

## <sup>77</sup>As

The discovery of <sup>77</sup>As was published in 1951 by Steinberg and Engelkemeir from Argonne National Laboratory in “Short-Lived Germanium and Arsenic Fission Activities” (1950St02) as part of the Manhattan Project Technical Series. Samples of uranyl nitrate were irradiated in the thimble of the Argonne Heavy-water Pile and the subsequent period of activity was found to be 40 hours. “Two germanium and two arsenic activities have been found in fission, with the following chain relations: 12h Ge<sup>77</sup> → 40h As<sup>77</sup> → stable Se<sup>77</sup>,...” Although Arnold and Sugarman published their observation of <sup>77</sup>As already in 1947 (1947Ar01) they were aware of the results of Steinberg and Engelkemeir which had been published in 1946 in a summary table (1946PI01). It should also be mentioned that in 1939 Sagane (1939Sa02) incorrectly identified <sup>77</sup>As as pointed out by Elliott and Deutsch (1943EI05).

Adapted from reference (2010Sh34)

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