

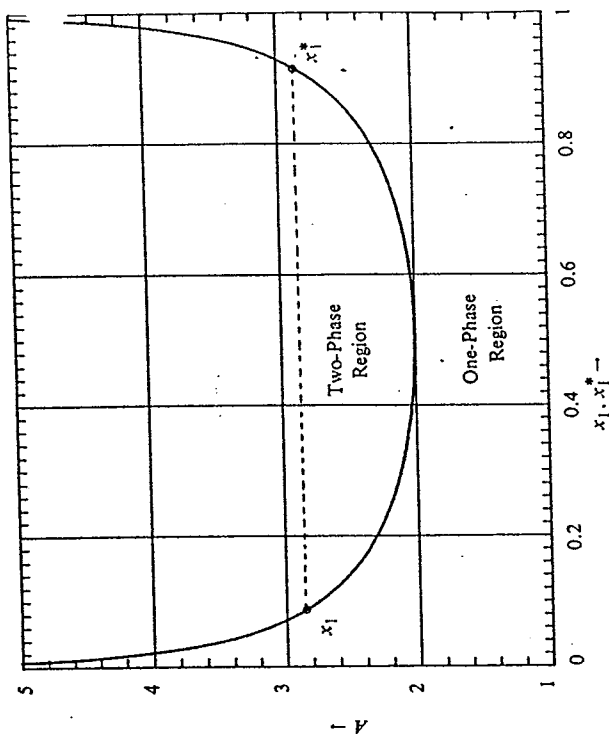


Figure 7.5. Miscibility limits of a binary mixture with a symmetrical equation for the excess Gibbs energy, $G^{\text{ex}}/RT = Ax_1x_2$. Miscibility range and the magnitude of A .

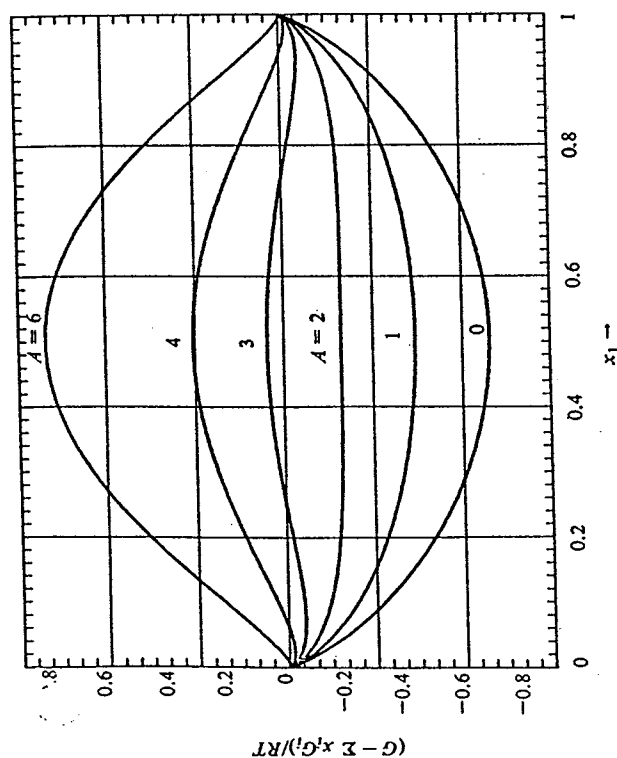


Figure 7.6. Gibbs energies of mixing at several values of A in the symmetrical equation for the excess Gibbs energy, $G^{\text{ex}}/RT = Ax_1x_2$. Phase splits occur only when A is greater than 2.

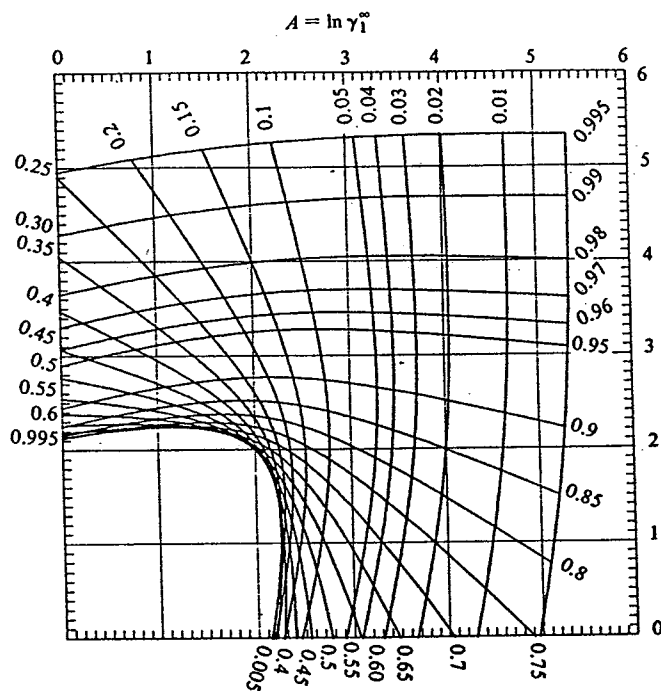


Figure 7.7. Miscibility limits with the Margules equation (After Kogan, 1968). An intersection within the network represents the equilibrium mol fractions (x_1, x_1^*) corresponding to each pair of logarithms of infinite-dilution activity coefficients or equation parameters A, B . For example, $(x_1, x_1^*) = (0.10, 0.98)$ corresponds to $(A, B) = (2.5, 4.03)$.

$A=2.8$
 $B=5.0$