RIKEN open day 2022

T. Ikeda,*1 Y. Watanabe,*1 N. Miyauchi,*1 Y. Hayashi,*1 and T. Abe*1

RIKEN open day, on which its research activities are showcased to the public, was held in the RIKEN Wako campus on Saturday, April 23, 2022 in a hybrid style. Employing an advance reservation system, it was the first attempt to invite visitors to the campus under the spread of COVID-19. The number of the visitors was limited to 300 for each morning and afternoon slot. The number of applications was 766 and 795, respectively, for the two slots and those of the visitors on site was 208 and 198, respectively. All visitors were supposed to spend their time in the Administrative Headquarters (AH) bldg. in the campus, except when taking group tours to a few selected research centers.

The contents of the activities from Nishina Center were (1) group tours for Cyclopedia and RIBF (Fig. 1), (2) exhibition of a large photo panel of the Superconducting Ring Cyclotron (SRC) at the AH bldg. as well as a poster presentation (Fig. 2), and (3) an online laboratory tour with a navigator to the Nishina accelerators using RIBF-VR360 (Fig. 3(a)).¹⁾ Online movies made before 2022 were also available. These contents included collaborations with the Center for Nuclear Study (CNS) at University of Tokyo and the Wako Nuclear Science Center (WNSC), IPNS, KEK. A tin-badge event was held at the AH bldg., in which visitors could make badges by themselves. The badges related to the Nishina Center, as shown in Fig. 3(b), were well-received by the participants. The details of the various activities are in Figs. 1 and 2.



Fig. 1. Group tour to the Nishina Center RIBF bldg., including an explanation session at Cyclopedia followed by visits to SRC and BigRIPS.

For COVID-19 infection control, the group tours to the Nishina RIBF bldg. were designed carefully. The



Fig. 2. A large photo panel of SRC displayed as a photogenic place at the Administrative Headquarters bldg.



Fig. 3. (a-1) Online tour using RIBF-VR360 with a navigator for interactive communication. (a-2) the title page (b) three badges marked with yellow circles were designed by Nishina Center. The flowering plant in (i) is the "Nishina Otome" cherry blossom produced in this center. The symbol "Nh" in (ii) and (iii) stands for the element Nihonium, that was synthesized in the center for the first time in the world.

tours titled "Everything you want to know about state-of-the-art accelerator is right here!" were held twice in the morning and also twice in the afternoon. The tour attendance was limited to 12 visitors, who were escorted by RIKEN staff members between the AH bldg. and the RIBF bldg., so that each group tour finished within an hour. The participants were welcomed at Cyclopedia for an explanation by the Nishina staff instructors, and then enjoyed the views of SRC and BigRIPS from the MB2 floor with guidance by the other instructors. At the end of the tour, they got RIBF souvenirs and left with the RIKEN staff members.

In the AH bldg., a booth with the title "A huge ac-

^{*1} RIKEN Nishina Center

celerator facility where elements are freely created like magic" was opened, where a 2.5-m high photo panel of SRC (Fig. 2), large enough for visitors to take photos as if they were at the SRC site, was on display. Nearby, several posters introducing the entire Nishina Center were displayed, where two Nishina staff members were assigned to provide explanation.

The online laboratory tour titled "RI Beam Factory: A reclining dragon-like huge underground accelerator complex" using the RIBF-VR360 was carried out through a zoom meeting system, where ion sources, RILAC, RRC, fRC, IRC, and SRC were introduced by a navigator (Fig. 3(a-1)). The virtual tour achieved 111 net views, which was the highest number among the four virtual tours, including the other centers.

The RIKEN open day 2023 is scheduled on October 14, 2023, which is the first trial of the autumn season.

Reference

1) RIBF-VR360 (in Japanese): https://vr.riken.jp/ribf/