CENTER FOR RADIOISOTOPE FACILITIES

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The technical and support staff of the Center for Radioisotope Facilities (CRF) maintain controlled areas in compliance with the law. The CRF is responsible for monitoring the purchase of radioisotopes from the Japan Radioisotope Association (JRIA) and the transfer of radioisotope waste to that organization.

In recent years, Ms. Matsuda, Ms. Iinuma and Ms. Hayashi maintained the Myodaiji area, Ms. Sawada worked in the Yamate area, and Dr. Kodama worked in both areas.

The following are notable activities that CRF conducted in 2018:

1. Renewal of radiation worker registration forms and health check interview sheets

In April 2018, all radiation worker registration forms and health check interview sheets were renewed. The main changes added were the ability to complete the forms in English, and a reduction in the number of forms.

2. Installation of an air-conditioner in the radioisotope storage room in the Yamate area

Before installing the additional air-conditioner, we were running the air-conditioner across the entirety of the radiation controlled area to prevent temperature rises in the radioisotope storage room during summer. Therefore, we installed the air-conditioner in the radioisotope storage room, stopped using the air-conditioner in the radiation controlled area when it is unnecessary, and thus were able to reduce costs by doing so. The dew condensation water generated from the air conditioner is drained to the sink in the radioisotope storage room as it may be contaminated with radioisotopes. (Figure 1A, 1B)

Figure 1. The CRF's notable activities in 2018:
A: the indoor air-conditioner unit
B: the outdoor air-conditioner unit (Displayed on the right in photo B)

The number of registrants and the number of users at our facility from January 2018 to December 2018 are shown in Table 1. Users and visitors counted by the access control system in the controlled areas numbered 1,123 during this period. The numbers for each area are shown in Table 2. The annual changes concerning registrants and the number of totals per fiscal year are shown in Figure 2. The balance of radioisotopes received and used at the CRF is shown in Table 3. The total of radioisotopes received has decreased further to a greater degree when compared to last year, and the number of radioisotopes received only amounted to 1 at the Myodaiji-area and 7 at the Yamate area. The figures for training courses on radioisotope handling are provided in Table 4.

	Myodaiji Area	Yamate Area
Registrants	46	34
Users	16	16

Table 1. Numbers of registrants and users at the Myodaiji and Yamate areas in 2018.

	Myodaiji Area	Yamate Area	Total
Users	457	407	864
Visitors	104	155	259
Total	561	562	1,123

Table 2. Users and visitors who entered each controlled area in 2018.

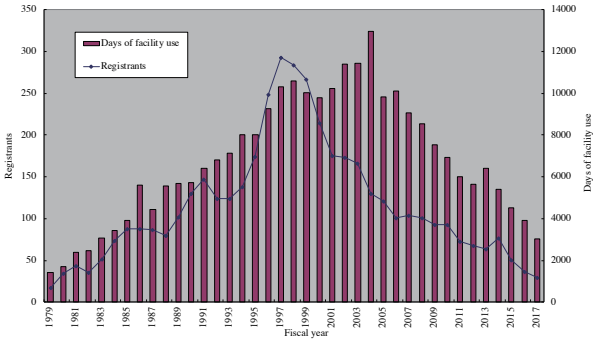

Figure 2. Annual changes of registrants and days of facility use per fiscal year.

		Myodaiji Area	Yamate Area	Total
^{125}I	Received	0	275	275
^{125}I	Used	0	165	165
^{35}S	Received	0	0	0
^{35}S	Used	0	0	0
^{32}P	Received	9,250	9,250	18,500
^{32}P	Used	8,140	0	8,140
^{14}C	Received	0	0	0
^{14}C	Used	0	0	0
^{3}H	Received	0	2,775,000	2,775,000
^{3}H	Used	0	1,850,037	1,850,037

Table 3. Balance of radioisotopes received and used (kBq) at each controlled area in 2018.

training course	place	numbers of participant
Introductory course for beginners	Myodaiji	0
Introductory course for beginners	Yamate	0
Introductory course for experts	Myodaiji	4
Introductory course for experts	Yamate	0
Users training course	Myodaiji	42
Users training course	Yamate	30

Table 4. Training courses for radiation workers in 2018.