

March 2024

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Workshop on Radiation Safety & Radioactive Waste Management held on November 7-9, 2023, Malaysia

Overview

The FNCA 2023 Workshop on Radiation Safety and Radioactive Waste Management (RS&RWM) was held in Bangi, Malaysia from 7 to 9 November 2023. The workshop was co-hosted by the Malaysian Nuclear Agency and the Ministry of Education, Culture, Sports, Science and Technology (MEXT) of Japan. It was attended by representatives from nine (9) FNCA member countries, namely Australia, Bangladesh, Indonesia, Japan, Malaysia, Mongolia, Philippines, Thailand, and Vietnam. The workshop was officiated by Dr. Rosli Darmawan, Director General of Malaysian Nuclear Agency and Mr. Wada Tomoaki, FNCA Advisor of Japan, who delivered a welcoming and opening remarks, respectively. Both remarks emphasized the importance of Radioactive Waste

Management in the member countries and its success.

The workshop began with a presentation by Mr. Wada on activities of FNCA projects. This is followed by a presentation from Dr. Muhammad Rawi Mohamed Zin, Deputy Director General of Malaysian Nuclear Agency and FNCA Coordinator of Malaysia, on Malaysia's achievements and project progress in FNCA activities, as well as introduced National Nuclear Technology Policy 2030 which was launched in September 2023. Prof. Kosako Toshiso, Project Leader of Japan, provided basic information and overview of the FNCA project and gave a briefing about consolidated report on NORM and TENORM, which is the main subject throughout the workshop.



A photo of all the workshop participants in front of Blok 11 at the Malaysian Nuclear Agency, Bangi

Presentation on Country Report of NORM/TENORM & Environmental Radiation and Radioactivity

All nine FNCA member countries reported on the progress, management, regulatory framework, and issues of NORM and TENORM in their respective countries. Subsequently, Prof. Kosako delivered a presentation on environmental radiation and radioactivity. The subject matter was proposed to be part of the forthcoming phase of the FNCA Project.

Group Discussion on Consolidated Report and Three-year Evaluation

A group discussion session was carried out in which participants discussed the status of the NORM/ TENORM in the Consolidated Report. Afterwards, Prof. Kosako had led a discussion with the participants that was geared towards the completion of activities in the current phase and the completion of the final project report, given that 2023 is the final year (2021-2023) and mark the 7th phase of Project. Outcomes from the discussion will be recorded in a three-year evaluation document.

Poster Session

Three countries presented posters on their significant topics. Malaysia presented two posters, titled “Borehole Disposal Facility for Disused Sealed Radioactive Sources (DSRS)”, as well as a poster to introduce the “Waste Technology Development center (WasTeC)” at the Malaysian Nuclear Agency. The Philippines presented a poster titled “Radon concentration inside the caves of Bohol Island, Philippines”. Finally, Thailand presented a poster with the title “Leaching Behavior of Cs 137 from Cement Solidified Electric Arc Furnace Dust”.



The Philippines presented a poster during the poster session on 8 November 2023.

Forum at Blok 11, Malaysian Nuclear Agency

A Forum was held on 8 November 2023, attended by the participants and the staffs at the Malaysian Nuclear Agency. Four presentations were delivered in the Forum. The first speaker was Mr. Obata Ryoji of MEXT, who gave a presentation on the FNCA activities of the MEXT and FNCA framework. The second speaker was Mr. Wada, who presented on recent development of FNCA’s eight projects. The third speaker was Dr. Yubonmhat, Project leader of Thailand, who delivered a presentation on the issue of Cs-137-contaminated electric arc furnace dust found in Thailand. The last speaker was Mr. Nazran Harun from Malaysian Nuclear Agency, who presented on the implementation of borehole disposal facility for DSRS Categories 3-5 in Malaysia.



The forum was moderated by Prof. Kosako and attended by participants and the staffs and the Malaysian Nuclear Agency.



