^{49}Sc

In 1940, Walke correctly identified ^{49}Sc in the paper "The Radioactive Isotopes of Scandium and Their Properties" (1940Wa01). ^{49}Sc was produced by bombarding calcium with 8 MeV deuterons from the 37-inch Berkeley cyclotron. ^{49}Ca was identified by measuring the decay and absorption with a Lauritsen quartz fiber electroscope. The assignment was confirmed in the β-decay of ^{49}Ca formed by neutron capture of ^{48}Ca and in the reaction ^{49}Ti(n,p)^{49}Sc. "The activity of half-life 53$\pm$3 min., now measured accurately as 57$\pm$2 min., produced by bombarding calcium with deuterons, which emits β-particles of energy 1.8$\pm$0.1 MeV previously assigned to Sc^{41} is shown to be probably due to Sc^{49}." The mentioned 53(3) m half-life was originally assigned to ^{44}Sc but changed to ^{41}Sc in a note added in proof (1937Wa04) which was still incorrect.

Adapted from reference (2011Me01)

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