

FNCA Newsletter **No.11**

Radiation Safety & Radioactive Waste Management

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&
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Research Association
(FNCA Secretariat)



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The 2016 FNCA Workshop on Radiation Safety & Radioactive Waste Management (RS&RWM)

4-6 October 2016, Almaty, the Republic of Kazakhstan



Workshop Overview

The 2016 FNCA Workshop on Radiation Safety and Radioactive Waste Management was held from 4 to 6 October in Almaty, the Republic of Kazakhstan, co-hosted by National Nuclear Center of the Republic of Kazakhstan and Ministry of Education, Culture, Sport, Science and Technology (MEXT) of Japan. The meeting was attended by 18 participants including Dr Erlan Batyrbekov, Director General and Mr Sergey Berezin, Deputy Director General of NNC.



Workshop Participants

On the first day, each country reported on their current situation of nuclear/radiological emergency preparedness and response, focusing on the progress, improvement and future plan.



Group Working

From Kazakhstan, Mr Yevgeniy Tur, NNC, reported on their current situation in the country. A new document entitled "National Plan for Response to Nuclear and Radiation Accidents" was issued by the Government in August 2016. The National Plan is a general nature document, and development of additional practical

guidelines is expected to clarify and specify the plan's provisions.

On the second day, the open seminar titled “Radioactive Waste Management in Nuclear Facilities” was held in the Institute of Nuclear Physics (INP) of the Republic of Kazakhstan. During the seminar, five reports were presented by Kazakhstan, Bangladesh, Thailand and Japan.

From Kazakhstan, Dr Alexander Klepikov, Acting Deputy Director General, Nuclear Technology Safety Center gave a presentation on the current status and conception of radioactive waste management in Kazakhstan.



Left: Dr Alexander Klepikov,
Nuclear Technology Safety Center
Right: Prof Toshiko Kosako, the University of Tokyo

According to his presentation, there are so many kinds of sources of radioactive waste, including common sources with other FNCA member countries, and also the wastes that are unique to Kazakhstan such as residue from uranium mining and wastes from nuclear test sites. Also, with regards to the radioactive waste disposal in Kazakhstan, the first and the most comprehensive inventory of radioactive waste storage and disposal sites were carried out in 1994. In the course of this activity, 529 sites of radioactive waste storage and disposal were identified. The presentation was concluded with suggesting the sole goal: to protect human health and the environment on a global scale from possible short-term and long-term exposures of radioactive substances on natural objects. Dialogue and cooperation between the various

groups in society can lead to the development of appropriate solutions.



Active Discussions during the Seminar

After the open seminar, a technical visit to the Institute of Nuclear Physics (INP) was conducted. Participants visited the research reactor and facilities where radiopharmaceuticals are manufactured. First of all, the participants visited the WWR-K research nuclear reactor facility's control room and central hall where wet storage of Spent Nuclear Fuel and irradiated samples are kept. The WWR-K is a pool-type reactor with thermal neutrons. The reactor uses demineralized water as coolant, moderator and reflector. The reactor is used for research purposes such as fundamental nuclear-physical research, material science and reactor tests, as well as for the manufacture of medical radioisotopes and gamma sources, neutron doping of silicon, and neutron-activation analysis. The participants' next destination is the Radiopharmaceuticals Manufacture Facility of Nuclear Medicine and Biophysics Center, where they visited the cyclotron and the hot cell units. The facility is designed for the production of radiopharmaceuticals such as F-18, Tl-201, Ga-67, In-111, I-123, I-131, Sm-153 and Sr-89.

On the third day, the participants reported on low/intermediate level waste disposal facilities/long term storage facilities focusing on the progress, improvement and future plan.

From Kazakhstan, Ms Aliya Izbaskhanova, NNC reported on the mechanisms of radioactive wastes formation and accumulation in the

country. She also presented the overview of the improvement and upgrading of national regulatory and legal base for regulation and control of radioactive waste management in Kazakhstan for 2015 - 2016.

Finally, member countries shared the information on three-year evaluation items and suggestions for the activities to be conducted during the next three year phase (2017-2019).

Workshop Participants

■ Bangladesh

Dr M. Moinul Islam

Chief Scientific Officer,
Health Physics & Radioactive Waste
Management Unit,
Institute of Nuclear Science & Technology,
Atomic Energy Research Establishment,
Bangladesh Atomic Energy Commission
(BAEC)

■ China

Prof An Hongxiang

Division Head,
Division of Waste Safety,
Waste Management Department,
China Institute of Radiation Protection

■ Indonesia

Mr Moch Romli

Safety Supervisor,
Center for Radioactive Waste Technology,
National Nuclear Energy Agency of Indonesia
(BATAN)

■ Japan

Prof Toshiso Kosako

Professor Emeritus,
The University of Tokyo

Dr Shoji Futatsukawa

Executive Director,
Japan Radioisotope Association

■ Kazakhstan

Dr Erlan Batyrbekov

Director General,
National Nuclear Center (NNC) of the Republic
of Kazakhstan

Mr Sergey Berezin

Deputy Director General,
National Nuclear Center (NNC) of the Republic
of Kazakhstan

