

¹⁸F

DuBridgE et al. from the University of Rochester described the observation of ¹⁸F in 1937 in “Proton Induced Radioactivity in Oxygen” ([1937Du01](#)). Protons up to 3.8 MeV impinged on quartz and other solid oxide targets and the resulting activities were measured following chemical separation. “The second period of 107±4 min. is shown by chemical separation to be due also to an isotope of fluorine and is close to the 112 min. period found by Snell for ¹⁸F. This period must be attributed to the reaction $O^{18} + H^1 \rightarrow F^{18} + n^1$, $F^{18} \rightarrow O^{18} + e^+$.” The publication by Snell mentioned in the quote refers to a conference abstract ([1937Sn03](#)). Less than three months later, Pool, Cork, and Thornton reported a 108 min half-life for ¹⁸F observed by neutron irradiations of fluorine ([1937Po04](#)).

Adapted from reference ([2012Th01](#))

- [1937Du01](#) L. A. DuBridgE, S. W. Barnes, and J. H. Buck, Phys. Rev. **51**, 995 (1937).
[1937Po04](#) M. L. Pool, J. M. Cork, and R. L. Thornton, Phys. Rev. **52**, 239 (1937).
[1937Sn03](#) A. H. Snell, Phys. Rev. **51**, 143 (1937).
[2012Th01](#) M. Thoennessen, At. Data Nucl. Data Tables **98**, 43 (2012).

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