^{17}F

"An artificial radioelement from nitrogen" reported the first observation of ^{17}F by Wertenstein in 1934 at the Radiological Laboratory in Warsaw (1934We01). Alpha particles from a radon source bombarded nitrogen gas and the subsequent activity was measured with a Geiger-Müller counter. "Messrs. M. Danysz and M. Zyw, working in this laboratory, have bombarded diverse substances with α-rays from a thin-walled glass tube containing some 15 millicuries of radon, and immediately afterwards have tested their activity with a Geiger Müller counter... As the effect was apparent only in nitrogen, we conclude that it consists in a transmutation of nitrogen of the Joliot type, the probable reactions being: $_{7}N^{14} + _{2}\alpha^{4} = _{9}F^{17}$ + neutron, $_{9}F^{17} = _{8}O^{17}$ + positron." The measured half-life was 1.2 min. It is interesting to note that Wertenstein is the sole author although M. Danysz and M. Zyw performed the actual experiments.

Adapted from reference (2012Th01)

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Please cite this abstract as: "FRIB Nuclear Data Group, *Discovery of Nuclides Project*, Isotope Database, doi:10.11578/frib/2279152"