

Accelerator Applications Research Division  
Nuclear Transmutation Technology Group  
High-Gradient Cavity R&D Team

### 1. Abstract

Superconducting linacs are suitable for high-power beam facilities, such as spallation neutron sources. The mission of this team is to develop a highly efficient superconducting linac with a high acceleration voltage, capable of handling high beam intensity and ensuring high availability, drawing from the operational experiences of SRILAC.

### 2. Major Research Subjects

- (1) Development of high-gradient cavities for low beta ions
- (2) Development of power saving cryomodules
- (3) Development of 1 MW fundamental power coupler for superconducting cavities
- (4) Reliable operation

### 3. Summary of Research Activity

Development of highly efficient superconducting accelerator modules

### Members

#### Team Leader

Naruhiko SAKAMOTO

#### Senior Technical Scientists

Yutaka WATANABE

Kazutaka OZEKI

#### Research & Development Scientist

Kenji SUDA