

FNCA Newsletter

Forum for Nuclear Cooperation in Asia

No. 12 March 2009



Forum for Nuclear Cooperation in Asia (FNCA)

9th FNCA Ministerial Level Meeting

November 28, 2008, Manila, Philippine



The 9th FNCA Ministerial Level Meeting was held in Manila, the Philippines, November 28, 2008, co-hosted by Cabinet Office of Japan (CAO), Japan Atomic Energy Commission (JAEC) and Department of Science and Technology of the Philippines (DOST), with the ministerial-levels and senior officials in charge of development and utilization of nuclear technology from 9 FNCA member countries, Australia, Bangladesh, China, Indonesia, Japan, Korea, Malaysia, the Philippines and Vietnam.



Delegates of FNCA Countries

In Session 1, Dr. Estrella F. Alabastro, Secretary of DOST and Mr. Yoshitake Masuhara, Senior Vice-Minister of Cabinet Office made an opening address as the co-hosts of this meeting.

In Session 2, head of delegations of participating countries made a report, focusing on their respective activities concerning nuclear power, radiation application and relevant regional and international cooperation.

In Session 3, 1) the highlights and achievements of 11 FNCA projects in 8 fields in FY2008 and FNCA future plans in FY2009 and 2) the current status of the Human Resources Development (HRD) database, 3) the results of 2nd Study Panel for the Development of Nuclear Safety Infrastructure which was held in September 2008, were reported and discussed.



Chairperson of the Meeting
Dr. Estrella F. Alabastro,
Secretary of DOST

In Session 4, there was a roundtable discussion on the possibilities of cooperation for the development of nuclear power infrastructure among FNCA countries, and it was decided to set up a new “Study Panel on Approaches toward Infrastructure Development for Nuclear Power”.

In Session 5, there was also a roundtable discussion on the cooperation for the future promotion of radiation application. The discussion focused on possible means to strengthen linkages with potential endusers of technologies so that actual application of the project outcome can be further promoted.

In Session 6, the resolution of this meeting was discussed and, in Session

7 (Closing Session), it was approved. Its points are as follows;

- 1) Further achieving the goal of the Joint Communiqué of the FNCA Ministerial Level Meeting on December 18, 2007 to raise global awareness on the contribution of civilian nuclear power in mitigating global warming, and to strengthen the discussions among stakeholders and policy makers with a view to extending the CDM coverage to include nuclear power;
- 2) To promote international cooperation among FNCA member countries, utilizing information, actual experience accumulated and other related resources available, for the development of infrastructure for nuclear power;
- 3) To promote international cooperation among FNCA member countries in the area of radiation applications, through enhancement of cooperative research/development and human resources development, and stronger linkages with potential end-users and stakeholders of technologies developed from FNCA projects



Scene of the Meeting

The meeting noted that the 10th Ministerial Level Meeting will be held in Japan and that the 11th Ministerial Level Meeting will take place in China.



FNCA Meeting from March 2008 to February 2009

The following FNCA Meetings were held from March 2008 to February 2009:

Projects/Field		Date	Venue
The 9 th Ministerial-level Meeting		Nov. 28, 2008*	The Philippines
The 9 th Coordinators Meeting		Mar. 10-11, 2008	Japan
2 nd Panel Meeting “Study Panel for Cooperation in the Field of Nuclear Energy in Asia”		Sep. 1-2, 2008	Japan
Research Reactor Utilization	Neutron Activation Analysis Workshop	Oct. 16-20, 2008	Vietnam
	Research Reactor Technology Workshop	Oct. 19-23, 2008	
Application for Agriculture	Mutation Breeding Workshop	Oct. 27-31, 2008	Vietnam
	Mutation Breeding Sub-Project Meeting on Insect Resistance in Orchid	Jun. 30-Jul. 3, 2008	Malaysia
	Biofertilizer Workshop	Feb. 23-26, 2009	Indonesia
Application for Medical Care	Radiation Oncology Workshop	Jan. 28-31, 2009	Indonesia
	Cyclotron and PET in Medicine Workshop	Jan. 6-9, 2009	Malaysia
Public Information	Project Leaders Meeting (PLM)	Nov. 10-14, 2008	China
Radiation Safety & Radioactive Waste Management	Workshop	Nov. 3-7, 2008	Australia
	Task on Radiation Safety & Radioactive Waste Management	Aug. 18-20, 2008	Indonesia
		Aug. 21-22, 2008	Malaysia
Nuclear Safety Culture Workshop		Mar. 26-27, 2008	China
Human Resources Development Workshop		Nov. 2-4, 2008	Bangladesh
Industrial Application	Low Energy Electron Accelerator Workshop	Oct. 27-31, 2008	China

