Research Facility Development Division
Accelerator Group
Infrastructure Management Team

1. Abstract

Our team oversees 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

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List of Publications

Publications

[Original Paper]

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[Proceedings]

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柴田順翔（住重加速器サービス）, 大関和貴（理化学研究所仁科センター）, 福澤聖児, 濱仲誠, 石川盛, 小林清志, 小山亮, 茂木龍一, 仲村武志, 西田稔, 西村誠, 月居憲俊, 矢冨一慎（住重加速器サービス）, 足立泰平, 藤巻正樹, 福西暢尚, 長谷部裕雄, 日暮祥英, 今尾浩士, 上垣外修一, 木寺正憲, 込山美咲, 熊谷桂子, 眞家武士, 三宅泰斗, 長友傑, 中川孝秀, 西隆博, 大西純一, 奥野広樹, 坂本成彦, サキラヤングリニスメイ, 須田健嗣, 内山暁仁, 渡部秀, 渡邉環, 渡邉裕, 山田一成（理化学研究所仁科センター）, 鎌倉恵太, 小高康照（東京大学原子核科学研究センター）, 「理研 AVF サイクロトロン運転の現状報告」, "Status report on the operation of RIKEN AVF cyclotron," Proceedings of the 21st Annual Meeting of Particle Accelerator Society of Japan, Yamagata, Japan, July 31–August 3, 2024, pp. 1112–1115.

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