^{105}Rh

^{105}Ru was discovered by Bohr and Hole in 1946, in their paper entitled "Radioactivity induced by neutrons and deuterons in ruthenium" (1946Bo28). Targets of natural ruthenium metal were bombarded with 5.5 MeV deuterons, as well as fast and slow neutrons, from the cyclotron at the Stockholm Forskningsinstitutet för Fysik. The activities were measured with glass Geiger-Muller counters following chemical separation. "We are thus forced to assign the two nuclei [4.4 h and 37 h] to ^{105}Ru and ^{105}Rh." Previously, half-lives of 39 h (1936Li02) and 34 h (1941Ni02, 1941Ni03) were reported without mass assignments. Also, 100 s (1935Ko06), and 45 d (1938De02) half-lives were assigned to ^{105}Ru which was incorrect. In addition, Pontecorvo had assigned the 44 s and 4.2 min half-lives of the ground state and isomeric state of ^{104}Rh incorrectly to ^{105}Rh.

Adapted from reference (2012Pa21)

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