A photo of all the participants in the Forum

Technical Visit to Radioactive Waste Management Facilities in Malaysian Nuclear Agency

A technical visit to Radioactive Waste Management Facilities in Malaysian Nuclear Agency was conducted on November 9, 2023. Following the technical visit, the participants also went for a short trip to the Malaysia's administrative and judicial capital, Putrajaya.

Closing

The workshop was closed with the closing remarks from Dr. Zaidi Ibrahim and Prof. Kosako.



Site visit to Mobile Tool Kit Facility (MTKF)



Visit to borehole disposal facility construction site.



Site visit to an interim storage facility for radioactive wastes



Group tour to Putrajaya

Workshop Participants

Australia

Mr. Duncan Kemp
Technical Director, Radioactive Waste, ANSTO

Bangladesh

Dr. Khandoker Asaduzzaman (PL)
Chief Scientific Officer and unit Head, Institute of Nuclear Science and Technology,
Bangladesh Atomic Energy Commission

Indonesia

Dr. Syaiful Bakhri (PL)
Head of Research Centre for Nuclear Fuel Cycle and Radioactive Waste Technology,
The National Research and Innovation Agency (BRIN)

Malaysia

Dr. Rosli Darmawan
Director General
Malaysian Nuclear Agency

Dr. Muhammad Rawi Mohamed Zin (CD)
Deputy Director General, Malaysian Nuclear Agency

Dr. Mohd Zaidi bin Ibrahim (PL)
Manager, Waste Technology Development Centre, Waste Technology and Environmental Division,
Malaysian Nuclear Agency

Mr. Rafizi Salihuddin
Research Officer, Waste Technology and Environment Division, Malaysian Nuclear Agency

Ms. Nurul Wahida Ahmad Khairuddin
Research Officer, Waste Technology and Environment Division, Malaysian Nuclear Agency

Ms. Rohyiza Ba'an
Research Officer, Waste Technology and Environment Division, Malaysian Nuclear Agency

Ms. Nurul Syazwani Yahaya
Research Officer, Waste Technology and Environment Division, Malaysian Nuclear Agency

Ms. Nurayu Ibrahim
Assistant Science Officer, Waste Technology and Environment Division, Malaysian Nuclear Agency

Mr. Mohd Zahiruddin Jaafar
Assistant Science Officer, Waste Technology and Environment Division, Malaysian Nuclear Agency

Mongolia

Ms. Ganbaatar Dolgormaa
Nuclear and radiation security state inspector, Department of Nuclear and Radiation Inspection,
Ministry of Education and Science government of Mongolia

Philippines

Mr. Angelo Absalon Panlaqui

Science Research Specialist I, DOST—Philippine Nuclear Research Institute (PNRI)

Thailand

Dr. Klitsadee Yubonmhat (PL)

Nuclear Scientist, Radioactive Waste Management Center,

Thailand Institute of Nuclear Technology (Public Organization)

Vietnam

Mr. Nguyen Thanh Thuy (PL)

Deputy Director Institute for Technology of Radioactive and Rare Elements (VINATOM)

Japan

Mr. WADA Tomoaki

FNCA Advisor of Japan

Mr. OBATA Ryoji

Deputy Director

International Nuclear and Fusion Energy Affairs Division, Research and Development Bureau,

Ministry of Education, Culture, Sports, Science and Technology (MEXT)

Prof. KOSAKO Toshiso (PL)

Professor Emeritus, The University of Tokyo

Mr. SAITO Tatsuo

Principal Engineer, Disposal Project Planning Office, Radioactive Wastes Disposal Center,

Decommissioning and Radioactive Waste Management Head Office, Japan Atomic Energy Agency (JAEA)

■ FNCA Secretariat

Ms. CHE Jong-ah

Nuclear Safety Research Association (NSRA)

FNCA Activities in 2023

Activity	Date	Venue
2023 Study Panel & The 23rd Coordinators Meeting	June 20 to 21, 2023	Tokyo (hybrid)
Workshop on Radiation Safety and Radioactive Waste Management	November 7 to 9, 2023	Malaysia
The 24th Ministerial Level Meeting	November 28, 2023	Thailand (hybrid)