*Nov. 27 Senior Officials Meeting (SOM)

Major Achievement of Ongoing Projects

Research Reactor Utilization

Neutron Activation Analysis

■ Beginning of New Activities of the Project including Application for Mineral Exploration



Workshop Participants

Neutron activation analysis (NAA) refers to a process where the subject of analysis (sample) is irradiated with neutrons causing activation of its constituent elements, the radiation and energy of which are measured, thereby allowing an elemental analysis to be performed. This technique has the excellent characteristic of allowing a high-sensitivity analysis of multiple elements present in the target sample to be performed at the same time. This project aims to encourage the utilization of NAA

under a new initiative comprising three themes — “Food Contamination Monitoring,” “Environmental Pollution Monitoring” and “Geochemical Mapping and Mineral Exploration” that was incorporated from fiscal year 2008 — which, through NAA, are expected to make significant social and economic contributions.

A workshop on NAA was held over 5 days from October 16 to 20, 2008 in Dalat, Vietnam. A total of 15 representatives from Australia, Bangladesh, China, Indonesia, Japan, Korea, Malaysia, the Philippines, Thailand and Vietnam participated — 10 countries in all. In workshop, participants exchanged information on the current state of NAA activities in each country, a selection of themes by each country and discussed objectives and action plans of the project.

Research Reactor Technology

■ New Theme, “Sharing Safety Analysis Techniques for Safety Operation of Research Reactors”

The objective of the Research Reactor Technology Project is to share neutronics calculation techniques for core management on research reactors between participating countries to assure safe and stable operation for efficient utilization.

A workshop on research reactor technology was held over 5 days from October 19 to 23, 2008 in Dalat, Vietnam. A total of 13 representatives from Bangladesh, China, Indonesia, Japan, Korea, Malaysia, Thailand and Vietnam participated. From fiscal 2008, the project commenced new activities under the theme “Sharing Safety Analysis Techniques for Safety Operation of Research Reactors”. The title is “Safety Analyses of RIA (Reactivity Initiated Accident) and LOFA (Loss of Flow Accident) for Research Reactors”. The following two calculation codes from Japan were chosen as common calculation codes for safety analysis to be distributed by Japan to each member country.



Control panel of Dalat Research Reactor

COOLOD-N2: Steady state thermal hydraulic code

EUREKA2/RR: Nuclear & thermal hydraulic coupling code for transient change

In this workshop, after an information exchange on the current state of safety analysis for research reactors in each country, the technical basis that applies to the COOLOD-N2 Steady state thermal hydraulic code was reinforced. In addition, issues including the implementation plan for sharing of EUREKA2/RR in the next fiscal year were held, and the agenda for the next workshop were discussed.

Open Seminar on Research Reactor Utilization Projects

On October 20, while the workshops were being held, the Neutron Activation Analysis Project and Research Reactor Technology Project jointly held an open seminar. Some lectures were given on the research reactor utilization in Japan, Australia and Vietnam and the current state of preparations for the introduction of nuclear power generation. The seminar was attended by 41 representatives from local research institutions, educational institutions and the government. In his lecture, Dr. Sueo Machi, FNCA Coordinator of Japan, provided lecture of the installation status of nuclear power plants in FNCA member countries, emphasizing the role of nuclear power generation to meet increased demand for power without emitting green house gases.



