Human Capacity Building for National Nuclear Energy Programmes through the IAEA Collaborating Centre - Rosatom Technical Academy

Webinar on IAEA Approaches to (Self)Assessment and Reassessment of Nuclear Infrastructure and Development of Roadmaps for Nuclear Infrastructure Development

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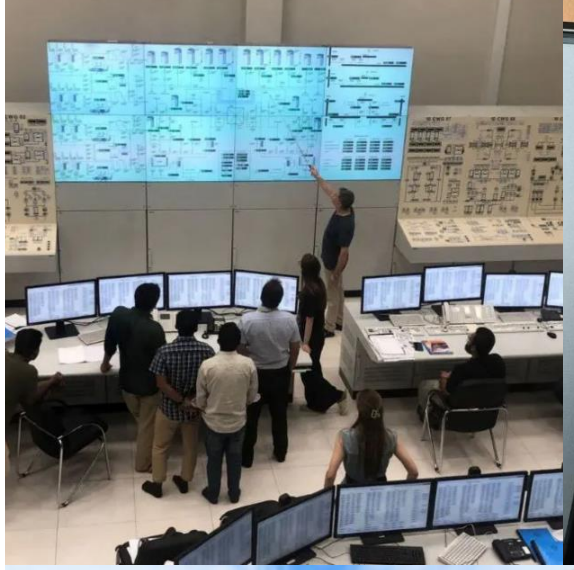
Rosatom Technical Academy

Centre of Excellence in Russia for building national and international competence in nuclear engineering.

- **Rosatom Technical Academy was founded in 1967** in Russia's first "science city" of Obninsk – the cradle of Russia's nuclear energy industry.

- Rosatom Tech's activities are focused on the training and vocational education of personnel in the field of nuclear energy, nuclear safety, nuclear materials and control, state security, and operational and supporting processes for the State Atomic Energy Corporation "Rosatom" and its subsidiary organizations.



Rosatom Technical Academy

TECHNICAL ACADEMY ROSATOM

Headquarter: Obninsk

Branches:
Moscow, St Petersburg, Novovoronezh, Sosnovy Bor

3 Hotels in Obninsk, St Petersburg, Novovoronezh

> 98 500 m² - total area of buildings

470 000+
people trained within 55 years

1 Full-scope simulator
of VVER-1200 Power unit

2 Simulator complexes
for M&R personnel

3 Multifunctional simulators of VVER-1200

1043 experts
in the expert pool

95 training classrooms

45 special laboratories

IAEA Collaborating Centre

2011

Practical Arrangements between Rosenergoatom, CICET (now the Technical Academy) and the IAEA

2017

Agreement between ROSATOM and the IAEA on extrabudgetary contribution for 2017-2019 and 2020-2023

2018

Capacity Building Centre in the area of Capacity Building for **Nuclear Safety, Radiation Protection and Emergency Preparedness**

2019

Collaborating Centre agreement in the area of NKM and HRD for **Nuclear Energy and Nuclear Security**

2020

Collaborating Centre agreement in the area of Human Capacity Building and Research Activities in the **Areas of Non-Power Nuclear and RT Applications**

2021

Practical Arrangements in the area of **Safeguards**

2024

Collaborating Centre agreement in the field of Personnel Training and Competence Building in 5 programmatic areas

IAEA Collaborating Centre

Made in Russia

TECHNICAL ACADEMY ROSATOM

Rosatom Technical Academy become an IAEA Collaborating Centre in **3 programmatic areas**

- **Nuclear Energy**
- **Nuclear Security**
- **Nuclear Sciences and Applications**

+ Practical Arrangements in the area of Safeguards

On October 23rd, 2024

Rosatom Technical Academy prolonged its status as the IAEA Collaborating Center and extended the areas of collaboration into:

- **Small Modular Reactors**
- **Medical Physics and Radiopharmaceutical**

Rosatom Technical Academy carries out training event within the **IAEA Technical Cooperation Programme** such as

- **as Interregional training courses** (INT2024 (prev. INT2021), INT2023 projects)
- scientific visits
- workshops

Moreover, together with the Nuclear Knowledge Management Section Rosatom Tech conducts joint Russian Federation-IAEA Schools on nuclear energy management and nuclear knowledge management.

