

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

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## V. 5. 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 1977 in Tohoku University. The contents of lectures and practices are almost the same as last year as shown in Table 1. In 1992 the training was performed for 475 persons. The departments 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 safehandling of 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 1992.

<b>Lectures (two days)</b>	
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
<b>Practices (one day)</b>	
Treatment of unsealed radioactive solution	
Measurements of surface contamination and decontamination	
Measurements of gamma rays and beta rays	

Table 2. Distribution of trainees for safehandling of radiation and radioisotopes in 1992.

Department	Staff	Student	Total
<b>Faculties</b>			
Medicine	35	78	113
Dentistry	3	2	5
Pharmacy	0	37	37
Science	2	102	104
Engineering	8	49	57
Agriculture	5	77	82
College of General Education	2	0	2
Research Institute	17	58	75
<b>Total</b>	<b>72</b>	<b>403</b>	<b>475</b>

Table 3. Contents of lectures for safehandling of X-ray machines and electron microscopes in 1992.

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 1992.

Department	Staff	Student	Total
<b>Faculties</b>			
Medicine	2	5	7
Science	0	30	30
Engineering	3	55	58
Research Institutes	12	119	131
<b>Total</b>	<b>17</b>	<b>209</b>	<b>226</b>