



Fig. 18

Relative elution of homologous actinides and lanthanides. The data for the actinides shown here are those of K. Street, Jr., S. G. Thompson, and G. T. Seaborg (32) in which the cation exchange resin Dowex-50 was used and the elution performed at 87° C with ammonium citrate buffered with citric acid to a pH of 3.5 (total citrate concentration 0.2 M). The data on the lanthanide elements are those of B. H. Ketelle and G. E. Boyd (34) in which the same resin was used in a somewhat longer column and the elution performed at 100° C using a similar citrate buffer solution (pH 3.28). (The dotted lines show the predicted elution positions for elements 99 and 100.)