

⁷³As

McCown et al. were the first to correctly identify ⁷³As in “Radioactive Arsenic Isotopes” at the Ohio State University in 1948 ([1948Mc31](#)). GeO₂ enriched in isotope 70 and regular GeO₂ were bombarded simultaneously with alpha-particles. The decay activity was measured with a Wulf Electrometer attached to a freon-filled ionization chamber. “Since stable ⁷⁰Ge was approximately four times as abundant in the enriched ⁷⁰Ge sample as in the ordinary Ge, it follows that this 76-day activity is produced from the stable ⁷⁰Ge isotope. Hence, the assignment of this activity, produced by the (α , p) reaction on ⁷⁰Ge, is made to ⁷³As.” ⁷³As decays by K-electron capture with a half life of 76(3) d. It should be mentioned that in 1939 Sagane had incorrectly attributed an 88(2) m half-life to ⁷³As ([1939Sa02](#)).

Adapted from reference ([2010Sh34](#))

- [1939Sa02](#) R. Sagane, Phys. Rev. **55**, 31 (1939).
[1948Mc31](#) D. A. McCown, L. L. Woodward, and M. L. Pool, Phys. Rev. **74**, 1315 (1948).
[2010Sh34](#) A. Shore, A. Fritsch, M. Heim, A. Schuh, and M. Thoennessen, At. Data Nucl. Data Tables **96**, 299 (2010).

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