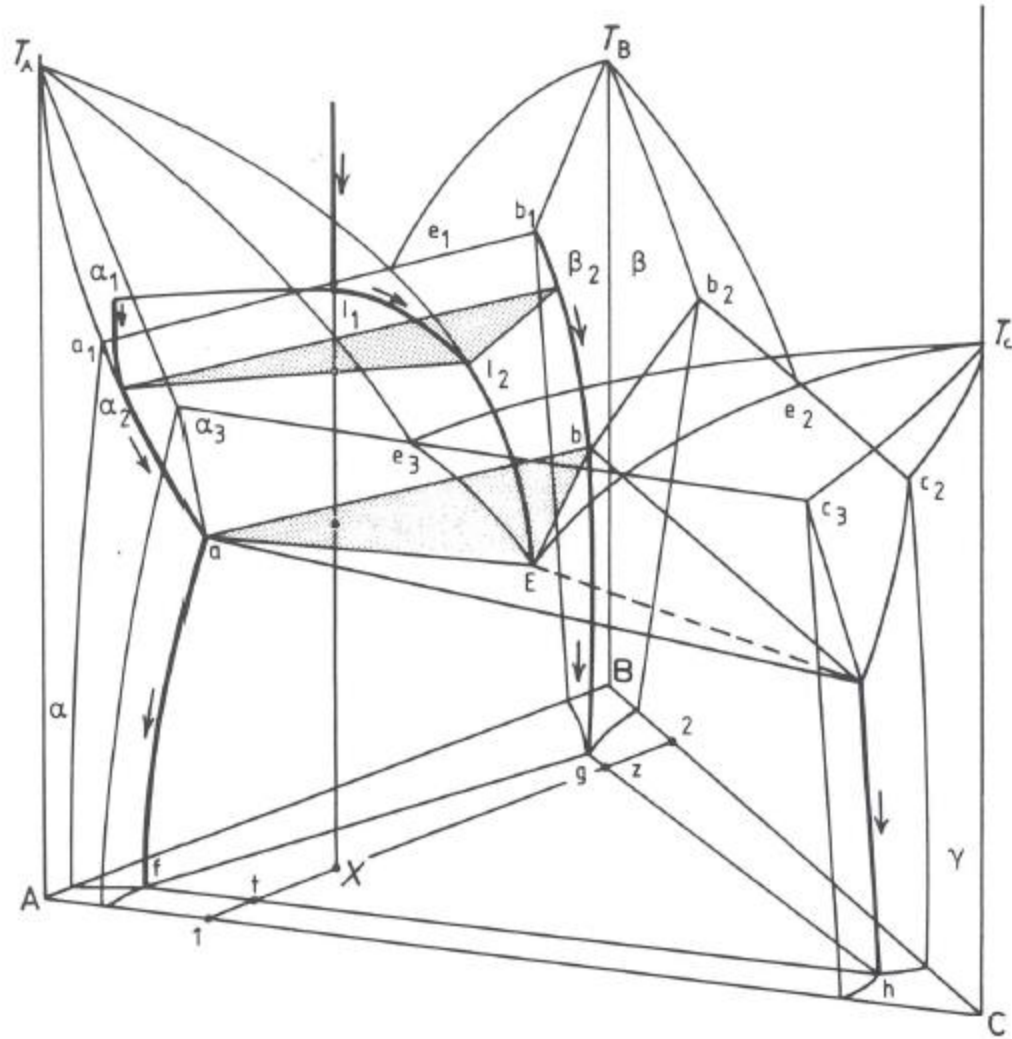
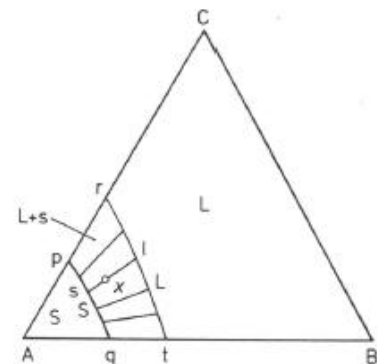
