe, OJSC VPO Tochmash, AF-Consult Czech Republic s.r.o., Ceramic Technologies, OJSC KRON-SPb, Instar Logistics, Mostostroy No 6, Corys T.E.S.S., OJSC "Soyuz Power Development Corporation", and CJSC AMT Engineering.

# INTERNATIONAL NUCLEAR COOPERATION

"ATOMEXPO" forum is a productive platform for organization of high-level meetings and negotiations. This year, the efficiency of cooperation was confirmed by signing of a range of prospective international agreements:

- 1. Contract with Hladice Veje for equipment supply for coolers at the Belorussian NPP;
- 2. Contract for JOI and EIA with Bangladesh;
- Memorandum of Understanding between the State Atomic Energy Corporation Rosatom, the Atomic Energy and Alternative Energies Commission of France and the US Atomic Energy Commission;
- Cooperation Agreement in the sphere of atomic energy use for peaceful purposes between the State Atomic Energy Corporation Rosatom and the Atomic Energy Agency of the Democratic Socialist Republic of Sri Lanka;
- 5. Material Stock Account Agreement between the JSC Techsnabexport and the JSC NAC Kazatomprom;
- Contracts between the Czech Company ARAKO and OJSC Atomenergomash;
- Nuclear Fuel Zero Refusal Agreement for NPPs of Russian design between the TVEL Fuel Company, the Ukrainian ENERGOATOM National Atomic Energy Company, the Bulgarian Kozloduy NPP and the Czech CEZ Energy Company





# PLENARY SESSION: OPENNESS AND INTERACTIVITY!

Topic: Nuclear power industry in the XXI century: responsible partnership for sustainable development

Business programme of this year focused on the most complicated and prospective areas of development of the global nuclear industry.

Renowned international experts were invited to define the most relevant topics of development of the global nuclear energy. For the first time, the speakers of the Plenary Session started online discussion of key issues of the global nuclear energy already several months prior to the event.

Moderator: Djurica Tankosic, Vice-president, Worley Parsons.

# Speakers:

- 1. Alexander Bychkov, IAEA Deputy Director General and Head, Department of Nuclear Energy;
- 2. Agneta Rising, Director General of the World Nuclear Association;
- 3. Kirill Komarov, Deputy Director General international business and development of the State Atomic Energy Corporation Rosatom;
- 4. Christophe Behar, Director nuclear energy division, CEA;
- 5. Luc Oursel, President, CEO and Chairman of the Executive Board, Areva;
- 6. Peter Faross, Deputy Director General for Nuclear Energy at the DG Energy of the European Commission;
- 7. Takuya Hattori, President, Japan Atomic Industrial Forum;
- 8. Lawrie Haynes, President, Marine and Nuclear division, Rolls-Royce;
- 9. Yu Peigen, Deputy Director General, China National Nuclear Corporation.

# 2013



# First at "ATOMEXPO 2013"



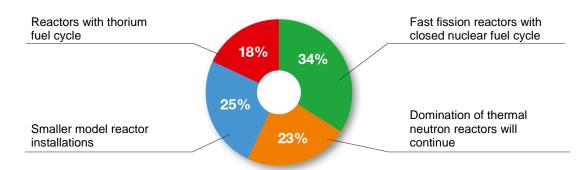




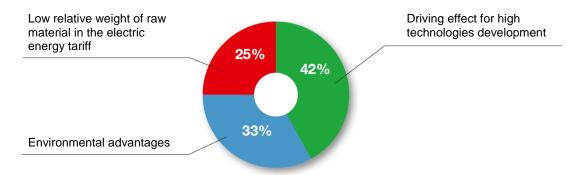
At the Plenary Session, each speaker presented his/her opinion to participants from 42 countries and had an opportunity to answer numerous questions from the audience.

# Moreover, 397 attendees of the Session could vote in an interactive mode on the most important topics.

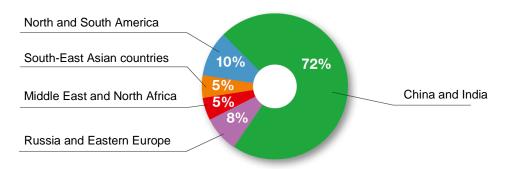
# Technological vector of nuclear energy development in the XXI century – it is:



# Advantages of nuclear energy that allows it developing fast are:

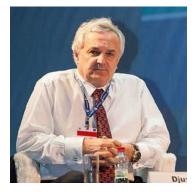


# Nuclear energy growth areas in the world in the XXI century will be in:



According to the results of voting, **34%** of participants think that technological vector of nuclear energy development in the XXI century is the fast fission reactors with closed nuclear fuel cycle. **42%** of participants said the advantage of fast development of nuclear energy was the multiplicative effect of high technologies. **72%** of participants determined China and India as growth areas in nuclear energy development in the XXI century.





# Djurica Tankosic Vice-president, Worley Parsons

Within five years of its history, "ATOMEXPO" forum became an international discussion area for building a multilateral dialogue of nuclear industry experts. This year, I managed to be a moderator of the Plenary Session, where participants from 42 countries and renowned international experts determined the development vector of global nuclear industry. We exchanged opinions, shared thoughts and developed outlooks. It was interesting, useful and relevant. I suppose that in the future the business progarmmes of the Forum may become a basis for creation of a united system of strategic forecast of global nuclear energy.



# Agneta Rising

Director General of the World Nuclear Association

For the World Nuclear Association as a global trade organization, it is very important to maintain the business cooperation in each area of nuclear industry. "ATOMEXPO" provides us with an opportunity to exchange experience with our Russian friends, colleagues and to establish new contacts. Every year, we are pleased to support the "ATOMEXPO" Forum with reports of speakers from the World Nuclear Association, and we always take home with us a lot of new and useful information, which we can use in work with members of our Association.



