

## HIGH AVERAGE CURRENT SRF CAVITIES

T. Furuya, KEK, Ibaraki

### Abstract

Higher-order-mode (HOM) free superconducting (SC) single cell cavities were developed for the rf system of high luminosity storage ring colliders. Because of the successful results of these cavities under ampere-class beams, the components and technology of the SC cavities have immediately been applied to the middle sized storage rings upgrading the beam intensity by using a few SC cavities. Beside the storage ring rf, a SC based high intensity proton linac was commissioned for neutron physics. Recently, the feasibility study of energy recovery linacs has been carried at various laboratories aiming for the 4th generation light source. Status of these developments will be described.

**CONTRIBUTION NOT  
RECEIVED**