^{227}U

In 1952, ^{227}U was discovered by Meinke et al. and the results were reported in the paper "Further work on heavy collateral radioactive chains" (1952Me13). Thorium nitrate targets were irradiated with a ^{4}He beam from the Berkeley 184-inch cyclotron. ^{227}U was chemically separated and the energy of α-particles were measured with an alpha-particle pulse analyzer. "An additional short-lived chain collateral to the actinium (4n+3) natural radioactive family has also been partially identified. This chain decays as follows: $U^{227} \rightarrow Th^{223} \rightarrow Ra^{219} \rightarrow Em^{215} \rightarrow Po^{211} \rightarrow Pb^{207}$... The half-life of the U^{227} parent of the series was determined by following the decay of certain alpha-groups in the pulse analysis curves. Resolution of these decay curves into the U^{229}, U^{228}, and U^{227} components gave a half-life of 1.3±0.3 minutes for U^{227}."

Adapted from reference (2013Fr03)

1952Me13 W. W. Meinke, A. Ghiorso, and G. T. Seaborg, Phys. Rev. **85**, 429 (1952).

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