

Competition Corner: Equilibrium Evidence

g11_u04_w13

Original fictional paper data only; no chemical activity, sampling, or procedure is requested.

1. For $2R(aq) \rightleftharpoons S(aq)$, $K_c = 16.0$, $R_0 = .500 \text{ M}$, and $S_0 = 0$. Build an ICE table, derive and solve the quadratic, then check Q_c .
2. For $P(aq) \rightleftharpoons 2Q(aq)$, $K_c = .360$. A report gives $P = .0250 \text{ M}$, $Q = .0900 \text{ M}$. Determine net direction and name two claims this comparison cannot establish.