

**MUSES Project, T. KATAYAMA, INS/RIKEN and MUSES group** - The Radio Isotope Beam Factory (RIBF) is planned at RIKEN as a near term future project. This factory is composed of accelerator complex of Super conducting Ring Cyclotron (SRC) for the heavy ion acceleration up to 400 MeV/u, and MUlti Use Experimental Storage rings (MUSES) for the various experiments. Muses is a chain of accelerators, namely, Accumulator Cooler Ring (ACR), Booster Synchrotron Ring (BSR) and Double Storage Rings (DSR). The ACR is used exclusively for the accumulation and cooling of RI beams where the RF stacking with the combination of multi-turn injection will be employed as well as the stochastic/electron coolers. The BSR is for the acceleration of RI beams from the ACR up to, typically, 1 GeV/u for U 92+ beams. The BSR will also be used for the acceleration of electron beams, injected from 300 MeV linac, up to 2.5 GeV. The DSR is a collider with two rings, each will be filled with RI beams and electron beams from BSR. At the DSR, high current ~500 mA electron beams will head-on collide with RI beams to perform the experiment for the study of charge/current distribution in proton/neutron rich nuclei. R&D of this project is officially approved from the fiscal year 1995 and is expected to start the construction from 1998. In the present paper the concept of MUSES will be described as well as the key issues such as expected luminosity, beam-beam effects, cooling stacking and so on.