^{156}Eu

The first identification of ^{156}Eu was reported by Winsberg in 1951 in "Study of the fission chain 10h Sm$^{(156)}$ – 15.4d Eu$^{(156)}$" (1950Wi09) as part of the Manhattan Project as summarized in 1946 (1946Pl01). Uranyl nitrate was irradiated with neutrons at the Argonne Heavy-water Pile. Decay curves and absorption spectra were recorded following chemical separation. A mass assignment of 156 was made based on the smooth fission-yield−mass curve. "The fission yield of the ∼10h Sm, as determined from the decay curves (about 0.012 per cent), is approximately the same as the fission yield of the 15.4d Eu, thus establishing the following chain relationship: 10h Sm$^{(156)}$ →15.4d Eu$^{(156)}$ → stable Gd$^{(156)}$."

The assignment was changed from the original compilation (2013Ma01) which credited a 1947 paper by Inghram et al. (1947In07) with the discovery of ^{156}Eu. The 2016 update of the discovery project stated: "Many fission fragments were identified within the Manhattan Project and the detailed results were only published in 1951 as part of the National Nuclear Energy Series (1951CoZZ). However, a survey of the properties of the fission fragments had already been published in two simultaneous publications in the Journal of the American Chemical Society and Reviews of Modern Physics (1946Pl01) quoting the still classified papers. Thus researchers at the time were aware of the results and credit for the discovery should be given to the initially classified work if it was included in the survey paper" (2016Th03).

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