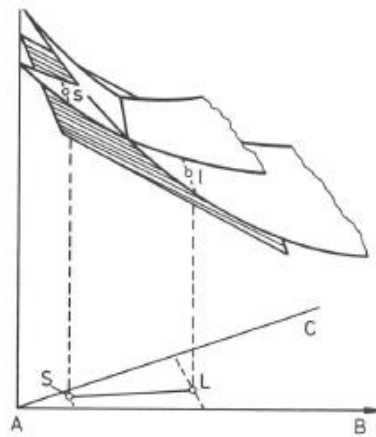
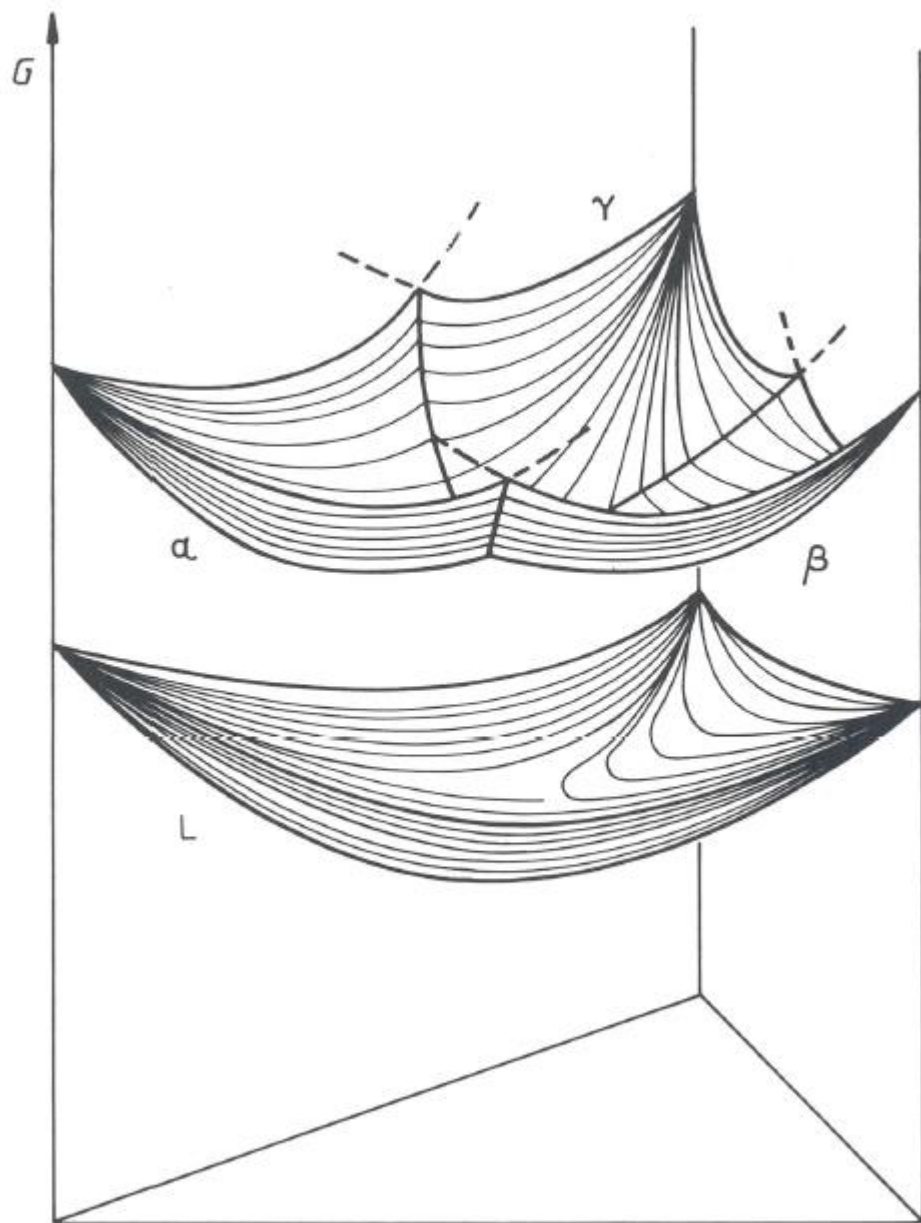
