

⁸⁹Tc

The discovery of ⁸⁹Tc was published in 1991 by Heiguchi et al. in “Half-Lives and Q_{β} measurements for New Nuclei of ⁸⁹Tc and ^{89m}Tc” (1991He04). A 95 MeV ³²S beam from the Kyushu University Tandem Accelerator bombarded a nickel target and ⁸⁹Tc was produced in the fusion evaporation reaction ⁶⁰Ni(³²S,p2n). The isotope was identified by β - γ coincidence measurements. Further confirmation came from the reaction ⁵⁸Ni(³⁵Cl,2p2n) measured at University Tsukuba tandem-postaccelerator system. “The half-lives of ⁸⁹Tc and ^{89m}Tc were measured to be 12.8 ± 0.9 s and 12.9 ± 0.8 s, respectively.”

Adapted from reference (2012Ny02)

1991He04 K. Heiguchi, T. Hosoda, T. Komatsubara, T. Nomura *et al.*, *Z. Phys. A* **338**, 7 (1991).

2012Ny02 A. Nystrom and M. Thoennessen, *At. Data Nucl. Data Tables* **98**, 95 (2012).

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