

# FNCA Newsletter **No.11**

## Radiation Safety & Radioactive Waste Management

**November 2016**

**Edited & Issued by**  
**Mr Yevgeniy Tur**  
**(NNC)**  
&  
**Nuclear Safety**  
**Research Association**  
**(FNCA Secretariat)**



### ❖ Contents ❖

- ◆ Workshop Report P1-4
- ◆ Comments from Participant P5
- ◆ Project Leaders P6
- ◆ FNCA Framework P7

## 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 Oyuntulkuur**

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.



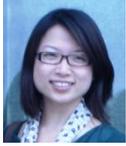
Participants in Park of 28 Panfilov Guardsmen



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 Oyuntulkuur Navaangalsan**  
Head,  
Radiation Safety Council  
Nuclear Energy Commission

## Indonesia



**Mr Suryantoro**  
Director of Center for  
Radioactive Waste Technology, National  
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

