

CENTER FOR RADIOISOTOPE FACILITIES

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The technical and supporting staff of the Center for Radioisotope Facilities (CRF) maintain three controlled areas according to Japanese law. The CRF is responsible for monitoring the purchase of radioisotopes from JRA (Japan Radioisotope Association) and the transfer of radioisotope wastes to JRA.

Matsuda, Iinuma, Ito, and Kaneuji maintain CFBI (Common Facilities Building I)-branch and LGER (Laboratory of Gene Expression and Regulation)-branch at the Myodaiji-Area, and Ogawa, Sawada and Kamiya work at the Yamate-Area.

The number of registrants and the number of users from January 2006 to December 2006 are presented in Table 1.

Users counted by the monitoring system going in and out of the controlled areas numbered 4,396 persons during this period. The percentages and numbers for each area are shown in Figure 1 and Table 2. The annual changes of registrants and the number of totals per year are shown in Figure 2.

The balance of radioisotopes received at the CRF is shown in Table 3. No ^{125}I was used at Myodaiji-Area.

In March 2006, the two systems for radiation safety at Myodaiji-Area - the monitoring system for users going in and out of the controlled areas, and the main control computer of the radiation monitoring system - were renewed. Both systems are shown in figure 3.

Table 1. Numbers of registrants and users at Myodaiji-Area and Yamate-Area in the 2006

	Myodaiji-Area	Yamate-Area
registrants	143	119
users	64	50

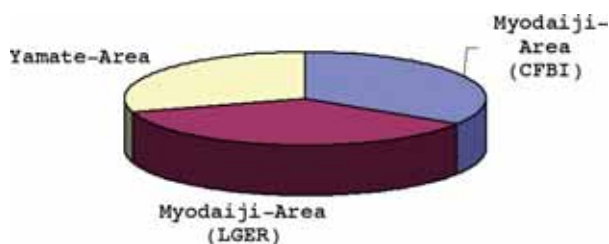


Figure 1. Percentage of users going in and out of each controlled area in 2006

Table 2. Users and visitors who entered each controlled area in 2006

	Myodaiji-Area CFBI-branch	Myodaiji-Area LGER-branch	Yamate-Area	total
users	1288	1462	1149	3899
visitors	208	128	161	497
total	1496	1590	1310	4396

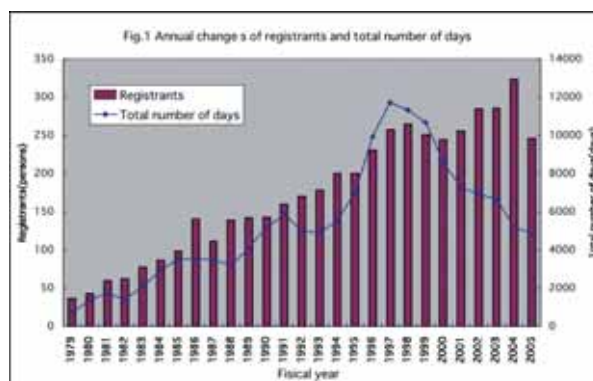


Figure 2. Annual changes of registrants and number of totals per fiscal year

Table 3. Balance of radioisotopes received and used (MBq) at each controlled area

	Myodaiji-Area CFBI-branch	Myodaiji-Area LGER-branch	Yamate-Area	total
^{125}I Received	0.000	0.000	1110.000	1110.000
^{125}I Used	0.000	0.000	1110.000	1110.000
^{45}Ca Received	37000.000	0.000	-	37000.000
^{45}Ca Used	18500.000	0.000	-	18500.000
^{35}S Received	18500.000	0.000	37000.000	55500.000
^{35}S Used	18500.000	0.000	16128.636	34628.636
^{32}P Received	244250.000	915750.000	860250.000	2020250.000
^{32}P Used	189250.000	801420.000	783660.000	1774330.000
^{14}C Received	18500.000	0.000	0.000	18500.000
^{14}C Used	10605.680	0.000	0.000	10605.680
^3H Received	268250.000	0.000	1110000.000	1378250.000
^3H Used	137614.840	0.000	862110.000	999724.840



Figure 3. Photographs show the renewal systems at Myodaiji area.

Left : The monitoring system for users going in and out of the radiation controlled area (upper : control computers; lower : an ID card and a card reader)

Right : The main control computer of the radiation monitoring system