

¹³⁷Eu

“Very neutron deficient isotopes of samarium and europium” by Nowicki et al. reported the discovery of ¹³⁷Eu in 1982 ([1982No15](#)). An enriched ¹¹²Sn target was bombarded with a 190 MeV ³²S beam from the Dubna U-300 cyclotron. The reaction products were identified with the on-line BEMS-2 mass separator and by measuring X- and γ -rays. “Three isotopes: ¹³⁶Sm, ¹³⁷Eu, and ¹³⁸Eu (with half-lives 40 ± 5 s, 11 ± 2 s and 12 ± 2 s respectively) were observed for the first time” Previously reported half-lives of 1.5(4) s and 35(6) s ([1977Bo02](#)) were incorrect.

Adapted from reference ([2013Ma01](#))

- [1977Bo02](#) D. D. Bogdanov, A. V. Demyanov, V. A. Karnaukhov, L. A. Petrov *et al.*, Nucl. Phys. A **275**, 229 (1977).
[1982No15](#) M. Nowicki, D. D. Bogdanov, A. A. Demyanov, and Z. Stachura, Acta Phys. Pol. B **13**, 879 (1982).
[2013Ma01](#) E. May and M. Thoennessen, At. Data Nucl. Data Tables **99**, 1 (2013).

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