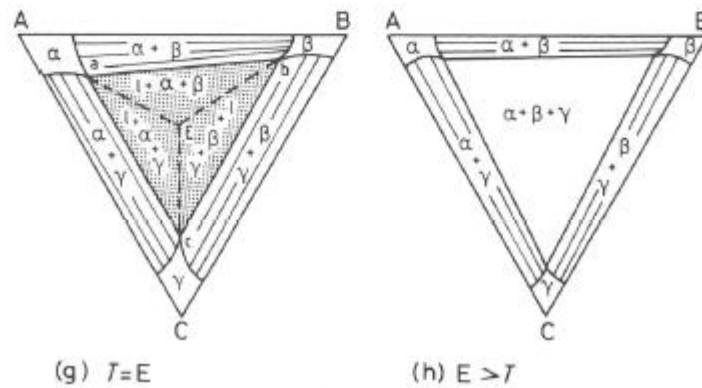
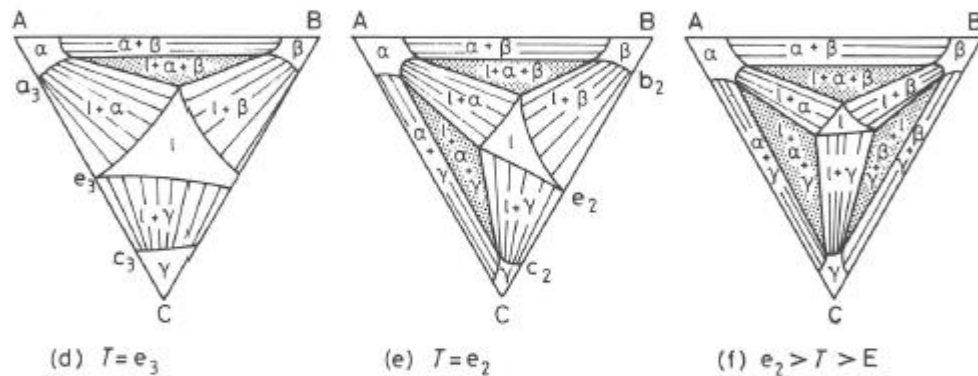
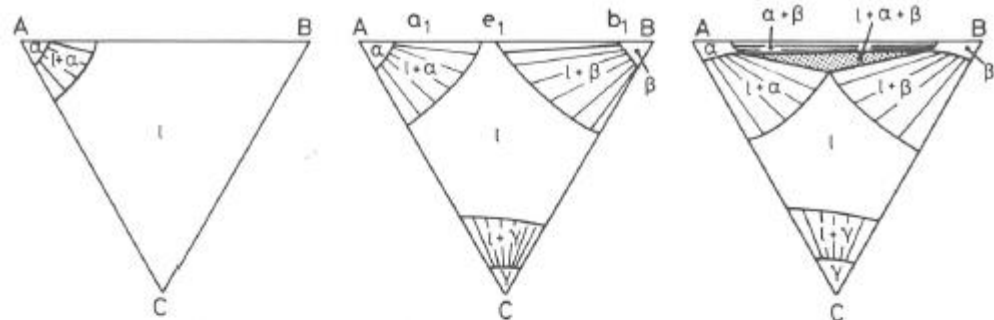
