

The Purification and Energy Determination of Secondary Radioactive Nuclear Beams

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A secondary beam line (GIRAFFE) at the Beijing tandem accelerator lab was constructed for yielding low energy secondary beams [1]. The current progress is upgraded with the installation of a Wien Filter and a set of time of flight system. The available secondary beams are extend to new species and the purity is substantially improved [Fig.1]. A beam monitoring TOF system makes use of plastic scintillator coupled with fast photomultiplier tube, enable the energy determination of secondary beams prior to the secondary reaction target. The impact to the ongoing research programs – the thick-target proton resonance reaction measurement in particular is shortly discussed.

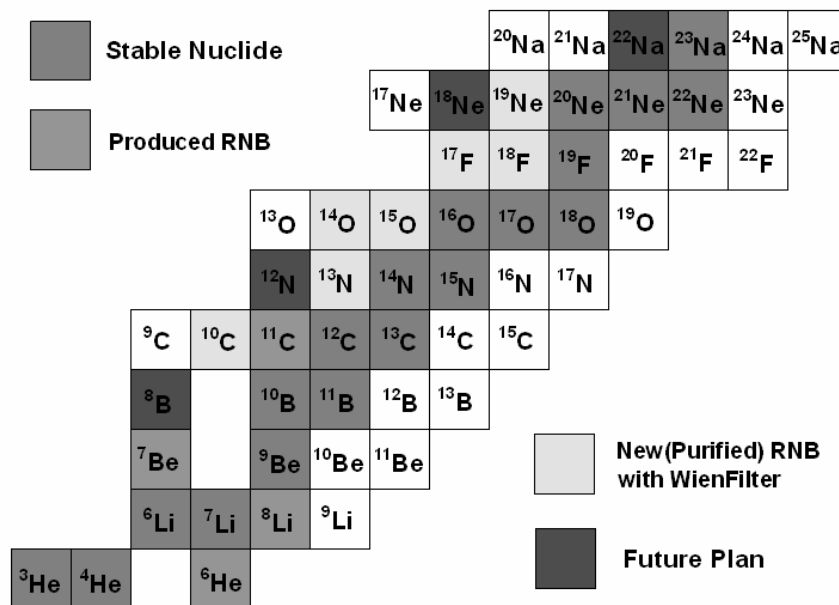


Figure 1: Summary of RNB at GIRAFFE

[1] W. Liu, X. Bai, S. Zhou, et al., Nucl. Phys. A 616, 131c (1997).