

FISICOQUÍMICA I (Lic. Qca.)
TERMODINÁMICA (Lic. Qca., Ing. Alimentos)

DIAGRAMAS DE FASES

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Diagrama P.v.T ideal

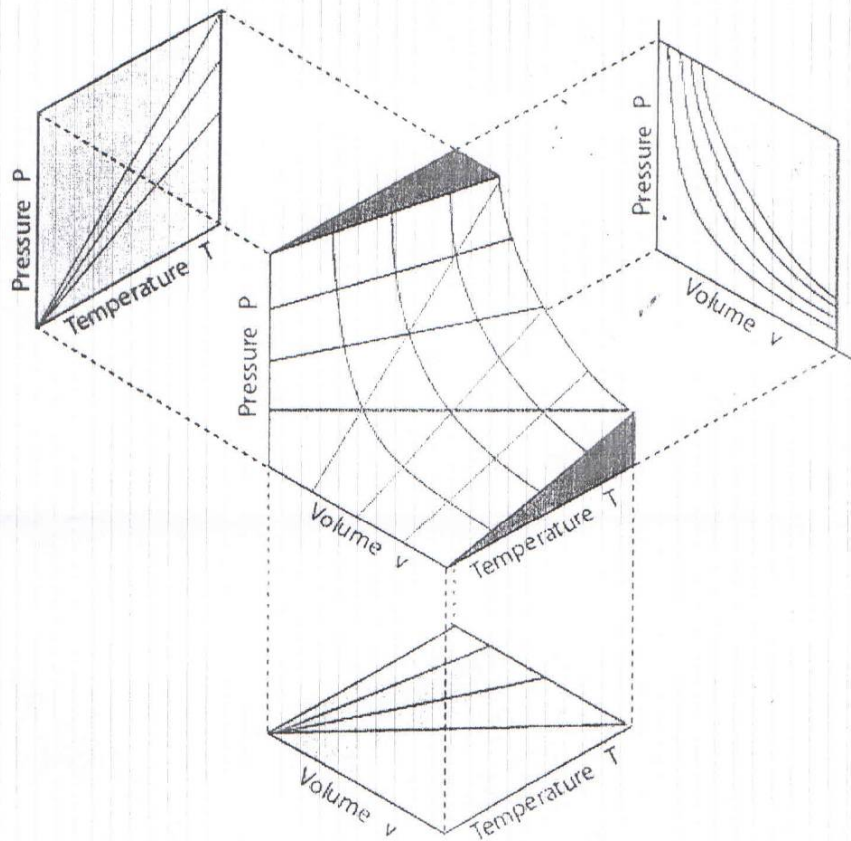


Diagrama P-V-T de cuerpo puro

($v_s^0 > v_l^0$)