Open Seminar

Application for Agriculture



Mutation Breeding

■ The Achievement of Orchid, Banana and Rice Sub-Projects were Described



Visit to rice growers in Vietnam

The Mutation Breeding Project aims to encourage the utilization of radiation for developing new mutant varieties of crops that can better resist drought, insect and disease by using mutation breeding. The project contributes to increase food production in Asia and to improve food quality. At present, joint research is underway into three crops: rice, banana and orchids.

A workshop on Mutation Breeding Project was held over 5 days from October 27 to 31, 2008 in Dalat, Vietnam. A total of 13 representatives from Bangladesh, China, Indonesia, Japan, Malaysia, the Philippines, Thailand and Vietnam participated.

With regards to research of insect resistant orchid, Malaysia, which has carried out joint research with Japan using the irradiation of ion beams, reported recent successes through having acquired two promising lines that exhibit resistance to thrips. In terms of research of rice composition and quality, participants reported recent successes and concrete future plans were developed. These include standardizing evaluation techniques for measuring amylose protein, phytic acid and aroma levels, and Thailand and Japan providing screening methods for amylose and protein to all the

participants. In addition, participants also paid a technical visit to the Research Institute on Cotton and Rural Development in Nha Ho, as well as Vietnamese rice, fruit and flower growers. With respect to research into disease resistance in banana, a report was provided on the results of the expert-level meeting on banana held in Malaysia from June 30 to July 3, 2008. The participating countries (Malaysia, the Philippines, and Vietnam.) acquired promising lines that are exhibiting resistance to BBTV (Banana Bunchy Top Virus) or Fusarium wilt disease. Some promising lines exhibited tolerance to nematodes. Further large-scale evaluation trials for agronomic characters, such as yield and tolerance to diseases and nematodes will be conducted from 2009 at several sites around the country towards the registration of the new variety.



Biofertilizer

■ Research Activity for Development of Multifunctional Biofertilizer

To establish sustainable agriculture in Asia, we must decrease consumption of the chemical fertilizers. However, reductions of the chemical fertilizer will lead to a decline in food productions. Microorganism, which is effective in promoting plant growths, is expected to be a possible solution to this contradiction.

To support sustainable agriculture, the FNCA countries are engaged in the R&D on multifunctional biofertilizer with high quality as an alternative to chemical fertilizers as well as other agrochemicals in the farming field. It consists of multiple inoculants with promoting plant growth or inhibiting plant diseases. Those inoculants are selected through conventional screening or produced with radiation-based microbial mutation breeding. To control quality of carrier, we would use the radiation sterilization using Co-60.



Visit to Pacet Field Station of
Department of Agriculture (DOA)

A workshop on Multifunctional Biofertilizer for Sustainable Agriculture was held in Jakarta, Indonesia from February 23 to 26, 2009. A total of 15 participants from China, Indonesia, Japan, Malaysia, Philippines, Thailand and Vietnam participated. They presented their current researches to develop multifunctional biofertilizer and decided target crops and experimental plan 2009 - 2010 for carrier sterilization by irradiation. Furthermore, they discussed how to improve the quality of inoculants with carrier sterilized by radiation in comparison with heat autoclaving as well as how to evaluate antagonistic effects inhibiting plant diseases. And it was suggested that cost of irradiation of carriers should be calculated in BATAN irradiation facilities, in comparison with autoclaving. On the 3rd day, they visited the biofertilizer trial plots of Department of Agriculture, for vegetables. It was observed that broccoli, cabbage and carrot gave positive response to the biofertilizer application. They also visited biofertilizer factory, which produces biofertilizer for soybean and groundnut with irradiated carrier at BATAN irradiation facilities. The participants learned that the activity of this company is an important model for dissemination of carrier sterilization by irradiation for other FNCA countries.

