^{143}Pm

"Promethium isotopes" was published in 1952 by Kistiakowsky documenting the observation of ^{143}Pm (1952Ki25). Neodymium oxide enriched in ^{143}Nd and ^{144}Nd 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 $(Nd^{143})_2O_3$ and $(Nd^{144})_2O_3$ 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 $(Pr^{141})_6O_{11}$, $(Nd^{143})_2O_3$, and $(Nd^{144})_2O_3$ bombardments were examined on a scintillation spectrometer. The conclusions drawn from these measurements were that Pm^{143} and Pm^{144} are probably very similar in their decay characteristics and that the activity observed from $(Pr^{141})_6O_{11}$ bombardments is probably a mixture due to both of these nuclides."

Adapted from reference (2012Ma48)

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