

¹⁴⁴Pm

“Promethium isotopes” was published in 1952 by Kistiakowsky documenting the observation of ¹⁴⁴Pm ([1952Ki25](#)). Neodymium oxide enriched in ¹⁴³Nd and ¹⁴⁴Nd were bombarded with 8.9 MeV protons from the Berkeley 60-inch cyclotron. Gamma- and beta-ray spectra were measured following chemical separation. “Bombardments of (Nd¹⁴³)₂O₃ and (Nd¹⁴⁴)₂O₃ separately with 8.9 Mev protons both yielded activities with half-lives of 200–400 days, consisting principally of electromagnetic radiation. These activities from the (Pr¹⁴¹)₆O₁₁, (Nd¹⁴³)₂O₃, and (Nd¹⁴⁴)₂O₃ bombardments were examined on a scintillation spectrometer. The conclusions drawn from these measurements were that Pm¹⁴³ and Pm¹⁴⁴ are probably very similar in their decay characteristics and that the activity observed from (Pr¹⁴¹)₆O₁₁ bombardments is probably a mixture due to both of these nuclides.”

Adapted from reference ([2012Ma48](#))

[1952Ki25](#) V. Kistiakowsky, Phys. Rev. **87**, 859 (1952).

[2012Ma48](#) E. May and M. Thoennessen, At. Data Nucl. Data Tables **98**, 960 (2012).

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