Application for Medical Care

Radiation Oncology

■ Survival Rate Data of Uterine Cervical Cancer and Nasopharyngeal Cancer are Achieving Results

The project seeks to establish integrated and standardized protocols (regimens) for cervical cancer and nasopharyngeal cancer, which affect large numbers of people in Asia, to upgrade the level of radiotherapy in Asia.

The 2008 workshop on radiation oncology was held in Surabaya, Indonesia, from January 28 to 31, 2009. 18 participants from 8 countries attended the workshop: Bangladesh, China, Indonesia, Japan, Malaysia, the Philippines, Thailand and Vietnam. Korea did

not take part in the workshop, having submitted clinical data on the FNCA joint clinical research.

The workshop consisted of presentations and discussions on the following five themes:

1. Phase II Study of Chemoradiotherapy for Locally Advanced Cervical Cancer (CERVIX-III)
2. Phase II Study of Concurrent Chemotherapy and Extended-Field Radiotherapy for Locally Advanced Cervical Cancer (CERVIX-IV)
3. Phase II Study of Chemoradiotherapy for NPC (TxN2-3) (NPC-I)
4. Phase II Study of Chemoradiotherapy for NPC (T3-4N0-3) (NPC-II)
5. QA/QC (Quality assurance and quality control) of Radiation Dosimetry

In addition, an open seminar was held in Dr. Soetomo General Hospital during the workshop with around 60 participants, including medical students and medical experts.



Open Seminar

Cyclotron and PET in Medicine

■ The Publication of FNCA Guidelines and the FNCA Case Review System for Clinical PET are in the Final Stage

The purpose of the project is to improve technology for the early detection of cancer to contribute to improving the health of people in Asian countries through the effective use of state-of-the-art nuclear medicine equipment: PET and PET/CT.

The workshop on cyclotron and PET in medicine was held in Kuala Lumpur, Malaysia, from January 6 to 9, 2009. The meeting had 30 participants from the following 7 countries: China, Indonesia, Japan, Malaysia, the Philippines, Thailand and Vietnam. Discussions were held at three parallel sessions on three points: "instrumentation", "radiation safety and PET radiopharmaceuticals" and "clinical diagnosis".



Open Seminar Participants

As the first stage of the project will be completed this year, Malaysia proposed extending the project for 2 years, drawing attention to support for future activities, such as the preparation of guidelines on radiation safety for operation of cyclotron and the manufacture of PET radiopharmaceuticals and standards to be followed prior to installation and upon the acceptance of cyclotron, the expansion of the scope of cases and increase in the number of interesting PET cases included in a collection of clinical cases, and surveillance of personal exposure doses in

PET/CT and Cyclotron facilities.

An open seminar was held for 2 days during the workshop. The seminar was attended by 49 participants on January 8 and 44 participants on January 9, in addition to participants including government offices representatives, medical doctors and nurses from nearby hospitals, and pharmaceutical companies. The seminar composed of general subjects, such as PET cameras, radiopharmaceuticals, and the roles of PET/CT in clinical medicine.

Public Information

■ Considering Conducting a Public Opinion Survey with Common Questions in FNCA Countries

Against a background of growing interest in nuclear power generation, the purpose of the Public Information Project is to promote and share activities of public information of nuclear energy being carried out in member countries, and to discuss the best way of conducting more effective public information activities. Public Information Project Leaders Meeting (PLM) was held over 5 days from November 10 to 14, 2008 in Beijing, China. A total of 15 representatives from 8 countries (Bangladesh, China, Indonesia, Japan, Malaysia, the Philippines, Thailand and Vietnam) and representatives from the International Atomic Energy Agency (IAEA) attended the meeting. In addition to each country's reporting on the current state of their public information activities, DVDs, posters, brochures and novelty goods produced by each member country for public information purposes were introduced, with a spirited exchange of opinions taking place between participants.



IAEA Training Program

In addition, an open seminar was held during the PLM. Lectures were delivered on the current state of nuclear power generation in China and public information activities in Japan. Around 50 people attended the seminar, including Chinese government officials, members of the media and private businesses. At the same time, a public information expert from IAEA was invited to conduct training program including a lecture and a case study.

