

COUNTRY REPORT FROM THAILAND

Present status on Human Resource Development in Nuclear Field

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Introduction

The status on human resource development in nuclear field is depending on the demand on the usage of nuclear application. There are three big groups using radiation and radioisotopes in Thailand; users in medical applications, users in industrial applications and users in research applications. Since nuclear power is not planned in near future, human resource in this application is limited. Human resource of medical profession in nuclear field is recognized to be necessary for the safety in medical exposure control. While human resources in radiation safety is the key for occupation control in industry and research. The important of human resource in research and development in nuclear application and reactor utilization are also recognized. The structure of Bureau of Atomic Energy Administration is built to support the activity.

Qualified Personnel is the key for Safety in Medical Exposure Control

It is realized long time ago that persons are the most important part of any service. Especially the service in medical practice, quality control of machine, drugs and the most important one is personnel in medical professional must be qualified. In nuclear field, medical physician applying radiation and radioisotopes to patient must have special qualification, as well as other related professional such as medical physicist, and radiologist.

Thailand has required authorized medical doctor in the licensing process to use radiation and radioisotopes in medical diagnostic and treatment. It is also required to have a radiation safety officer and qualified experts either medical physicist or radiologist. Medical societies in nuclear field has been established as shown in table 1. Those societies and academic institute play a strong role in building and supporting human resources in this field.

Radiation Safety Officer Qualification

Radiation safety officer qualification has recently announced in the radiation safety regulation. Thailand has conducted radiation protection courses for tens years. But the qualification theme has not been established yet. Models of other countries are studied in order to choose suitable model for Thailand. The qualification will be launch as soon as possible and projected to be fulfill in 5 years.

Organization re-structured in the passed few years

Thailand has overall governmental organization re-structured in the passed few years. Office of Atomic Energy for Peace is also experience some change. Not only the name changed to Office of Atoms for Peace, but internal structure is also changed. OAP will be separated into two parts; OAP and an Institute for Nuclear Technology. OAP consists of 5 units; Office of Secretary, Bureau of Atomic Energy Administration, Bureau of Radiation Safety Regulation, Bureau of Nuclear Safety Regulation and Bureau of Technical Support for Safety Control. The part of OAP which will be separated to nuclear institute consists of the Radioactive Waste

Management Program, the Radioisotope Production Program, the Reactor and Nuclear Technology Operation Program, the Radiation and Nuclear Protection Program, the Irradiation Research for Agriculture Program, the Chemistry Research and Material Science Program and the Physics and Advanced Technology Research Program.

Status of Academic Courses in Nuclear

Nuclear Science has been included in curriculum of science study in every universities and colleges. In some universities the special subjects in nuclear are included and graduate courses are offered for example Physics, Chemistry, Medical Physics, Nuclear Technology, Environmental Science, Radiation Technology, etc. More intensive survey must be conducted in order to achieve valuable data for human resource development plan.

Nuclear Education for Young Generation

Young generation is recognized as the future of our country. There is effort to cooperate nuclear subject in the learning material of primary, secondary and high schools. OAP has cooperated and supplied information relating nuclear to units for developing the learning material.

OAP also tries to catch the interesting of young group by conducting Nuclear science camp for secondary school and high school students. The program first started in Nakhon Nayok area (the new research reactor base) since 1998. As the program earned excellent feedback from students and teachers, so it is continued and expanded to other area as requested.

OAP also participates in the events arranging for special occasion; Science day, Youth day, etc. The program is ranging from the exhibition to the nuclear science camp.

Table 1 Academic Associations and Societies in the Nuclear Field in Thailand

| Academic Associations and Societies | Established Year | Number of Regular Members | Number of Student Members | Total |
|--|------------------|---------------------------|---------------------------|-------|
| Nuclear Society of Thailand | 1994 | 600 | | 600 |
| Thai Society for Non-destructive testing | 1991 | 30 | | 30 |
| Thai Medical Physicist Society | 1975 | 100 | | 100 |
| Nuclear Medicine Society of Thailand | 1985 | 170 | | 170 |
| Radiation Oncologist Society of Thailand | | | | |
| Medical Radiology Society of Thailand | | | | |