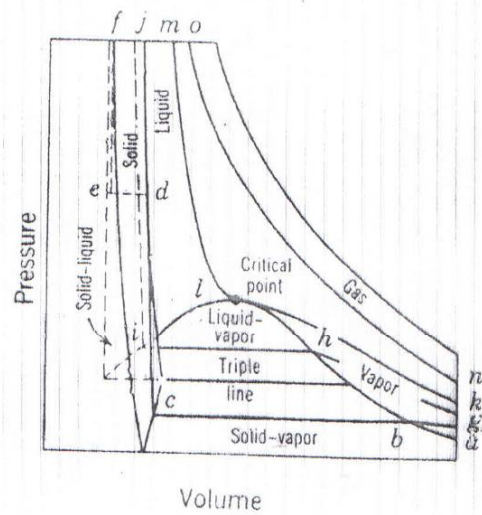
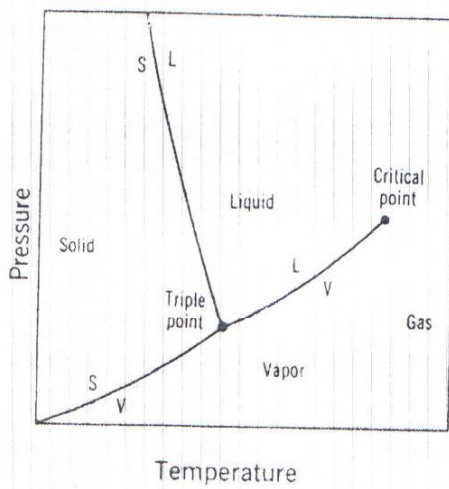
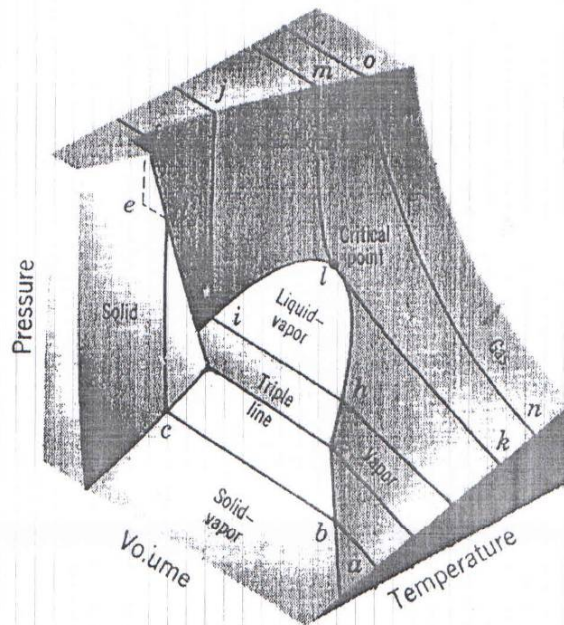
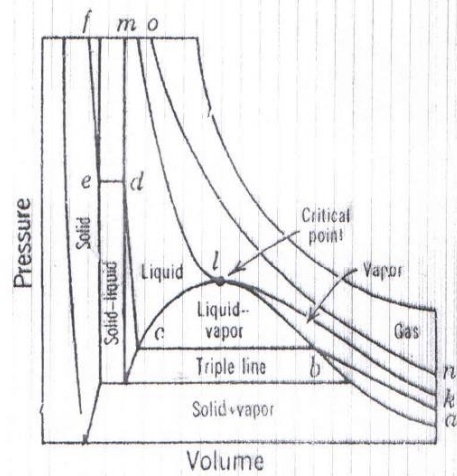
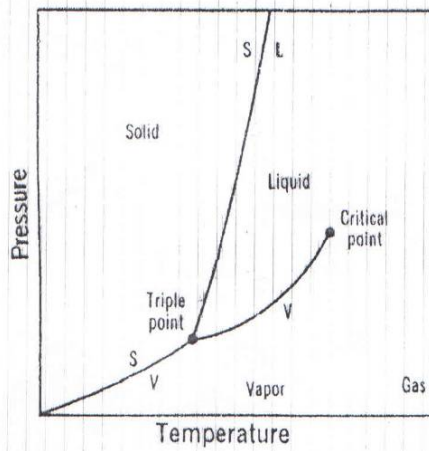
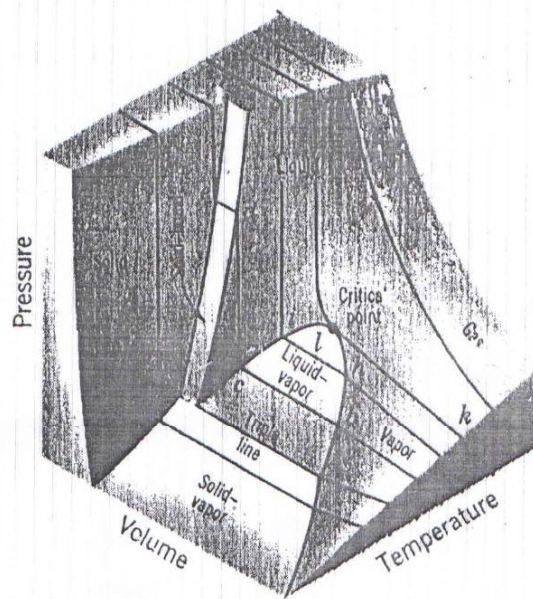
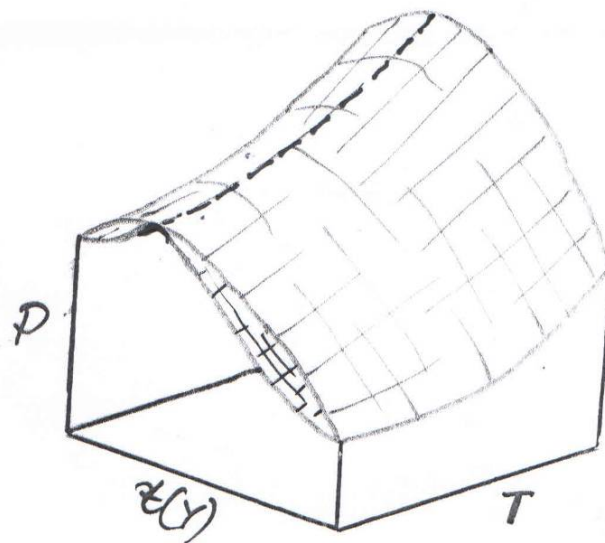
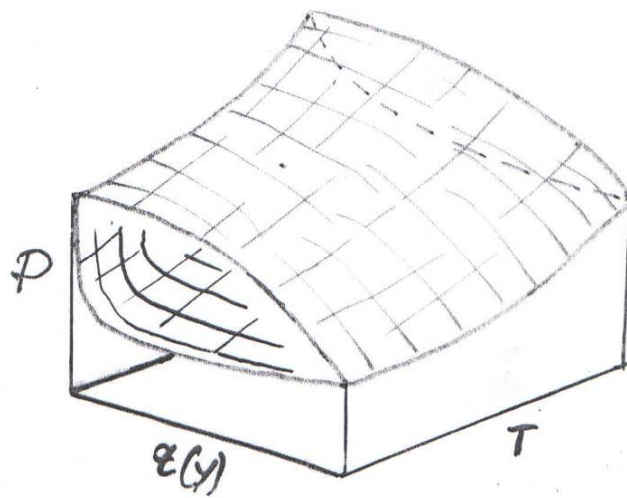