In this meeting, the participants held discussion with a focus on new project activities. While the idea of jointly conducting a public opinion survey on nuclear power in FNCA member countries had been raised, as a feasibility study each country reported on the results of their respective public opinion survey that had been conducted previously. As a future plan, it was agreed that a public opinion survey on nuclear power would be jointly conducted by the FNCA countries.

Radiation Safety and Radioactive Waste Management

■ Agreed to Cooperate in Establishing a Consolidated Report on Radiation Safety in Asia

The Radiation Safety and Radioactive Waste Management Project aims to contribute to improved safety in the peaceful use of nuclear power in Asia through exchanging and sharing of information and experience-based knowledge pertaining to radiation safety and radioactive waste management

between member countries. The project was formed through the reorganization of the Radioactive Waste Management Project that had been underway since 1995, and it commenced new activities from the current fiscal year.

A workshop on Radiation Safety and Radioactive Waste Management was held over 5 days from November 3 to 7, 2008 in Sydney, Australia. A total of 13 representatives from Australia, Bangladesh, China, Indonesia, Japan, Malaysia, Thailand and Vietnam participated. The workshop included the presentation of country reports from each country on the current status and progress of radiation safety and radioactive waste management. In addition, various problems faced by each country were presented as special topics, with members acquiring shared awareness of the issues through debate and exchanges of opinion. Sub-meetings with set themes including “Radiation Safety at Nuclear Power Plants” were also held. During the course of the workshop, sessions on radiation safety and radioactive waste management posters were conducted by Japan and Australia. In addition, plans for working together with other international cooperation programs such as the Asian Nuclear Safety Network (ANSN) and the Regional Cooperative Agreement (RCA) in the Asia region, both programs of the International Atomic Energy Agency (IAEA), were confirmed in a roundtable discussion. Technical visits were paid to facilities of the Australian Nuclear Science and Technology Organisation (ANSTO) such as an interim storage facility for low-level radioactive waste and the OPAL reactor, as well as the HIFAR and MOATA reactors, which are currently being decommissioned.



Left: Concrete Blocks
Middle: Metallic Bulk (Non-Compactable)
Right: Soft Waste (Compactable)

Nuclear Safety Culture

■ Workshop in Beijing as a Wrap-up

The objective of the Nuclear Safety Culture Project, which was proposed by Australia and launched under its initiative, is to promote greater awareness of nuclear safety culture of research reactor in FNCA countries through the exchange and sharing of information and experience-based knowledge pertaining to nuclear safety culture among member countries. At the 9th Coordinators Meeting (March 10 to 11, 2008), a proposal for the termination of the project and the initiation of a new project was presented by Coordinator of Australia. A workshop was held in Beijing, China from March 26 to 27, 2008 to discuss the future direction of the project and confirm its achieved outcomes, attended by 15 experts representing 9 countries — Australia, China, Indonesia, Japan, Korea, Malaysia, the Philippines, Thailand and Vietnam. Since then, the project has not engaged in any major activities during FY2008.

At the 10th Coordinators Meeting (March 11 to 13, 2009), Australia's new 5 years project will be proposed on Safety Management System for Research Reactor Facilities.

Human Resources Development

■ Establishing Website for the Asian Nuclear Training and Education Program (ANTEP)



Workshop Participants

The Human Resources Development Project conducts surveys on the needs for human resources development programs and the programs available in each country, along with activities that further the Asian Nuclear Training and Education Program (ANTEP), by effectively matching the needs with available programs.

