

⁴³K

⁴³K was observed in 1949 by Overstreet et al. from the Agricultural Experiment Station at the University of California in the article “Evidence for a new isotope of potassium” (1949Ov01). Argon was bombarded with 40 MeV α particles and the subsequent activity was measured with a Lauritsen electroscope following chemical separation. “A study of the possible isotopes resulting from the bombardment of argon with alpha-particles favors the assignment of K⁴³ to the 22.4 hour potassium isotope. The reaction would be $A^{40}(\alpha,p)K^{43}$. This choice is further substantiated by the fact that the new isotope is a beta-emitter.”

Adapted from reference (2012Th10)

1949Ov01 R. Overstreet, L. Jacobson, and P. R. Stout, Phys. Rev. **75**, 231 (1949).
2012Th10 M. Thoennessen, At. Data Nucl. Data Tables **98**, 933 (2012).

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