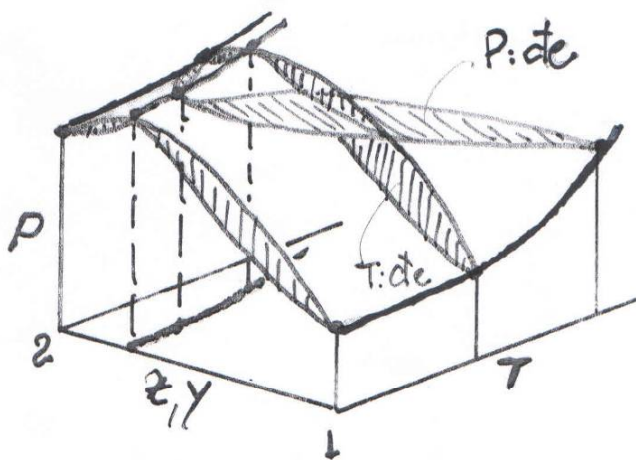
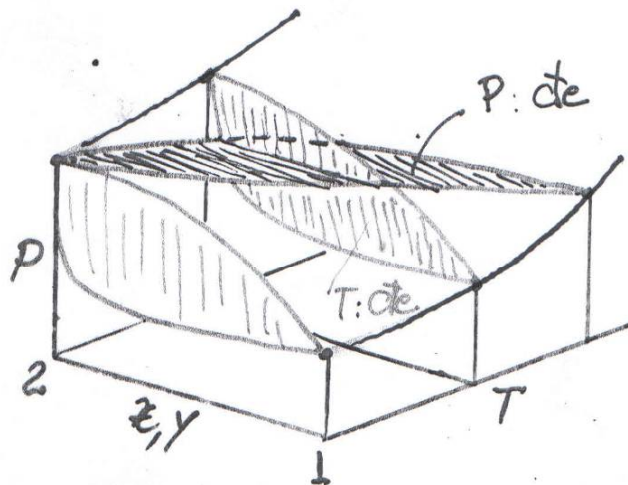
Diagrama P-V-T de cuerpo puro

