

## <sup>65</sup>Ge

<sup>65</sup>Ge was first reported by Robertson and Austin in their 1972 paper, “Germanium-64” (1972Ro13). Enriched <sup>64</sup>Zn was irradiated with a 50 MeV <sup>3</sup>He beam from the Michigan State University cyclotron. Gamma-rays were measured with a Ge(Li) detector following chemical separation. “The strongest lines decay with a short half-life ( $30 \pm 2$  sec) and are attributed to <sup>65</sup>Ge (despite large disagreement with the previous half-life), on the basis of the rapid growth of the <sup>65</sup>Ga daughter and good energy fit with levels observed in <sup>64</sup>Zn(<sup>3</sup>He,d)<sup>65</sup>Ga. Other lines, at  $128.2 \pm 0.2$ ,  $384.1 \pm 0.3$ ,  $427.0 \pm 0.3$ ,  $667.1 \pm 0.3$ , and  $774.5 \pm 0.3$  decay with a (weighted average) half-life of  $62.3 \pm 2.0$  sec and are assigned to the decay of the new isotope <sup>64</sup>Ge.” The previously reported half-life of <sup>65</sup>Ge mentioned in the quote (1.5(2) min) was incorrect (1958Po79).

Adapted from reference (2012Gr19)

- 1958Po79 N. T. Porile, Phys. Rev. **112**, 1954 (1958).  
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Please cite this abstract as: “FRIB Nuclear Data Group, *Discovery of Nuclides Project*, Isotope Database, doi:10.11578/frib/2279152”