Nuclear Science and Transmutation Research Division High-Intensity Accelerator R&D Group High-Gradient Cavity R&D Team

1. Abstract

We develop new components for accelerators dedicated for low-beta-ions with very high intensity. Specifically, we are designing and constructing a cryomodule for superconducting linac efficient for acceleration of low-beta-ions. In parallel, we try to optimize an rf acceleration system by making computer simulations for acceleration of very high intensity beams.

2. Major Research Subjects

- (1) Development of high-gradient cavites for low beta ions
- (2) Development of power saving cryomodules

3. Summary of Research Activity

• Development of highly efficient superconducting accelerator modules

Members

Team Leader

Naruhiko SAKAMOTO

Research/Technical Scientists

Kazunari YAMADA Yutaka WATANABE Kazutaka OZEKI

Research & Development Scientist

Kenji SUDA