

¹⁰⁷Cd

In 1946, ¹⁰⁷Cd was correctly identified in the article, “Isotopic Assignment of Cd and Ag Activities”, by Helmholtz (1946He04). A cadmium target enriched in ¹⁰⁶Cd was bombarded by slow neutrons produced in the Berkeley 60 inch cyclotron. The isotope was identified by absorption curves of the emitted electrons. “The 6.7 hour period was the predominant activity in the 106 sample after a few hours bombardment... The results then assign the 6.7 hr. Cd to Cd¹⁰⁷,...” A 6.7 h half-life had been observed earlier, but no mass assignment could be made (1939De01, 1940A101). Kirshnan and Gant assigned a 6.8 h half-life to either an isomeric state of ¹⁰⁸Cd or ¹¹⁰Cd or to radioactive ¹⁰⁷Cd or ¹⁰⁹Cd (1939Kr12). Several other measurements were performed which could not make a unique mass assignment and referred to the 6.7 h activity as either ¹⁰⁷Cd or ¹⁰⁹Cd (1945Br07, 1945Br06, 1946Br07).

Adapted from reference (2010Am04)

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