A workshop on human resources development was held over 3 days from November 2 to November 4, 2008 in Dhaka, Bangladesh. A total of 15 representatives from 9 countries (Bangladesh, China, Indonesia, Japan, Korea, Malaysia, the Philippines, Thailand and Vietnam) and the IAEA attended the workshop in the presence of Bangladesh Atomic Energy Commission Chairman Dr. Shafiqul Islam Bhuiyan. In the workshop, each country clarified the background to its current human resources development requirements (needs), and the more effective utilization of ANTEP was discussed. An open seminar was held on the first day of the workshop, where participants from Bangladesh, Japan and Vietnam delivered lectures on human resources development. It was attended by around 100 representatives from the Bangladeshi government, universities and research institutes. The results of the survey were presented at the current workshop. While they showed that the current needs of each country span a wide range of fields, it was revealed that almost 90% of the 65 needs identified are covered by the Nuclear Researchers Exchange Program run by the Ministry of Education, Culture, Sports, Science and Technology (MEXT). (In the MEXT Nuclear Researchers Exchange Program in FY 2008, there were 22 applications submitted with respect to the 65 needs identified.) In building a more effective ANTEP, a shared awareness was formed as to the importance of properly meeting the needs of each country based on their respective national nuclear policies. In addition, a demonstration was given of the ANTEP website, which will be revamped during the current fiscal year.

Industrial Application



Electron Accelerator Application

■ Remarkable Progress Made in R&D on Plant Growth Promoter/ Elicitor

The Electron Accelerator Application Project aims to create valuable materials through the radiation processing of natural polymers.

A workshop on the Application of Electron Accelerator was held in cooperation with the IAEA/RCA, October 27 to 31, 2008, in Shanghai, China. A total of 18 experts attended the workshop, including those from the 8 of the member countries (Bangladesh, China, Indonesia, Japan, Malaysia, the Philippines, Thailand and Vietnam), as well as the IAEA/RCA member countries of India, Pakistan and Sri Lanka as observers. This was the 8th workshops for this project and the following issues were discussed.

- (1) Review of the current status of products developed through the radiation processing of natural polymers in terms of process and application of products;
- (2) Strategic plan for commercial application including cooperation with end-users;
- (3) Possible cooperation and sharing of R&D work between member countries to achieve common goal;
- (4) Project implementation plan for 2009-2011.

An open seminar was held on the first day of the workshop, which was attended by around 90 participants from industry, universities and research institutions. The experts presented their research on the radiation processing of natural polymers and the current status of electron accelerator utilization in each country. An exhibition displaying posters, commercialized and prototype products from each country was also held on the same day.



Visit to Shanghai Synchrotron Radiation Facility

Plant Growth Promoter from Radiation Processing of Natural Polymers

It was reported that some member countries have been conducting field test on several kinds of plants, vegetables, tea, coffee, rice, sugarcane and so on. Malaysia reported a large scale field test using radiation degraded chitosan. Member countries are to conduct field tests of rice using the chitosan irradiated at BATAN in August 2008 based on common experiment procedures.

Study on Hydrogels for Wound Dressing and Other Medical Applications

It was reported that hydrogel products such as wound dressing from China and Korea, and cosmetic face masks from Malaysia have been successfully commercialized. Super water-absorbent gels made from radiation crosslinked/grafted natural polymers were developed in Vietnam. These have great potential as soil conditioners, particularly in drought-stricken area.

The member countries agreed to continue their research by sharing experiences, data and technical information on the radiation processing of natural polymers.

Message from FNCA Coordinator of Japan

Sueo Machi

FNCA Contributes Sustainable Development of Member Countries

The Coordinators Meeting in March, 2009 celebrated its 10th Anniversary with remarkable achievement of the activities in the past 9 years. The vision of FNCA adapted in 2000 by Ministerial Meeting states it should work for enhancing socioeconomic development through active regional partnership by safe utilization of nuclear science and technology. FNCA has been focusing on nuclear applications for agriculture, human health and energy, and infrastructure development such as human resources development and safety culture.

Let me highlight two selected recent success stories. One is the development of new plant growth promoter produced by radiation degradation of chitosan, wastes of crab and shrimp shell. The products are in commercial market in Vietnam and Japan since last year, and being tested in large scale of 24 ha. for rice in Malaysia. The other is development of new effective treatment protocol by chemo-radio therapy for patients of uterine cancer achieving excellent recovery rate of about 70% in 5 years after treatment. The protocol has been developed by clinical tests in collaboration of hospitals in FNCA countries.

