Rate Measurements of Radioactive Neutron Rich Beams Produced via Proton Induced Fission at HRIBF

M. N. Tantawy,[1] J. C. Batchelder, H. K. Carter, G. Spejewski,[2] R. Welton, D. E. Mueller, R. L. Auble, J. R. Beene, D. Stracener,[3] D. J. Hartley, C. R. Bingham[1] K. Tsukada,[4]

[1] *University of Tennessee,Knoxville, TN 37996,USA*

[2] *Oak Ridge Institute for Science and Education, Oak Ridge, TN 37831, USA*

[3] *Physics Division, Oak Ridge National Laboratory, Oak Ridge, TN 37831, USA*

[4] *Japan Atomic Energy Research Institute,Japan*

A systematic study of the rates of radioactive nuclei produced via fragmentation was performed at the Holifield Radioactive Ion Beam Facility (HRIBF). A Uranium Carbide target was bombarded with a 20 MeV proton beam with an intensity of 2 μA. Fission fragments were produced and separated by the ISOL technique, and then implanted on a moving tape and transported to a Ge detector. Rates of individual species from A=78 to 145 will be presented.