Russia's Extrabudgetary Contribution to the Implementation of the IAEA Technical Cooperation Projects on Nuclear Infrastructure Development

610.000 EUR

voluntary contribution

INT2023 + INT2024
NEMS + NKMS

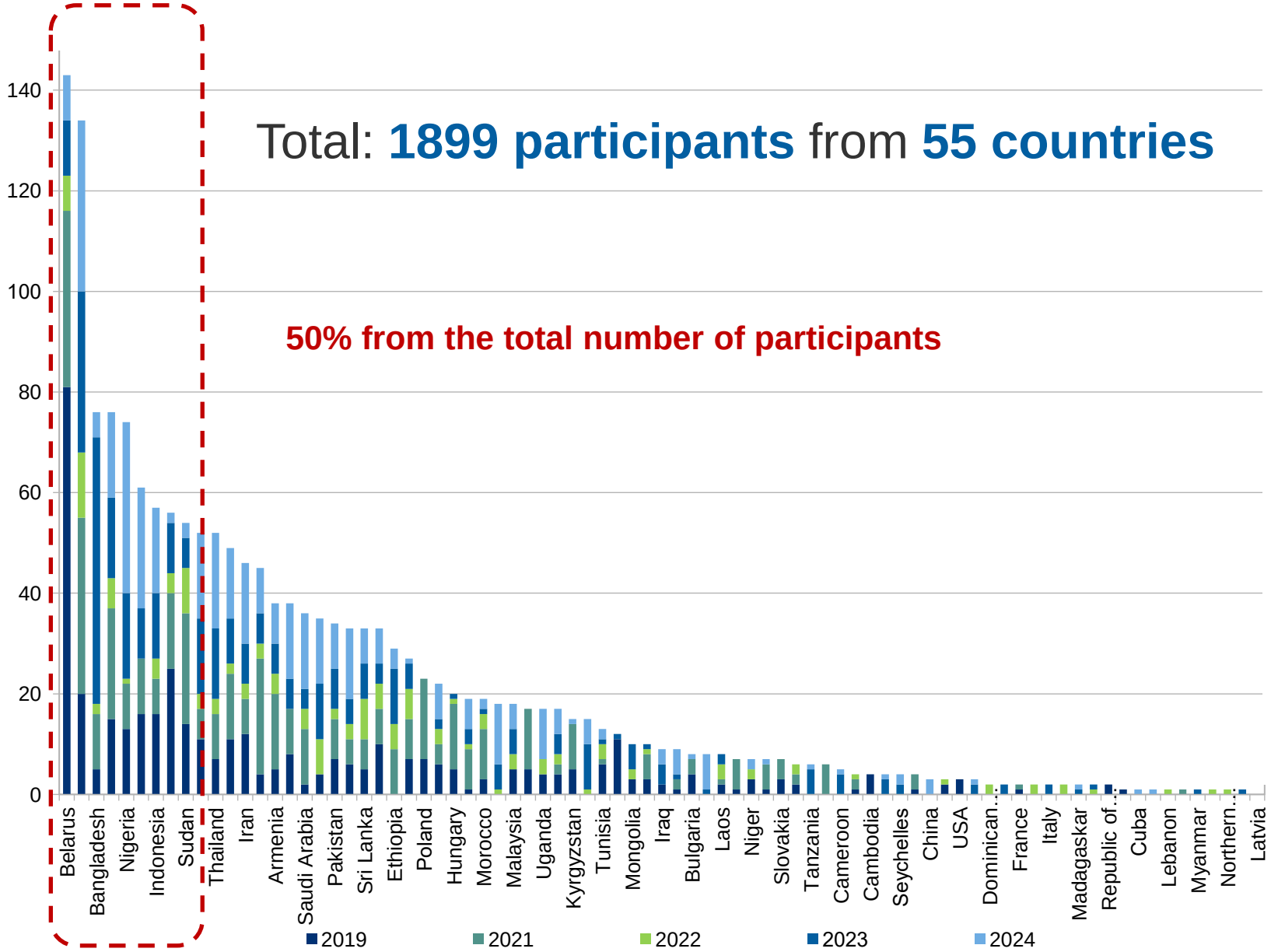
▸ **43.354.600 RUB**

≈ 424.000 EUR

expenses related to the organization of training events

Cost-Free experts

Number of Participants Trained from 2019



Total: **1899 participants** from **55 countries**

50% from the total number of participants

- **34** TRAINING COURSES
- **12** SCHOOLS
- **11** GROUP SCIENTIFIC VISITS
- **5** FELLOWSHIPS

Technical Tours

Baltic Shipyard
St. Petersburg

Emergency Response Centre
St. Petersburg

Virtual technical tour to the world's first floating NPP «Akademik Lomonosov»

Leningrad NPP,
Sosnovyi Bor

Machine Building Plant
Elektrostal

Novovoronezh NPP,
Elektrostal

The 21st INPRO Dialogue Forum on The Deployment of Smrs Projects and Technologies to Support the Sustainable Development Goals

- **28 August – 1 September 2023 Saint Petersburg, Russia**
- **86 specialists from 35 countries**
- **6 Sessions, 40 Presentations, and a Technical tour in 5 Days**

> During the week, the participants touched upon the use of the INPRO methodology for modeling the development of nuclear energy and assessing its sustainability, as well as discussed technological, economic, regulatory and social aspects related to the development and implementation of SMR technologies.

Regional Research Reactor School on Research Reactor Operation and Utilization

> The workshop is intended to assist participating Member States in Asia, Africa and European regions in building nuclear competence and providing hands-on training for young professionals on the operation of research reactors.

August 22 to September 2, 2022

Moscow, Obninsk and Dubna

15 specialists from 5 countries

