The Rare Isotope Science Project (RISP) of Institute for Basic Science (IBS) is to construct a heavy ion accelerator, RAON, for the researches in nuclear physics, nuclear astrophysics, material science, bio and medical application with rare isotope beams in Korea. RAON consists of two isotope beam facilities as shown in Figure 1. The In-flight Fragmentation (IF) system is driven by a Superconducting (SC) linac with 400 kW beam power on the target with heavy ion beam such as Uranium of 200 MeV/u. The Isotope Separation On-Line (ISOL) system is driven by a proton cyclotron with 70 kW beam power on the target. ISOL system is followed by a SC linac for the re-acceleration of high purity rare isotope beams. RAON has an additional feature that the re-accelerated RI beam from ISOL system can be injected into the main driver linac for further acceleration to higher energy for use with IF system. This feature would widen the variety of rare isotope beams. Efforts for the technical design of accelerator and experimental apparatus are in rapid progress. The status and prospects of the project is reported.

Figure 1. Conceptual layout of RAON