

## $^{240}\text{U}$

In 1953, the discovery of  $^{240}\text{U}$  was described in the article “The radiations of  $\text{U}^{240}$  and  $\text{Np}^{240}$ ” by Knight et al. from Los Alamos National Laboratory ([1953Kn23](#)). Uranium was irradiated with neutrons to form  $^{240}\text{U}$  by successive neutron capture. Following chemical separation, decay curves were measured with continuous-flow methane gas proportional counters and  $\beta$ - and  $\gamma$ -ray spectra were recorded with a magnetic lens spectrometer and a NaI(Tl) crystal, respectively. “These measurements yielded a  $\text{U}^{240}$  half-life of  $14.1\pm 0.2$  hours, and a  $\text{Np}^{240}$  half-life of  $7.3\pm 0.3$  minutes.” Knight et al. credited Hyde and Studier with the discovery of  $^{240}\text{U}$  quoting an unpublished report ([1948HyZZ](#)).

Adapted from reference ([2013Fr03](#))

- [1948HyZZ](#) E. K. Hyde and M. H. Studier, ANL-4182 (1948).  
[1953Kn23](#) J. D. Knight, M. E. Bunker, B. Warren, and J. W. Starner, Phys. Rev. **91**, 889 (1953).  
[2013Fr03](#) C. Fry and M. Thoennessen, At. Data Nucl. Data Tables **99**, 345 (2013).

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