Mr Yevgeniy Tur

Senior Engineer,
Technical and Economic Assessment
Department,
National Nuclear Center (NNC) of the Republic
of Kazakhstan

Mr Sergey Ukhanov

Senior Engineer,
Technical and Economic Assessment
Department,
National Nuclear Center (NNC) of the Republic
of Kazakhstan

Ms Aliya Izbaskhanova

Head,
Devison for Accounting and Control of Nuclear
Material, Ionizing Radiation Sources and
Radioactive Waste of Radiation Safety
Department,
National Nuclear Center (NNC) of the Republic
of Kazakhstan

Ms Nurgul Kurmangaliyeva

Interpreter,
Public Relations Department,
National Nuclear Center (NNC) of the Republic
of Kazakhstan

Ms Zhanar Aigozhina

Interpreter,
Public Relations Department
National Nuclear Center (NNC) of the Republic
of Kazakhstan

Mr Dmitriy Kim

Deputy Head,
Radiation Safety Department,
Institute of Nuclear Physics of Republic of
Kazakhstan

■ **Malaysia**

Mr Nazran Bin Harun

Research Officer,
Malaysian Nuclear Agency (Nuclear Malaysia)

■ **Mongolia**

Ms Navaangalsan Oyuntulkhuur

Head,
Radiation Safety Council,
Nuclear Energy Commission

■ **Thailand**

Ms Nanthavan Ya-anant

Head,
Radioactive Waste Management Section,
Radioactive Waste Management Center,
Thailand Institute of Nuclear Technology
(TINT)

■ **Vietnam**

Dr Pham Quang Minh

Director,
Planning and R&D Management Department,
Vietnam Atomic Energy Institute (VINATOM)

■ **Secretariat**

Ms Ayako Tanida

International Affairs and Research Department,
Nuclear Safety Research Association (NSRA)

*Australia and Philippines are absent.



FNCA

Forum for Nuclear Cooperation in Asia



Comments from Workshop Participants



Prof An Hongxiang, China Institute of Radiation Protection

It is my first time to attend FNCA Workshop and to come to Kazakhstan. But I'd like to say that the Workshop is successful and Almaty is a beautiful city. Hope that I can attend the Workshop in the future and I can tour Almaty with my family soon. Thanks a lot and good work to my colleagues, especially from Kazakhstan and Japan.

Mr Moch Romli, National Nuclear Energy Agency of Indonesia (BATAN)

Although the temperature is colder than Indonesia, but Kazakhstan is a warm country for its hospitality. What is presented in the workshop was very informative and very useful for the member states. A pride of being a participant in this workshop.



From FNCA Secretariat

I first would like to extend my sincere gratitude to Dr Erlan G. Batyrbekov, Mr Yevgeniy Tur and everyone in the National Nuclear Centre (NNC) and Institute of Nuclear Physics (INP) of the Republic of Kazakhstan, for your huge efforts in hosting the workshop. I was deeply impressed by their hospitality, and also by its beautiful nature, historical buildings and kind people. I hope to visit Kazakhstan again near future not only for business, but also for personal trip.



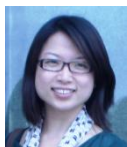
Participants in Park of 28 Panfilov Guardsmen



Dr Futatsukawa, JRIA (left) and Prof Kosako, the University of Tokyo (right)

The FNCA RS&RWM Project Leaders

Australia



Ms Lynn TAN
Project Transition Leader
Waste Projects and Strategic Planning
Australian Nuclear Science and
Technology Organisation (ANSTO)

R.O. Korea



Dr Chang Lak Kim
Director,
Radioactive Waste Management Policy
Office,
Korea Radioactive Waste Management
Corporation (KRMCC)

Bangladesh



Dr Moinul Islam
Chief Scientific Officer,
Health Physics & Radioactive Waste
Management Unit, Atomic Energy
Research Establishment (AERE),
Bangladesh Atomic Energy Commission
(BAEC)

Malaysia



Dr Mohd Abdul Wahab Yusof
Director,
Waste and Environmental Technology
Division,
Malaysian Nuclear Agency (Nuclear
Malaysia)

China



Dr Zhang Jintao
Deputy Director General,
Department of Safety, Protection and
Quality, China National Nuclear
Corporation (CNNC)

Mongolia



Ms Oyuntulkhuur Navaangalsan
Head,
Radiation Safety Council
Nuclear Energy Commission

Indonesia



Mr Suryantoro
Director of Center for
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Nuclear Energy Agency of Indonesia
(BATAN)

Philippines



Ms Maria Visitacion B. Palattao
Head, Regulations and Standards
Development Section, Philippine
Nuclear Research Institute (PNRI)

Japan



Prof Toshiso Kosako
Professor Emeritus,
The University of Tokyo

Thailand



Ms Nanthavan Ya-anant
Head, Radioactive Waste Management
Section,
Radioactive Waste Management
Center,
Thailand Institute of Nuclear

Kazakhstan



Mr Yevgeniy TUR
Technical and Economic Assessment
Department
National Nuclear Center (NNC) of the
Republic of Kazakhstan

Vietnam



Dr PHAM Quang Minh
Director, Department for Planning and
R&D Management,
Vietnam Atomic Energy Institute
(VINATOM)
Technology (TINT)

The FNCA Framework

