

^{137}I

The identification of ^{137}I was determined by Riezler in Grundlsee, Austria, in the 1943 article “Aktivierung von Xenon durch Neutronen” (1943Ri01). In 1940, Strassmann and Hahn observed a new activity of iodine in neutron-induced fission of uranium with a half-life of 30(6) s (1940St03). Three years later Seelmann-Eggebert and Born established that this 30 s activity decays to a 3.8 min activity of Xenon (1943Se01). Riezler used neutron irradiation of xenon to identify the origin of this 3.8 min half-life (1943Se01). “Die Strahlung des 3.4-Minuten-Körpers ist sehr hart, 2 mm Aluminium lassen noch 25% durch. Es ist anzunehmen, daß diese Aktivität mit dem von H. J. Born und W. Seelman-Eggebert bei der Uranspaltung gefundenen 3.8-Minuten-Körper identisch ist. Als Massenzahl kommt dann nur 137 in Frage.” [The radiation of the 3.4 min emitter is very hard; 25% are transmitted through 2 mm aluminum. It can be assumed that this activity is identical to the 3.8 min emitter that H. J. Born and W. Seelman-Eggebert found in the fission of uranium. Only mass number 137 is then reasonable.] Although Riezler did not measure or mention ^{137}I directly his mass identification of ^{137}Xe directly implied the identification of ^{137}I as acknowledged later by Snell et al. (1947Sn07) and Sugarman (1949Su14).

Adapted from reference (2013Ka01)

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Please cite this abstract as: “FRIB Nuclear Data Group, *Discovery of Nuclides Project*, Isotope Database, doi:10.11578/frib/2279152”