Nuclear power is another focus to meet emerging needs of FNCA countries. Study panels on nuclear power started in 2004 leading to clear and common recognition of its benefits for member countries. From 2009 member countries cooperate for development of infrastructure of introduction of nuclear power.

Our further challenges are strengthen linkage with end-users, such as agriculture sector, medical doctors and environmental protection sectors. FNCA would continue to cooperative work for sustainable development in Asia using nuclear technology.

The 2nd Study Panel for Cooperation in the Field of Nuclear Energy in Asia (September 1-2, 2008, Tokyo)



Participants to the 2nd Panel

The 2nd Study Panel on the Cooperation in the Field of Nuclear Energy was held on September 1-2, 2008 at Mita Conference Hall, Tokyo, Japan, hosted by Japan Atomic Energy Commission (JAEC), Cabinet Office of Japan (CAO), in cooperation with the Nuclear Safety Commission of Japan (NSC).

Dr. Kuniyoshi Soda, Commissioner of the NSC, chaired the meeting and the discussion was carried out about the Development of the Infrastructures for Ensuring Nuclear

Safety among senior officials and experts in charge of nuclear policy and nuclear safety regulation of 9 FNCA member countries, that is, Bangladesh, China, Indonesia, Japan, Korea, Malaysia, the Philippines, Thailand and Vietnam. An officer of the Department of Nuclear Safety and Security, the expert of IAEA, also participated in the meeting.

Based on the recognition that promoting international cooperation can contribute to effective and efficient development of the infrastructure for nuclear safety, it was suggested that it is necessary to share the knowledge and experiences among FNCA countries and to promote coordination of FNCA with other international frameworks such as Asian Nuclear Safety Network (ANSN) in IAEA and sub-network of nuclear safety of Association of South East Asian Nations (ASEAN) + 3 (Japan, China, Korea), etc.

※1 In view of the recent movement toward introduction of nuclear power in the region, FNCA has been holding the study panel for the past 5 years on the role of nuclear energy in Asia and on the cooperation for promoting nuclear energy. The panel was held for three years as the first phase and subsequently for 2 years as the second phase, this meeting is the last one year of the second phase.



Meeting scene of the 2nd Study

The 9th FNCA Coordinators Meeting (March 10-11, 2008, Tokyo)

The 9th FNCA Coordinators Meeting was held from March 10-11, 2008, in Tokyo, Japan, hosted by Japan Atomic Energy Commission (JAEC) and Cabinet Office of Japan (CAO). The Meeting was chaired by Dr. Machi, FNCA Coordinator of Japan, and attended by delegates from 10 FNCA countries. Dr. Prinath Dias, RCA Focal Person also participated representing IAEA.

In the meeting, FNCA Project Leaders reported activities of on-going FNCA projects, and their evaluation and future plans, thereafter discussion was conducted. And the result of 8th FNCA Ministerial Level Meeting (December 18, 2007), and the follow-up of "Forum for Nuclear Cooperation in Asia (FNCA) Joint Communiqué on the Peaceful Use of Nuclear Energy for Sustainable Development" were reported by CAO. The meeting agreed to allocate enough time for policy dialogue on the introduction of civilian nuclear energy in terms of "Reduction of CO2 emission and energy sustainability" at the 9th Ministerial Level Meeting. As the follow-up of the 1st Study Panel (October 30-31, 2007), concept of FNCA Database for HRD toward Nuclear Power and the schedule have been proposed, and agreed. The meeting agreed to select "Nuclear Safety" as the theme of the 2nd Study Panel and also to discuss the next step concerning nuclear energy at the 2nd Study Panel. The meeting agreed that member countries should seriously approach the 5 challenges of FNCA (see bellow) to implement projects achieving goals.



