

(9.8) With Figure 9.9 one can estimate the stability constants ( $\beta_1$ - $\beta_3$ ) for the lutetium acetylacetonate complexes. Make this estimation using Figure 9.9. A simplified approach to estimate  $\beta_n$  is the use of the approximate relations  $k_n = \beta_n / \beta_{n-1} = 1 / (Aa)_{n=r-0.5}$  and  $n = z - d(\log D) / d(\log(Aa))$ ; for  $\text{Lu}^{3+}$   $n < 4$ , but  $z = 3$ .

The solution is graphical and not shown here.