$$(v_s^0 < v_l^0)$$



Equil. Fases - Superf. PTXY

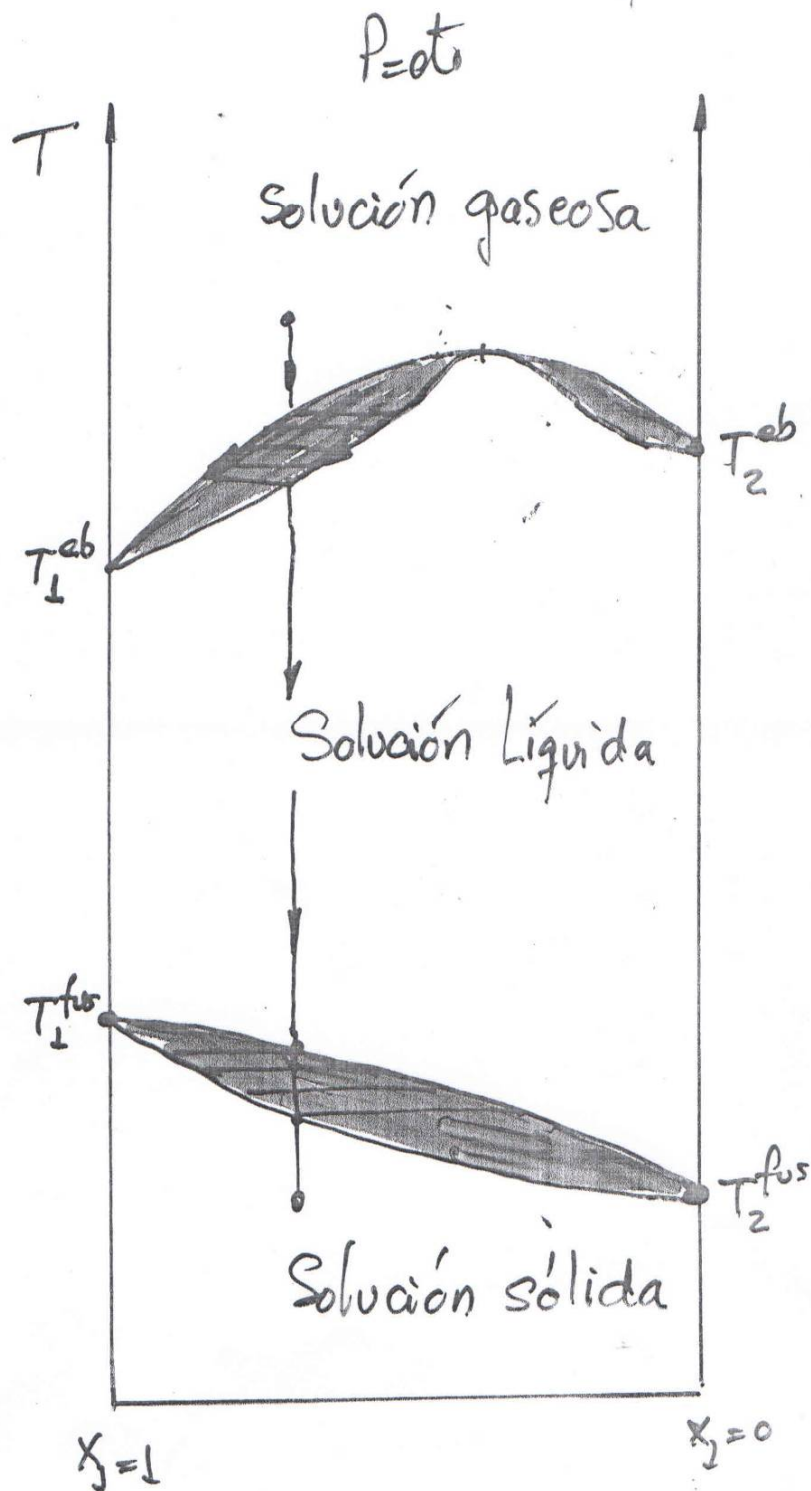




Equilibrio fases

sistemas totalmente miscibles

eq. fases

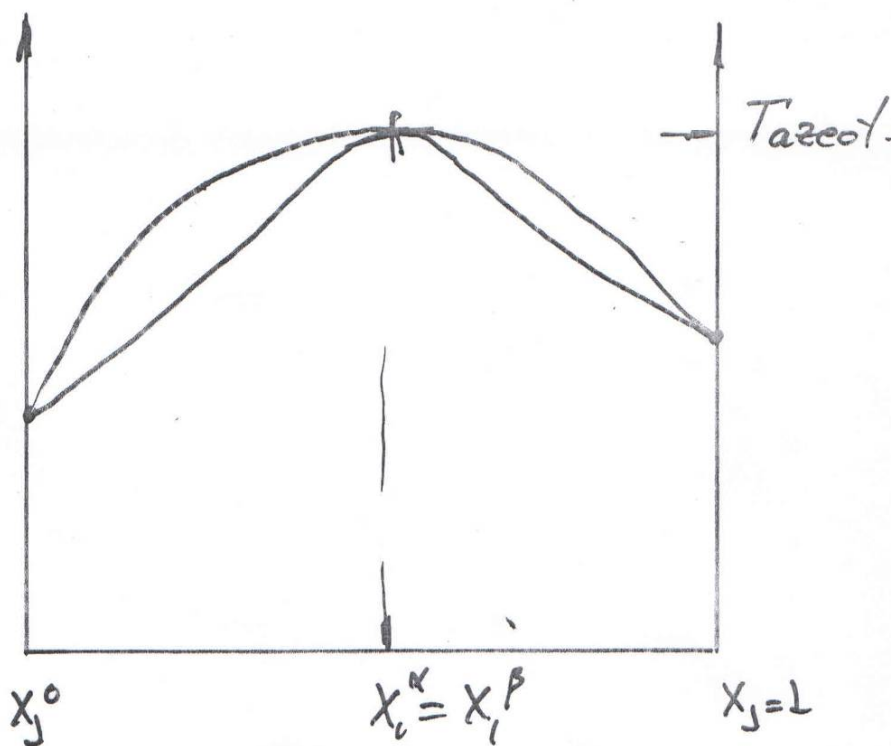


Azeotropia

$$\text{Si } x_i^\alpha = x_i^\beta$$



$$\left. \frac{\partial T}{\partial x_i^\alpha} \right|_p = \left. \frac{\partial T}{\partial x_i^\beta} \right|_p = \left. \frac{\partial P}{\partial x_i^\alpha} \right|_T = \left. \frac{\partial P}{\partial x_i^\beta} \right|_T = 0$$