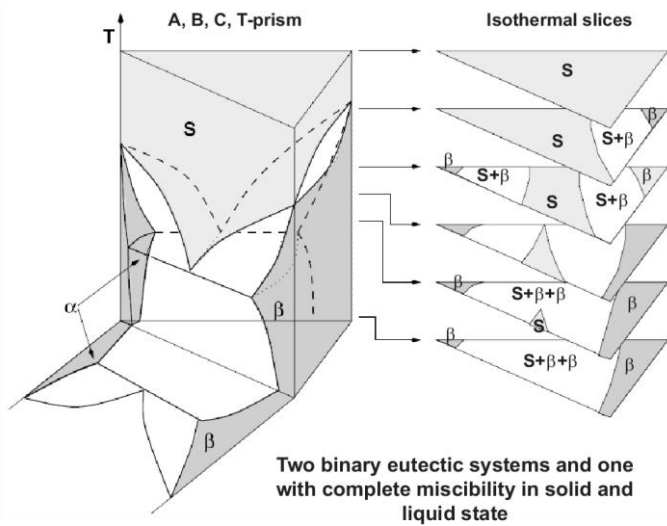
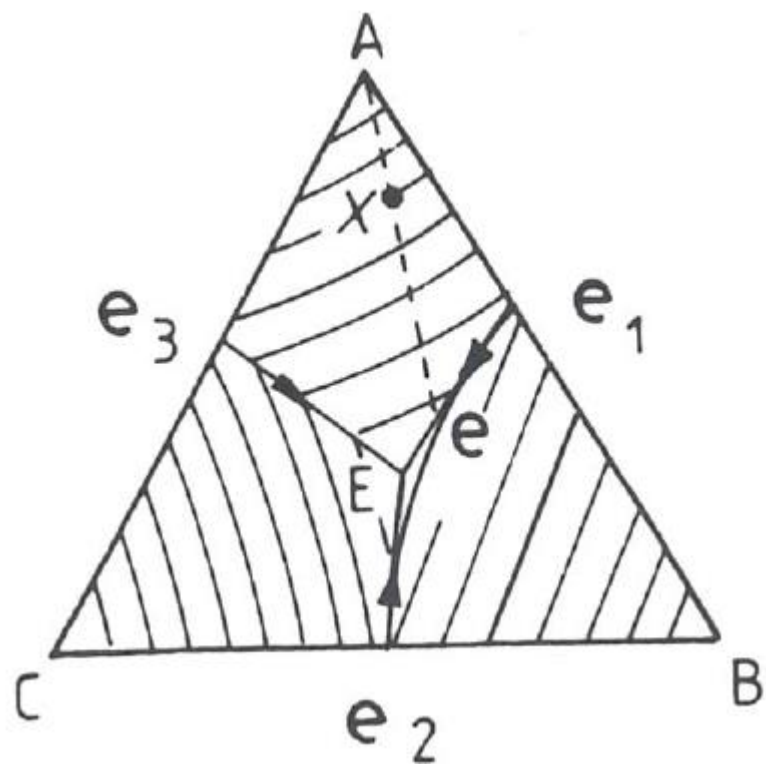