Participants were able to deepen their knowledge in radioisotope and radiopharmaceutical production, nuclear material accounting and control, and nuclear and radiation protection. They also learned about various applications of research reactors, among them studying cultural heritage objects.

May 27 to June 7, 2024

Moscow, Obninsk and Dubna

15 specialists from 11 countries

During two weeks, leading experts from the nuclear industry told foreign specialists about advanced Russian technologies for studying new types of nuclear fuel and design materials using research reactors.

Upcoming Courses in 2025 (1/2)

INT2023

- **Preparation of a feasibility study for nuclear power plants, including the MMR,**
  Vladivostok, a technical tour to the "Zvezda" Shipbuilding Complex
- **Capacity Building for Nuclear Power Programme Based on SMRs Technology Applications: SMRs Specific Features**
  St Petersburg, Technical Tour to the Baltic Shipyard
- **Aspects of Modelling and Simulation in Gen-IV Type SMR Developments (covers 6 technologies of Gen IV)**
  Moscow, Technical Tour to the ZiO-Podolsk Machine Building Plant where heat exchangers are constructed for large NPPs and SMRs

INT2024

- **Siting for Nuclear Power Plants, Including SMRs,**
  Moscow, Technical Tour to the Kalininskaya NPP
- **Stakeholder Engagement for New Nuclear Power Programmes,**
  St Petersburg, Technical Tour to the Baltic Shipyard
- **Nuclear Fuel Cycle and Radioactive Waste Management Considerations for a New Nuclear Power Programme,**
  Moscow, Nuclear Fuel Fabrication Plant

Upcoming Courses in 2025 (2/2)

- **Joint Russian Federation – IAEA Nuclear Knowledge Management School**
  Moscow, June 23-27

- **Joint Russian Federation – IAEA Advanced Nuclear Energy Management School** *(to be held as part of the World Atomic Week)*
  Moscow, Sept 28 – Oct 3

- **Nuclear Stakeholder Engagement School**
  (to *be held as part of the World Atomic Week)*
  Moscow, Sept 28 – Oct 3

TECHNICAL ACADEMY ROSATOM

Thank you for your attention!

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