RIKEN open day 2021

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RIKEN open day was held on April 17, 2021. Because of the COVID-19 pandemic, open day 2020 was canceled. In 2021, the open day was held but limited to online only. Figure 1 shows framework of contents. It was operated by using Zoom video conference software.[1] A breakout room was assigned to a virtual laboratory which could relay an experimental room in RIKEN to the open day visitors. Nishina Center had two virtual laboratory rooms. One offers a virtual accelerator tour. The other provides an introduction of RIBF research and collaborated with the Center for Nuclear Study at the university of Tokyo (CNS) and the KEK Wako Nuclear Science Center.

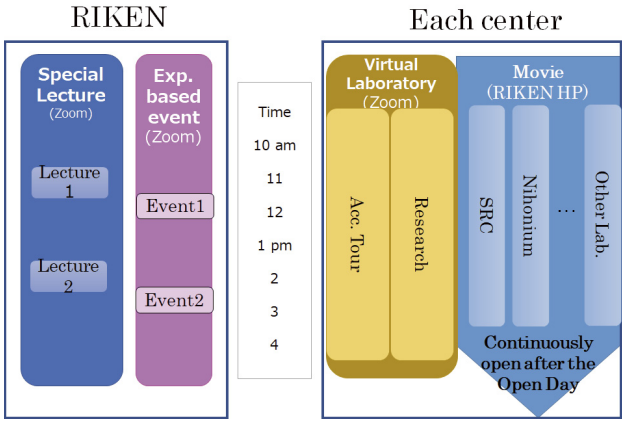

Fig. 1. Contents for the RIKEN open day.

For the virtual accelerator tour, RIBF movie taken along to the accelerator and downstream beamline was shared to visitors. Figure 2 shows the movie shared for the RIBF tour. SRC, BigRIPS, and SAMURAI were contained in the movie. Researchers described about RIBF accelerators and experimental instruments with the RIBF movie. Six time of tours were performed.

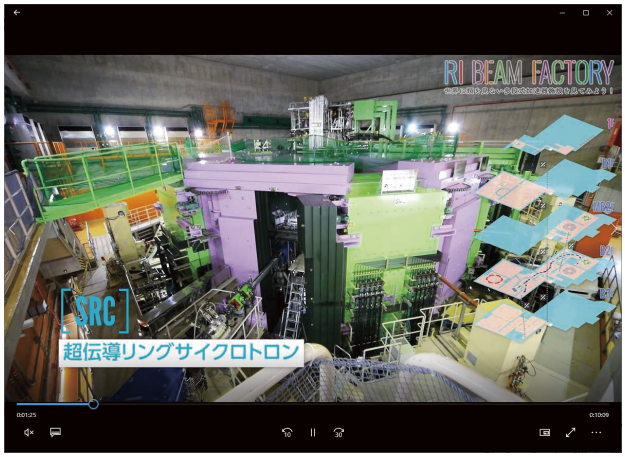

Fig. 2. Movie for the RIBF virtual tour.

To present an introduction to RIBF research, experiments and researches about ZDS with HIKARI detector, SAMURAI, SHARAQ by CNS, KISS by KEK, and nuclear chemistry were introduced. Six different exhibition tours were performed. Figure 3 shows a screen shot of the introduction to the nuclear chemistry presentation.

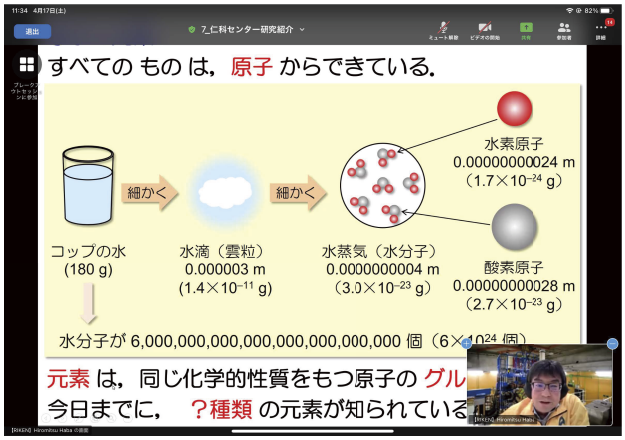

Fig. 3. Screen shot of an introduction of research of virtual laboratory.

Movies for RIKEN laboratories were also exhibited on the RIKEN web page. Nishina Center released two, five-minute movies. One was introduction to SRC and the other was about the discovery of the 113th element, Nihonium. These videos were shared for a month after the open day.

RIKEN organized a special lecture and an experience-based event. Dr. Tomoko Abe gave a special lecture, “Creating novel plants of your dreams using heavy-ion beams.”

She introduced studies about various biological effects of fast heavy-ions. Ion beams have been used to create over 35 new varieties in RIKEN in the last two decades and beneficial mutants have been identified in various species.

Nishina Center also presented at the experience-based event. During a hands-on event for children, participants made their own handmade spectrometers and used them during the interactive online class to learn in a fun way that light is composed of various colors, like a rainbow. Spectroscope kits were distributed to registered participants in advance.

About 800 participants visited RIKEN open day. The approximate numbers of visitors in the breakout rooms for the virtual laboratory of Nishina Center were 200. Twenty four staff from Nishina Center participated in the open day.

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Reference

1) https://zoom.us .