

# Training for Safehandling of Radiation and Radioisotopes and X-ray Machines for Beginners in Tohoku University

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V. 6 Training for Safehandling of Radiation and Radioisotopes and X-ray  
Machines for Beginners in Tohoku University

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Training for safehandling of radiation and radioisotopes for beginners has been conducted twice a year from 12 years ago in Tohoku University. The contents of lectures and practices are almost the same as last year as shown in Table 1. In 1987 the training was performed for 372 persons. The department to which they belong are given in Table 2.

Training for safehandling of X-ray machines and electron microscopes began from the end of 1983. The training is scheduled to be held twice a year at the same time as that for radiation and radioisotopes.

Only lectures are given and not practices. The contents of the lectures and the distributions of trainees are shown in Tables 3 and 4, respectively.

Table 1. Contents of lectures and practices for safehandling of radiation and radioisotopes in 1987.

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Lectures (two days)	
Radiation physics	1.5 (hours)
Radiation measurements	1.5
Chemistry of radioisotopes	1.5
Radiological protection ordinance	1
Principles of radiation on man	1
Effects of radiation on man	1
Safehandling of radioisotopes	1.5
VTR for safehandling of radiation and radioisotopes	2
Practices (one day)	
Method of dilution radioactive solution	
Measurements of surface contamination and decontamination	
Measurements of gamma rays and beta rays	

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Table 2. Distribution of trainees for safehandling of radiation and radioisotopes in 1987.

Department	Staff	Student	Total
<b>Faculties</b>			
Medicine	47	73	120
Dentistry	0	6	6
Pharmacy	2	26	28
Science	2	63	65
Engineering	4	34	38
Agriculture	6	51	57
Research Institute	6	52	58
<b>Total</b>	<b>67</b>	<b>305</b>	<b>372</b>

Table 3. Contents of lectures for safehandling of X-ray machines and electron microscopes in 1987.

Safehandling of X-ray machines	1.5 (hours)
Radiological protection ordinance	1
VTR for safehandling of radiation and radioisotopes	2

Table 4. Distribution of trainees for safehandling of X-ray machines and electron microscopes in 1987.

Departments	Staff	Student	Total
<b>Faculties</b>			
Medicine	2	12	14
Science	0	22	22
Engineering	9	62	71
Research Institutes	22	71	93
<b>Total</b>	<b>33</b>	<b>167</b>	<b>200</b>