

¹⁵⁹Dy

Butement described the observation of ¹⁵⁹Dy in “Radioactive ¹⁵⁹Dy” in 1951 ([1951Bu24](#)). A sample of dysprosium oxide was irradiated with neutrons from the Harwell pile. Decay curves and X-rays were measured following chemical separation. ¹⁵⁹Dy was also produced in the reaction ¹⁵⁹Tb(d,2n). “After waiting 60 days for complete decay of the ¹⁶⁶Dy, the decay of the long-lived activity was followed for 400 days, and showed a half-life of 132 days... It is concluded that the only long-lived product of neutron capture by dysprosium is ¹⁵⁹Dy.” Butement had mentioned the observation of a half-life >50 days of ¹⁵⁹Dy in an earlier paper ([1950Bu30](#)). Previously, a 140(10) d half-life was assigned to either ¹⁵⁷Dy or ¹⁵⁹Dy ([1949Ke22](#)).

Adapted from reference ([2013Fr10](#))

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