

Accelerator Applications Research Division
Nuclear Chemistry Group
Industrial Application Research Team

1. Abstract

Industrial application research team handles non-academic activities at RIBF corresponding mainly to industries.

2. Major Research Subjects

Support of industrial utilization of the RIBF accelerator beam.

3. Summary of Research Activity

RNC promote facility-sharing program “Promotion of applications of high-energy heavy ions and RI beams.” In this program, RNC opens a part of the RIBF facility, which includes the AVF cyclotron, RIKEN Ring Cyclotron and experimental instruments, to non-academic proposals from users including private companies. The proposals are reviewed by a program advisory committee, industrial PAC (IN-PAC). The proposals which have been approved by the IN-PAC are allocated with beam times and the users pay RIKEN the beam time fee. The intellectual properties obtained by the use of RIBF belong to the users. In order to encourage the use of RIBF by those who are not familiar with utilization of ion beams, the first two beam times of each proposal can be assigned to trial uses which are free of beam time fee.

In July 2023, the IN-PAC met and approved fee-based proposals from private companies; one proposal from new company and six proposals from continuously using companies. In January 2024, the IN-PAC met and approved two proposals from new companies and seven proposals from continuous users. In 2023, nine companies executed 33 fee-based beamtimes, 17 of which used a Kr beam, 9 utilized an Ar beam, 6 utilized a Xe beam and one utilized a C beam with a total beam times of 235, 124, 67, and 7 hours, respectively.

Members**Team Leader**

Atsushi YOSHIDA

Contract Researcher

Mizuki NISHIMURA

Special Temporary Technical Scientist

Kowashi WATANABE

Research Consultant

Tadashi KAMBARA

List of Presentation**Presentation****[Domestic Conference/Workshop]**

吉田敦, 「理研・重イオン加速器による, 宇宙用 部品の高 LET シングルイベント試験」, 第 67 回宇宙科学技術連合講演会, 富山市 (富山国際会議場), 2023 年 10 月 17-21 日.