#### Luc Oursel, President, CEO and Chairman of the Executive Board, Areva

I am sure that key challenges faced with by our industry may be met only jointly, in the framework of international cooperation. "ATOMEXPO" International Forum offers attractive platforms for maintaining such exchange and interaction. Like other conferences that I attended within recent years, "ATOMEXPO 2013" was an excellent forum. I am looking forward to the conference of the next year.



#### Yu Peigen Deputy Director General, China National Nuclear Corporation

International Industry Forum "ATOMEXPO" was a surprise for me this year due to the number of experts from different countries. Such a large-scale exchange of information allows understanding outlooks and risks of nuclear energy development under globalization quicker and more efficiently. Participation in the Forum is an excellent opportunity to speak about new successes, to broaden business contacts and is an additional opportunity to know your business partners in a better way. "ATOMEXPO" Forum is the place, where new ideas, projects are brought to life, it is a platform, on which we jointly build cooperation in global nuclear industry.

Statistic data





# **Geography of participants**





**ATOMEXPO 2013 International Industry Forum** 



**Коммерсантъ** "International Industry Forum "Atompexpo 2013" took place in St. Petersburg on June 26–28, 2013.

It was organized by the State Atomic Energy Corporation

АРГУМЕНТЫ ИФАКТЫ

General S. Kirienko".

"...participants of the "ATOMEXPO" forum that took place in parallel in St. Petersburg, became the guests of the conference; they included heads of major global companies. All of them had a right to take part in discussions and thereby to deliver their opinions to governmental officials and IAEA experts".



"International Industry Forum "ATOMPEXPO 2013", that celebrated its fifth anniversary this year, took

"Rosatom". The Atomexpo Forum was

attended by the IAEA Director General

place between 26 and 28 June in St. Petersburg. At the Forum, the delegates discussed in the format of round tables and symposia relevant issues of international nuclear law, environmental protection, and international cooperation in nuclear fuel cycle and in the back-end field. Scientific topic became one of the focuses of the "ATOMEXPO-SPO". Russia, the US and France signed a Memorandum of Understanding on use of capabilities of the unique Multipurpose Research Fast Fission Reactor (MRFFR). It will be constructed in the Scientific Research Institute of Nuclear Reactors in Dimitrovgrad. With capacity of 150 MWt, after commissioning, it will become the most powerful active research reactor in the worlds. The cost of the project amounts to 16.4 billion rubles".



"Participants of the round table "Integrated approach to development of nuclear power industry: advantages and prerequisites" discussed modern

development trends of nuclear energy markets, as well as advantages and outlooks for application of an integrated approach to the nuclear energy development. Specifically, key elements of integrated approach have been considered, such as staff training, methods of project funding, production localization at NPP construction and development of allnational nuclear infrastructure".



 Russia and EU tend to develop cooperation in the sphere of NPP security,
reported Peter Faross, Deputy Director

General for Nuclear Energy at the DG Energy of the European Commission. – A meeting of the Russia-

EU group on nuclear energy took place today, at which the parties also discussed the experience accumulated after the accident on the Japanese NPP Fukushima. We decided to undertake measures for provision of security of such plants," — told Faross at the inauguration of the Industry Forum "Atomexpo 2013" in St. Petersburg.

**EXAMONDATION** "This week, St. Petersburg became the centre of an extraordinary "nuclear assembly" of the leading international industry forum "Atomexpo" and the major IAEA conference. Experts and heads of different companies and agencies managed to discuss not only a decade of outlooks for world nuclear generation development, but also "closer" projects".

"A new type of reactor - an integral fast neutron reactor - was presented to the БЕЛТА participants of the round table "Nuclear energy and public acceptance" that took place in the framework of the forum "ATOMEXPO 2013", - reports the BELTA correspondent. As was explained by Barry Brook, a leading Australian environmental scientist from the Adelaide University, who presented the innovation, the main dissimilarity of this reactor from those already existing was that it was proposed to use metal instead of fluid fuel. This solution is economically beneficial from the point of view of fuel extraction and cost of licensing. "Integral fast neutron reactor reduces the level of waste, and there is no need to construct long-term storage facilities", - claimed the expert". "Sergey Novikov, Director of the Communications Department of the State Corporation "Rosatom", who was the moderator of the round table, told about the recent public surveys in Russia and France. According to the survey that was conducted in both countries, the number of supporters for nuclear energy development as a key element of energy security has increased and reached the pre-Fukushima figures".



"In the course of the International Industry Forum "ATOMEXPO 2013" in St. Petersburg, a contract for JOI and EIA

was signed by the President Valery Limarenko and the Bangladesh Nuclear Energy Commission representative, Abu Sayed Mohammad Firoz. Limarenko said that signing of the recent contracts symbolizes a transition to a long-term cooperation. Further contracts will follow thereafter; they will encompass the preparatory period in development and implementation projects of priority construction.





# Meetings. Events. Portraits































platts







**ATOMEXPO 2013 International Industry Forum** 





atomexpo 2014







# VI International Forum Moscow, Russia June 9 – 11, Gostiny Dvor

# Terms of participation\*:

- Delegate's package EUR 1995
- Virtual participation EUR 1400

# Rent of exhibition space\*:

- Unequipped space EUR 490 per 1 square meter
- Equipped space (min. 9 sq.m.) EUR 750 per 1 square meter
- Registration fee EUR 750

\*All prices do not include VAT 18%

# Directorate of the Forum

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Atomexpo International Forum

atomexpo

Organizer





VI International Forum Moscow, Russia June 9 – 11, Gostiny Dvor

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