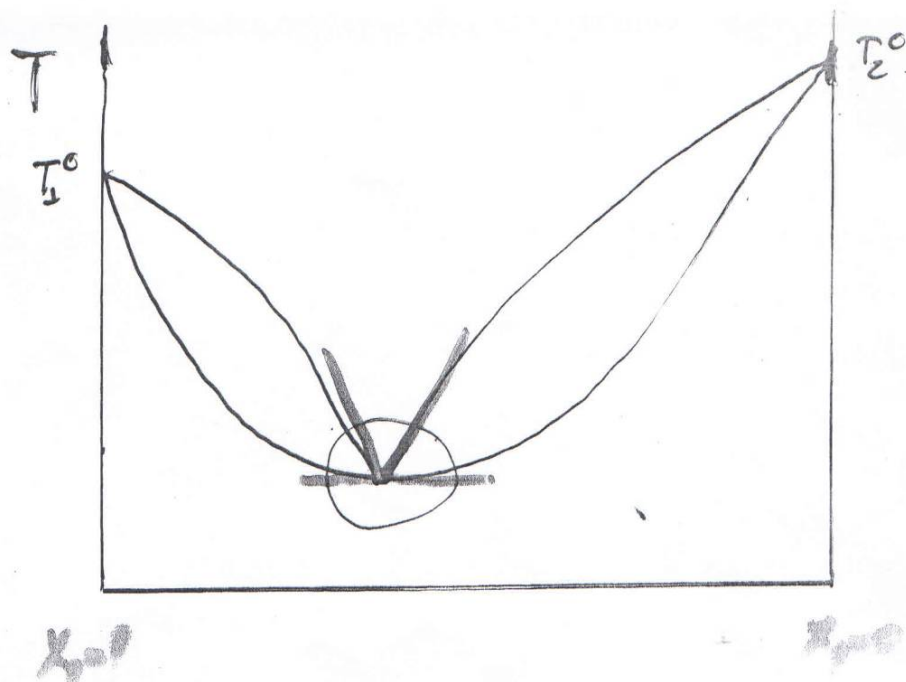
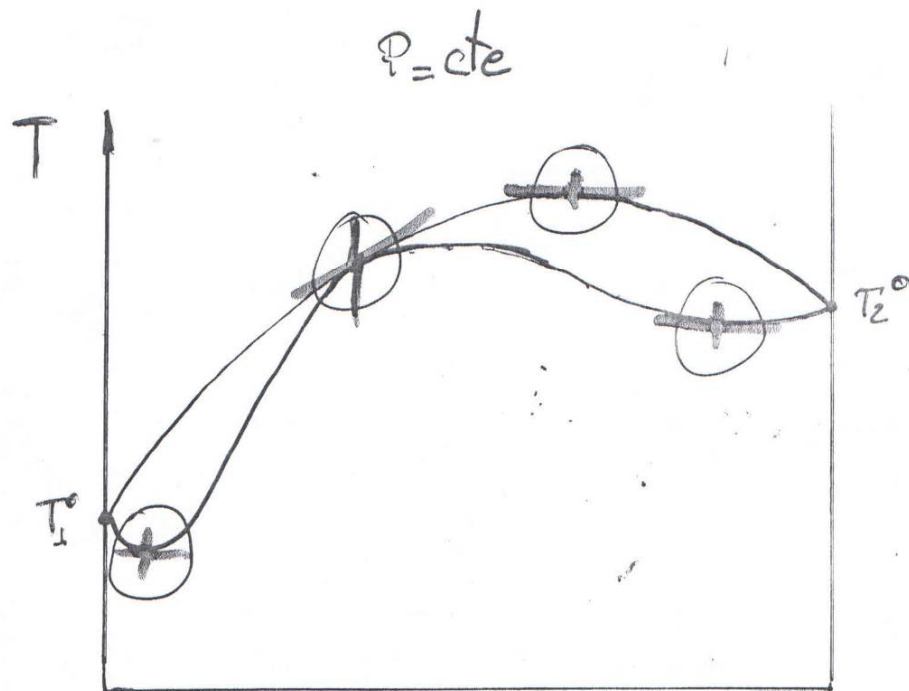


* Máximos y/o mínimos

* Puede existir 2 azeótropos s/binario.

