

## Research Facility Development Division Accelerator Group Infrastructure Management Team

### 1. Abstract

Our team is in charge of the design, operation, and maintenance of the large-scale infrastructure for the entire RI Beam Factory (RIBF), including cooling water, air conditioning, and electrical equipment, as well as the research and development of their advanced management. In order to operate the RIBF efficiently, it is very important to ensure the sound operation of these infrastructures that lead to the stable functioning of various devices. Another important mission is to coordinate the scheduling of major construction and repair work related to the RIBF so that beamtime runs smoothly.

The recent issue is the aging of infrastructure equipment. In line with these measures, we are making modifications that contribute to the stability of accelerator equipment and energy saving. In addition, infrastructure equipment has many sensors for management, and a huge amount of measurement data from these sensors is archived. We are planning to use this data to build a more advanced management system.

### 2. Major Research Subjects

- (1) Operation, maintenance and monitoring of infrastructure of RI Beam Factory.
- (2) Development of advanced management of infrastructure that contributes to accelerator and beam stability.
- (3) Coordination of large construction work and modification related to RI Beam Factory.

### Members

#### Team Leader

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#### Deputy Team Leader

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### List of Publications & Presentations

#### Publications

##### [Proceedings]

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坂本成彦, 藤巻正樹, 池沢英二, 今尾浩士, 上垣外修一, 長友傑, 西隆博, 大関和貴, 須田健嗣, 内山暁仁, 渡邊環, 渡邊裕, 山田一成, 「理研超伝導線型加速器 SRILAC のコミッショニング」, “Commissioning of superconducting-linac booster for RIKEN heavy-ion linac,” 第 17 回日本加速器学会年会プロシーディングス, web 公開のみ, 2020 年 10 月 21 日. [https://www.pasj.jp/web\\_publish/pasj2020/proceedings/PDF/WESP/WESP03.pdf](https://www.pasj.jp/web_publish/pasj2020/proceedings/PDF/WESP/WESP03.pdf).

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