

## $^{231}\text{Ac}$

Chayawattanangkur et al. reported the discovery of  $^{231}\text{Ac}$  in the 1973 paper “Heavy isotopes of actinium:  $^{229}\text{Ac}$ ,  $^{230}\text{Ac}$ ,  $^{231}\text{Ac}$  and  $^{232}\text{Ac}$ ” (1973Ch24).  $^{232}\text{Th}$  was irradiated with 150 MeV bremsstrahlung  $\gamma$  rays from the Mainz electron linear accelerator. Beta- and gamma-ray spectra were measured with a stilbene crystal a Ge(Li) diode, respectively, following chemical separation. “ $^{231}\text{Ac}$  was found to decay with a half-life of  $7.5\pm 0.1$  min.” The previous assignment of a 15(1) min half-life to  $^{231}\text{Ac}$  (1960Ta19) was probably not right because the measured  $\gamma$ -ray intensities were incorrect (2022Si29).

Adapted from reference (2013Fr03)

- 1960Ta19 K. Takahashi and H. Morinaga, Nucl. Phys. **21**, 133 (1960).  
1973Ch24 K. Chayawattanangkur, G. Herrmann, and N. Trautmann, J. Inorg. Nucl. Chem. **35**, 3061 (1973).  
2013Fr03 C. Fry and M. Thoennessen, At. Data Nucl. Data Tables **99**, 345 (2013).  
2022Si29 B. Singh, J. K. Tuli, and E. Browne, Nucl. Data Sheets **185**, 560 (2022).

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