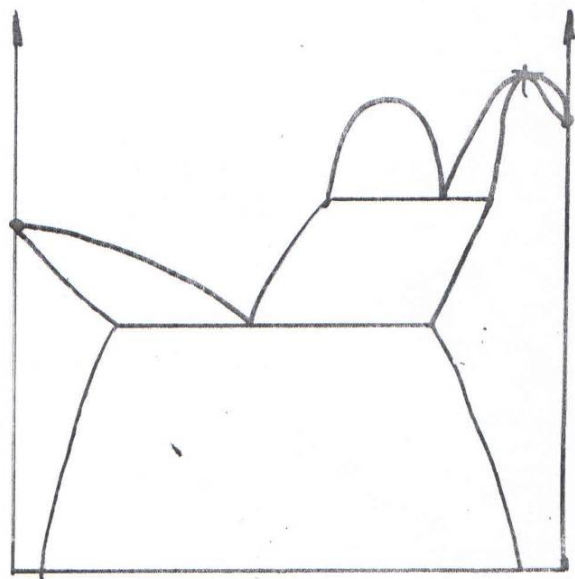
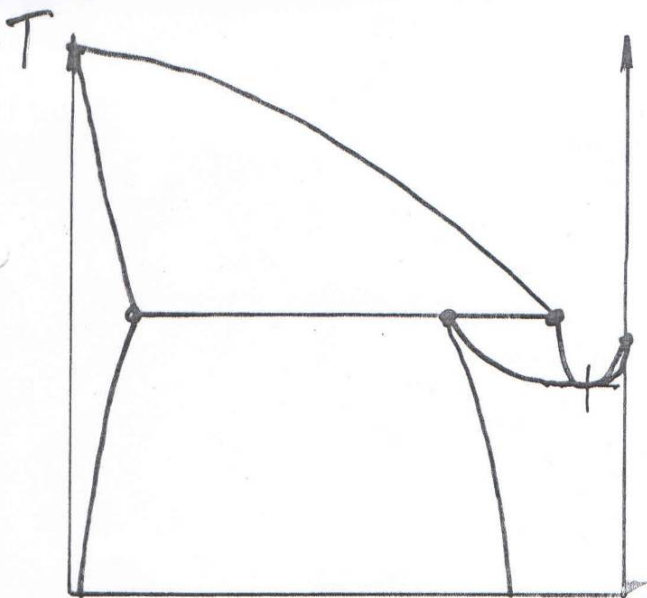
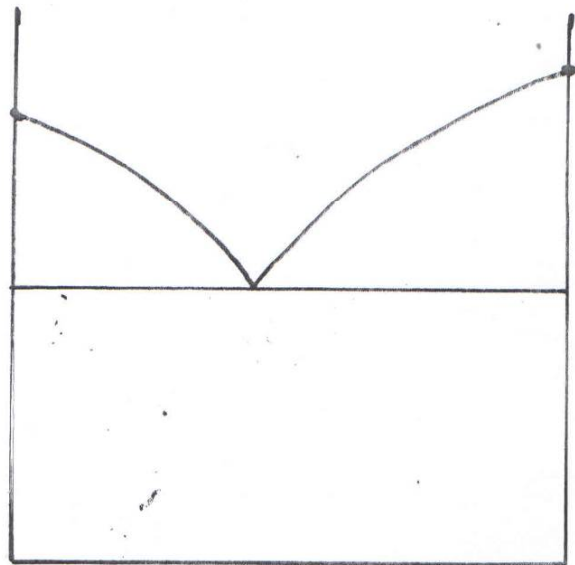
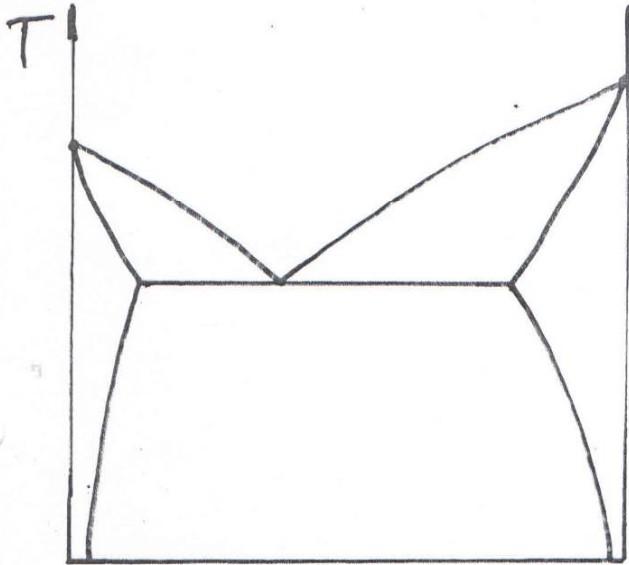
Azeotropia