Participants to the 9th Coordinators Meeting

5 Challenges of FNCA

- 1) Linkage with Regional and National Priority
- 2) Enhancing cooperation with potential end-users
- 3) Ensuring sustainability of financial support
- 4) Improving coordination with other regional activities to minimize duplication
- 5) Need from FNCA countries for support in HRD for NPP introduction

What is the Forum for Nuclear Cooperation in Asia (FNCA)?

The Forum for Nuclear Cooperation in Asia (FNCA) means the framework (forum) for encouraging cooperation among Asian countries in the use of nuclear technology to improve the lives of the people of each country under the leadership of Japan. The FNCA member countries are promoting activities related to the use of nuclear energy.

[Name]

FNCA : Forum for Nuclear Cooperation in Asia

[Participating nations]

Australia, Bangladesh, China, Indonesia, Japan, Korea, Malaysia, the Philippines, Thailand and Vietnam, IAEA (Observer)

[Framework]

Ministerial-Level Meeting

The ministerial-level representatives of each country holding jurisdiction over nuclear activities discuss cooperation measures and nuclear related policies. On the day before the ministerial-level meeting, the senior administrative officer's meeting is to be held.

Coordinators Meeting

The coordinators who are selected as a representative by each nation discuss several issues including introduction, revision & abolishment, coordination and evaluation of cooperative projects.

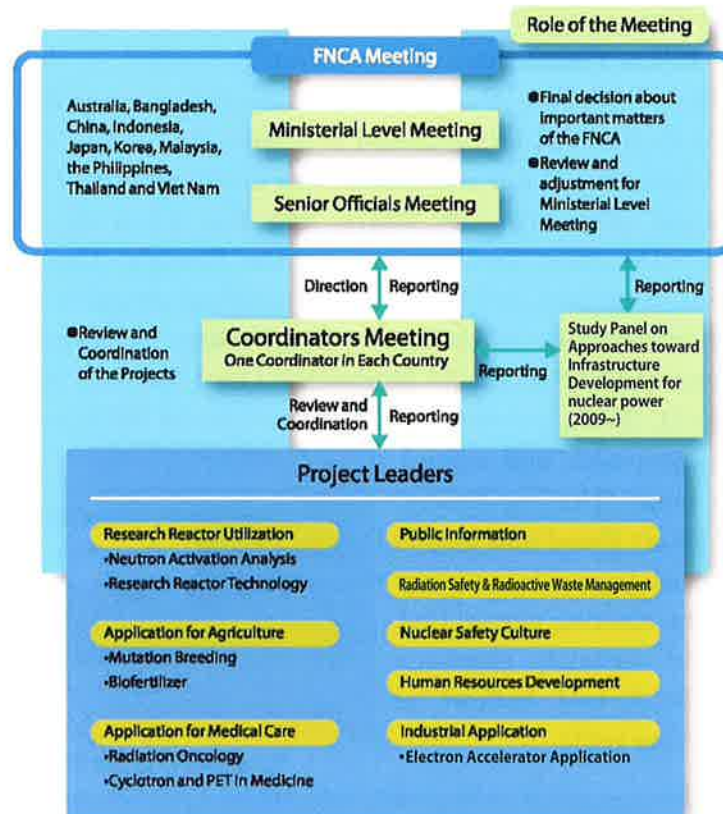
Panel Meeting

To examine & evaluate the role of nuclear energy, and also to study problems related to the introduction of nuclear power generation. A new Study Panel on Approaches toward Infrastructure Development for nuclear power will start in 2009.

Project

Each FNCA-participating nation holds workshops through post rotation to discuss activity programs. And in addition to workshops, appropriate experts' meetings are held for each project.

The FNCA Framework



Nuclear Safety Research Association (NSRA), FNCA Secretariat

5-18-7 Shinbashi Minato-ku Tokyo 105-0004 Japan

Tel: 81-3-5470-1983 Fax: 81-3-5470-1991 FNCA Website: <http://www.fnca.mext.go.jp/english/index.html>