

Some Recent Results Using ISOL Radioactive Ion Beams in the United States

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As is the case throughout the world nuclear physics community, interest in the United States in the development and use of ISOL-type radioactive ion beams has grown rapidly during the past decade. In particular, the three U.S. national laboratories with low-energy accelerator facilities, ANL, LBNL, and ORNL, now have active research programs using RIBs. Furthermore, all three labs are heavily involved in research and development relevant to the next-generation RIB facility in the U.S., the RIA project. At ORNL, the HRIBF has been completed and is now a fully operational ISOL facility. The initial research program at the HRIBF has utilized beams of $^{17,18}\text{F}$ for several astrophysics experiments as well as for experiments on nuclear reactions. The HRIBF is currently developing neutron-rich beams and should have a research program under way with those beams by the summer of 2000. A short overview will be provided of the status of RIB beams at the three national laboratories, and emphasis will be placed on a few recent results from the ISOL beams now available.

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