Errores usuales

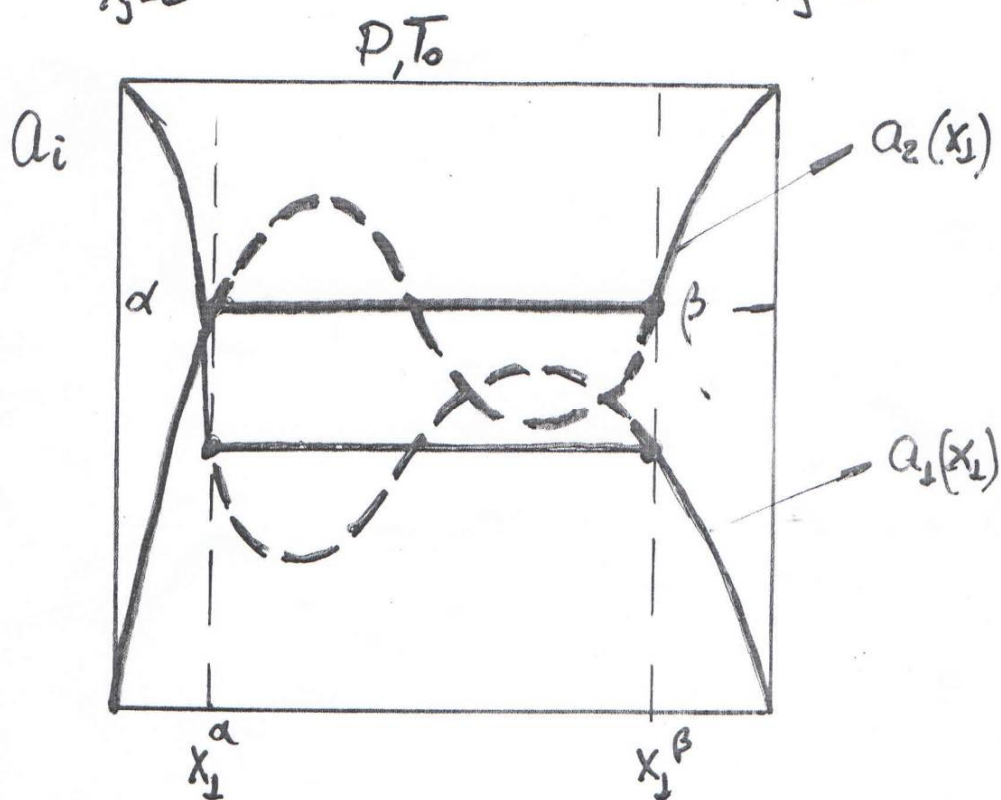
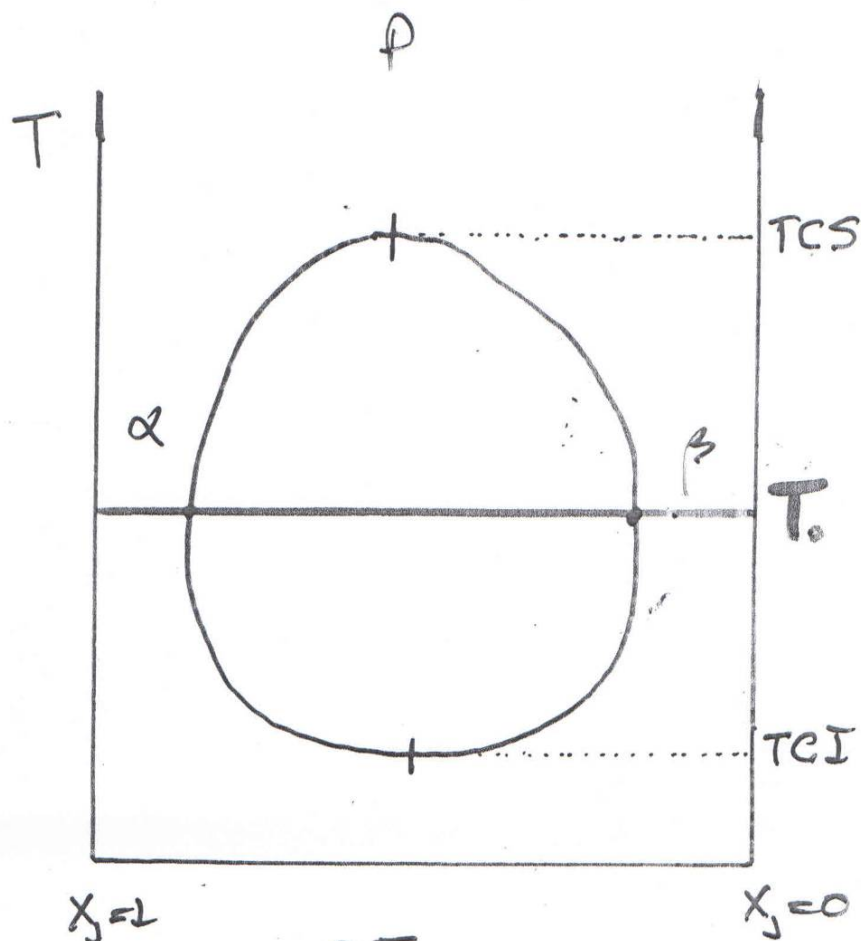


