

²¹⁷Bi

Pfützner et al. observed ²¹⁷Bi as described in the 1998 publication “New isotopes and isomers produced by the fragmentation of ²³⁸U at 1000 MeV/nucleon” (1998Pf02). A 1 GeV/nucleon ²³⁸U beam from the SIS facility at GSI bombarded a beryllium target and projectile fragments were identified with the fragment separator FRS in the standard achromatic mode. The observation of ²¹⁷Bi was not considered a discovery quoting a paper by Van Duppen et al.: “A complementary technique is the combination of high-energy proton-induced spallation of thick heavy targets with on-line isotope separation (ISOL), with which the isotopes ²¹⁵Pb and ²¹⁷Bi were recently observed (1998Va13).” However, Van Duppen et al. did not actually observe ²¹⁷Bi stating: “In conclusion, we have presented a new method that allows detailed decay-spectroscopy studies of the neutron-rich ‘east of ²⁰⁸Pb’ using the pulsed release from the ISOLDE targets... It has been successfully applied in a recent experiment where two new isotopes (²¹⁵Pb and ²¹⁷Bi) were identified ...” and referring to “K. Rykaczewski et al., to be published.” This does not constitute the discovery of ²¹⁷Bi, thus the credit is given to Pfützner et al. because ²¹⁷Bi is cleanly identified in the mass-to-charge spectra.

Adapted from reference (2013Fr04)

- 1998Pf02 M. Pfützner, P. Armbruster, T. Baumann, J. Benlliure *et al.*, Phys. Lett. B **444**, 32 (1998).
1998Va13 P. Van Duppen and the ISOLDE Collaboration, Nucl. Instrum. Methods Phys. Res. B **134**, 267 (1998).
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