

## $^{125}\text{Cs}$

“Mass assignments by isotope separation” was published in 1954 by Michel and Templeton documenting the observation of  $^{125}\text{Cs}$  ([1954Mi16](#)). The Berkeley 184-inch cyclotron was used to bombard calcium iodide with 100 MeV  $\alpha$  particles. The resulting activities were measured with a G-M counter and a scintillation spectrograph following chemical separation. “A new isotope of cesium found by Mathur and Hyde of this laboratory, has been assigned to mass 125 and its half-life observed (from separated samples) to be  $45\pm 1$  minutes.” The experimental details were described in the paper by Mathur and Hyde ([1954Ma54](#)) mentioned in the quote. Mathur and Hyde submitted their paper less than a month after Michel and Templeton and give them credit for the measurement “A G-M decay curve of the mass-125 fraction isolated with the help of Michel and Templeton in the time-of-flight mass separator showed a straight line decay of  $45\pm 1$  minutes from an initial counting rate of 18 000 to less than 10 counts per minute.”

Adapted from reference ([2012Ma48](#))

- [1954Ma54](#) H. B. Mathur and E. K. Hyde, Phys. Rev. **95**, 708 (1954).  
[1954Mi16](#) M. C. Michel and D. H. Templeton, Phys. Rev. **93**, 1422 (1954).  
[2012Ma48](#) E. May and M. Thoennessen, At. Data Nucl. Data Tables **98**, 960 (2012).

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