Equilibrios fases multiples

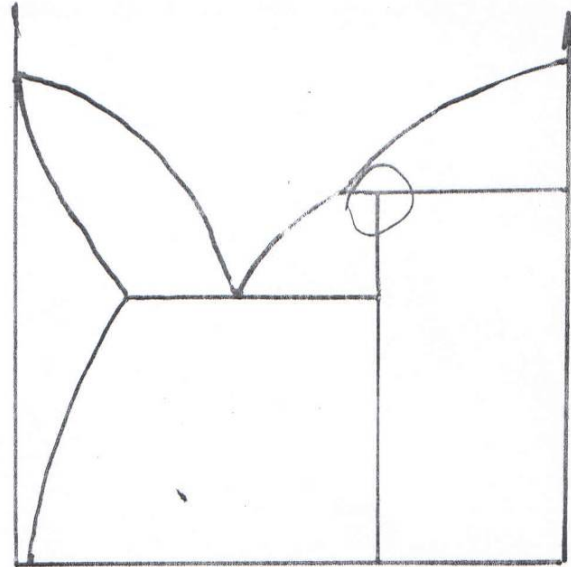
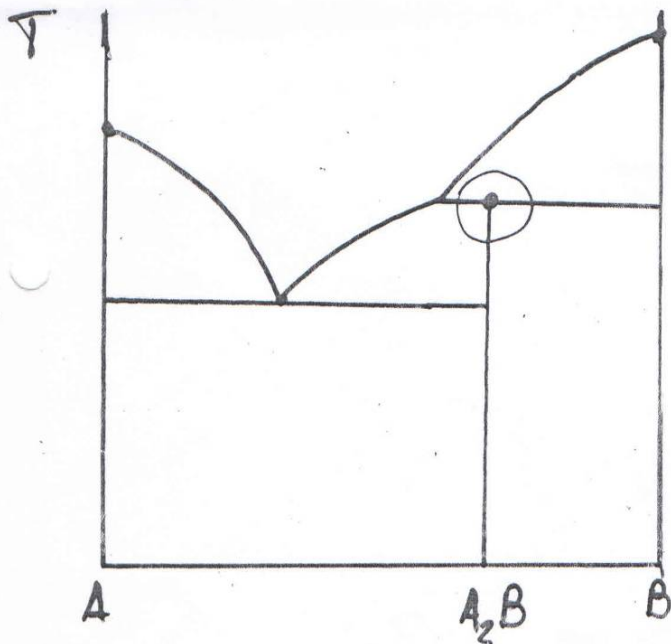
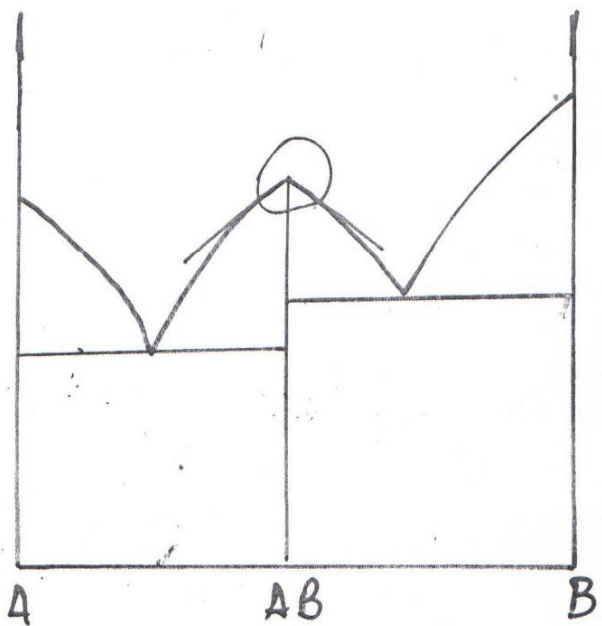
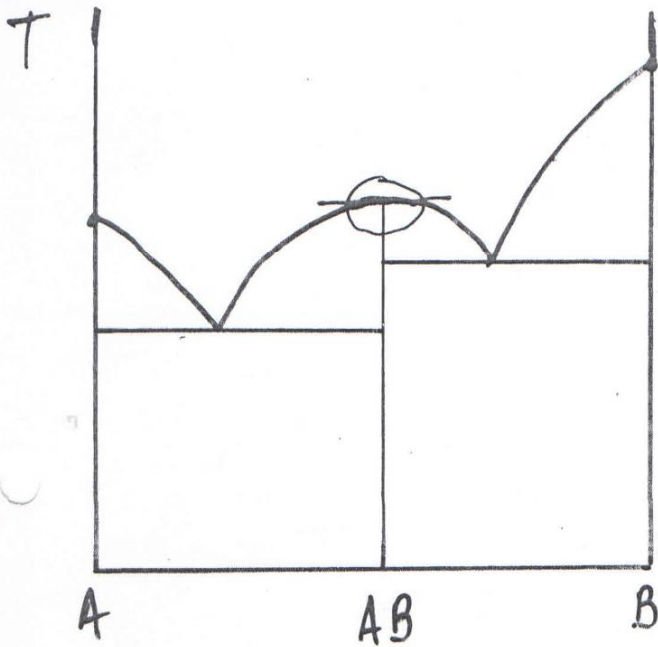
$P = \text{cte}$



Equilibrio Liq-Liq (Sol-Sol)



Ponto fusão Congruente - No Cong.



Propiedades Coligativas

$P = 1 \text{ atm}$

