

## CENTER FOR RADIOISOTOPE FACILITIES



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

Matsuda, Iinuma, Ito, and Kamiya maintained the Myodaiji-Area. Ogawa and Sawada worked in the Yamate-Area.

The number of registrants and the number of users from January 2011 to December 2011 are presented in Table 1.

Users counted by the monitoring system going in and out of the controlled areas numbered 3,760 persons during this period. The percentages and numbers for each area are shown in Table 2. The annual changes of registrants and the number of totals per year are shown in Figure 1.

The balance of radioisotopes received at the CRF is shown in Table 3.

The followings are CRF's special activities in 2011.

1. A special lecture was performed covering NBC (Nuclear, Biological, Chemical) hazards and the Great East Japan Earthquake disaster rescue operations by invited speakers (Okazaki fire station officers) as the 2011 training lesson for radiation workers. (See Figure 2, photo A, B.)
2. At the Myodaiji-area, the exhaust fan had deteriorated and has subsequently been exchanged. The repair work was done in accordance with Japanese law. (See Figure 2, photo C, D.)

|             | Myodaiji-Area | Yamate-Area |
|-------------|---------------|-------------|
| registrants | 107           | 71          |
| users       | 43            | 30          |

Table 1. Numbers of registrants and users at Myodaiji-Area and Yamate-Area in 2011

|          | Myodaiji-Area | Yamate-Area | total |
|----------|---------------|-------------|-------|
| users    | 1965          | 671         | 2636  |
| visitors | 198           | 129         | 327   |
| total    | 2163          | 800         | 2963  |

Table 2. Users and visitors who entered each controlled area in 2011

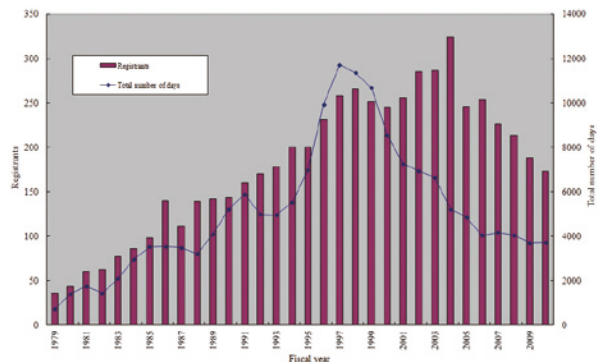


Figure 1. Annual changes of registrants and number of totals per fiscal year

|                           | Myodaiji-Area | Yamate-Area | total   |
|---------------------------|---------------|-------------|---------|
| <sup>125</sup> I Received | 296085        | 7770        | 303855  |
| <sup>125</sup> I Used     | 166585        | 7770        | 174355  |
| <sup>45</sup> Ca Received | 0             | -           | 0       |
| <sup>45</sup> Ca Used     | 0             | -           | 0       |
| <sup>35</sup> S Received  | 259000        | 0           | 259000  |
| <sup>35</sup> S Used      | 185000        | 16000       | 201000  |
| <sup>32</sup> P Received  | 499750        | 70000       | 569750  |
| <sup>32</sup> P Used      | 394210        | 48800       | 443010  |
| <sup>14</sup> C Received  | 225700        | 0           | 225700  |
| <sup>14</sup> C Used      | 257671        | 0           | 257671  |
| <sup>3</sup> H Received   | 1697779       | 2775000     | 4472779 |
| <sup>3</sup> H Used       | 144297        | 2949085     | 3093382 |
| <sup>22</sup> Na Received | 0             | -           | 0       |
| <sup>22</sup> Na Used     | 0             | -           | 0       |

Table 3. Balance of radioisotopes received and used (kBq) at each controlled area in 2011

| training course                          | place    | numbers of participant |
|--|----------|------------------------|
| beginners training course for beginners* | Myodaiji | 4                      |
| beginners training course for beginners* | Yamate   | 4                      |
| beginners training course for experts    | Myodaiji | 10                     |
| beginners training course for experts    | Yamate   | 4                      |
| Users training course*                   | Myodaiji | 77                     |
| Users training course                    | Yamate   | 54                     |

Table 4. Training course for radiation workers in 2011



Figure 2. The CRF's special activities in 2011

A, B: Okazaki fire station officers lecture about NBC hazards. Photo A shows a lecture by the head of the Okazaki fire station. Photo B shows a participant wearing NBC hazard protective wear.

C, D: The exhaust fan was exchanged. Photo C shows the new fan (left) and the old fan (right). Photo D shows CRF's staff checking radiation contamination inside of the fan.