New Initiatives for International Cooperation for Nuclear Education in Russia



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The first vice-rector

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Atomexpo, Moscow
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National Research Nuclear University MEPhI – a networking university





In the Soviet time, MEPhI coordinated the nuclear education in the former Soviet Republics: Ukraine, Belarus, Kazakhstan ... etc

NRNU MEPhl:

- Main Educational and Research Partner of Rosatom
 - One of Two First Research Universities (2008)
 - 21 branches
 - Located in 15 Federal Districts and in 20 atomic cities throughout Russian Federation
- Combines 11 Higher Education Institutions and 20 colleges:
 - Over 38,000 students;
 - over 1500 professors and associated professors.

National Research Nuclear University MEPhI – Russian Nuclear Education Network

RANKING (2013) INTERNATIONAL **Times Higher Education (THE)** 226-250 74 **Subject List Physical Science (THE)** SCImago Institutions 5 **Among Russian** Ranking Universities Webometrics 4 **RUSSIAN NATIONAL** 1 - 3 **Global Competitiveness Program Interfax Agency** 3 **Russian Training Foundation Expert Ranking Agency**



MEPhl, Moscow



IATE, Obninsk

Nuclear Energy Complex (10 NPP – Rostov, Novovoronezh, Kalinin, Beloyarsk)

Nuclear Research Complex (46 Research Institutes – RIAR, IPPE, GIDROPRESS, VNIIAES)

Nuclear and Radiation Safety Complex (Production Plant «Mayak», Siberian Chemical Plant, 17 facilities)

Nuclear Defense Complex (VNIIEF, VNIITF, more than 20 facilities)



VITI, Volgodonsk



DITI, Dimitrovgrad

Russian National Nuclear Innovation Consortium

Russian National Nuclear Innovation Consortium tasks

NNIC Tasks:

- Professional and public accreditation of curriculum and certification of university graduates' qualifications
- Integration of research, education and industrial potential of NNIC members.

Heat Power Engineering and Thermal Engineering

Power Engineering and Electrical Engineering

Nuclear Power and Thermophysics

Nuclear Physics and Technologies

Power Engineering

Materials Science and Materials Engineering

Applied Physics

Electronics and Automatics of Nuclear Facilities

Nuclear Reactors and Materials

Etc...

Nuclear Plants: Construction, Exploitation and Engineering

Isotope Separation Technologies and Nuclear Fuel

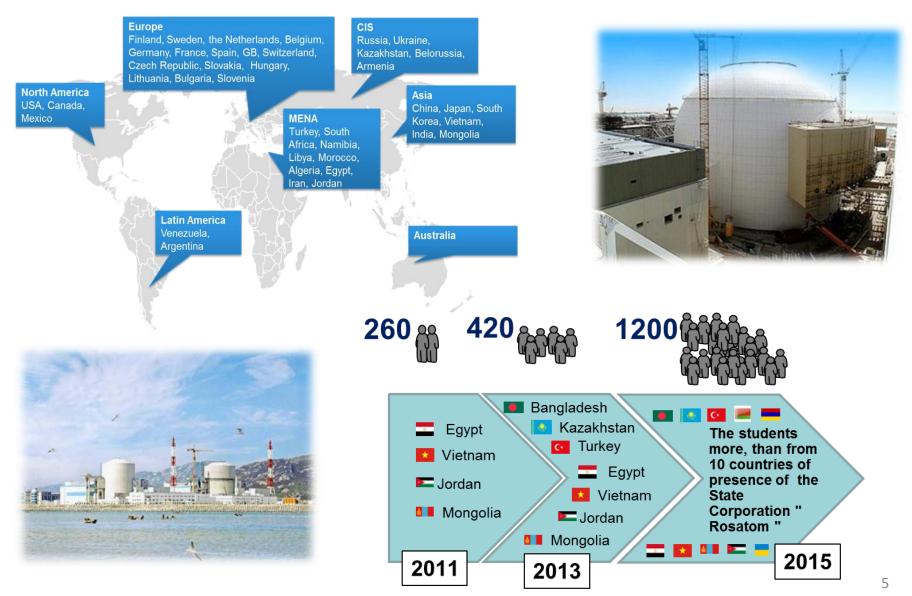
The Association of Universities «Consortium of Rosatom Supporting Universities»

- 1. National Research Nuclear University MEPhl www.mephi.ru MEPhl
- 2. Ivanovo State Power Engineering Institute named after V.I. Lenin www.ispu.ru IPSEU
- 3. Moscow State Technical University named after Bauman www.bmstu.ru BMSTU
- 4. National University of Science and Technology "MISIS" www.misis.ru MISIS
- 5. National ResearchTomsk Polytechnic University www.tpu.ru TPU

- 6. National Research University "Moscow Power Engineering Institute" www.mpei.ru MPEI
- 7. Nizhny Novgorod State Technical University n.a.
- R.E. Alekseev www.nntu.nnov.ru NSTU
- 8. D. Mendeleyev University of Chemical Technology of Russia www.muctr.ru MUCTR
- 9. St. Petersburg State Polytechnical University www.spbstu.ru SPbSPU
- 10. Ural Federal University n.a. the first President of Russia
- B.N. Yeltsin <u>www.urfu.ru</u> UrFU

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Rosatom – MEPhI collaboration for foreign students training



Rosatom – MEPhI – IAEA collaboration for International cooperation in nuclear education

Training & Retraining of foreign students and specialists in the field of nuclear engineering and hi-tech.

Cooperation with nuclear educational networks (MEPhI has agreement with ENEN and ANENT).

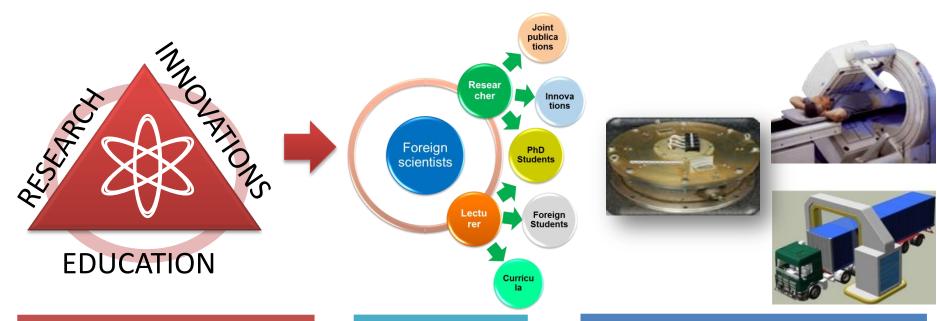


Cooperation with the foreign nuclear universities for development common master of research programs, postgraduate training, curricula analysis and enhanced (MEPhI has agreements with more than 20 universities from USA and Europe).

Participation at the IAEA activity and representation of the Russian Federation at the World Nuclear University. NRNU MEPHI – IEAE Practical Arrangements.



Rosatom – MEPhI collaboration Triplicity: Education – Research – Innovations



Centres of Excellence

Centre for Nuclear Systems and Materials

High-Energy Physics Centre

Centre "Plasma and Laser Technology"

Centre of Nanotechnologies

Cyber Security Centre

Nuclear Security and Safety

... etc...

Mega science

CERN, DESY

BNL, LANL,..., USA

MIT, Stanford, USA

IAEA

INFI, Italy

KEK, Japan

AMC, Netherlands

Industrial products

Isotopes

Nanoelectronics

Superconductivity products

Lasers

Portal diagnostic systems

Nuclear medicine devices

Optoelectronics

Thank You for Your Attention