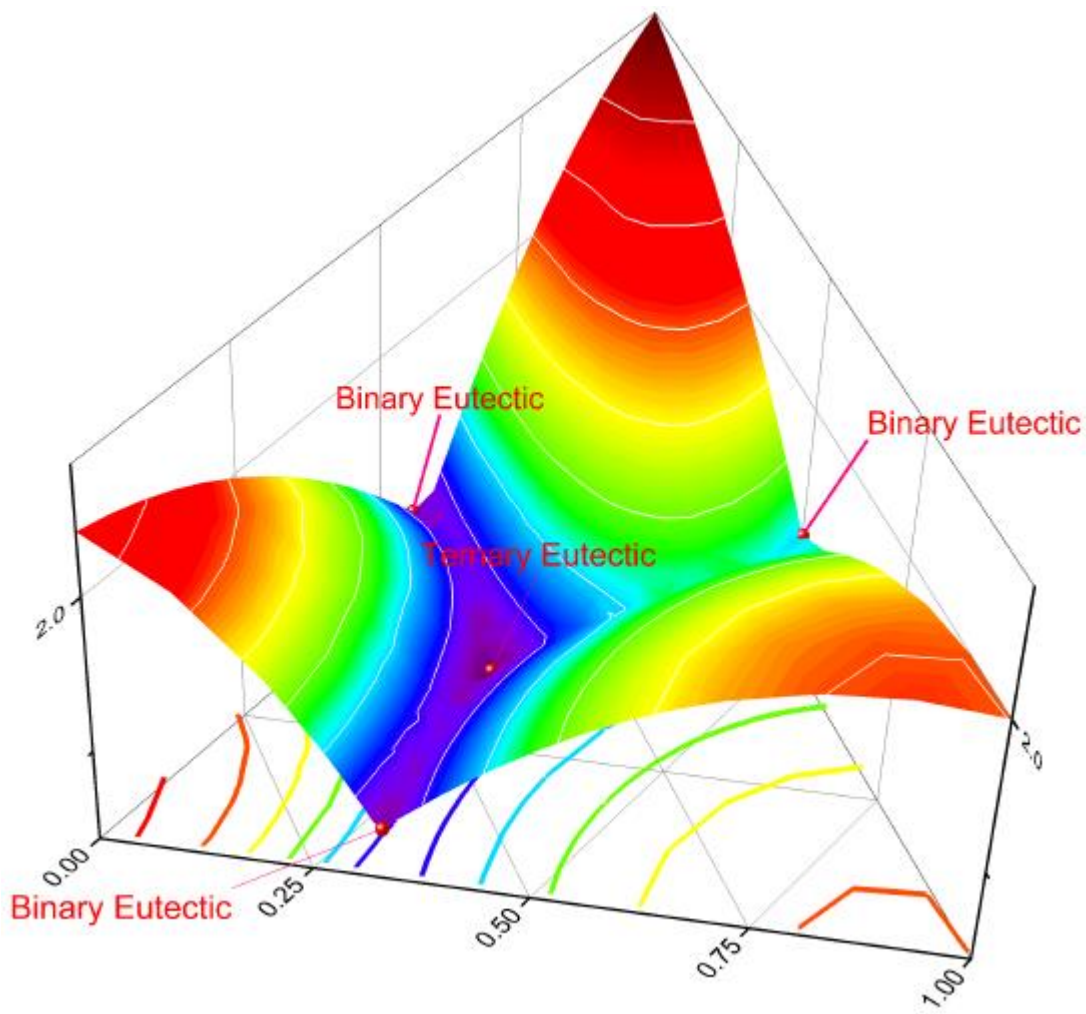


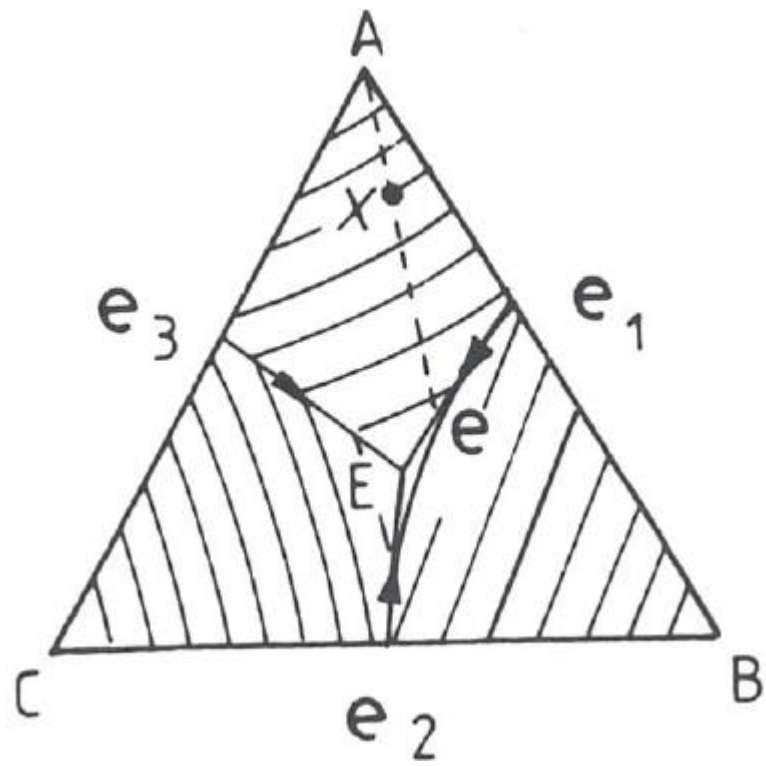
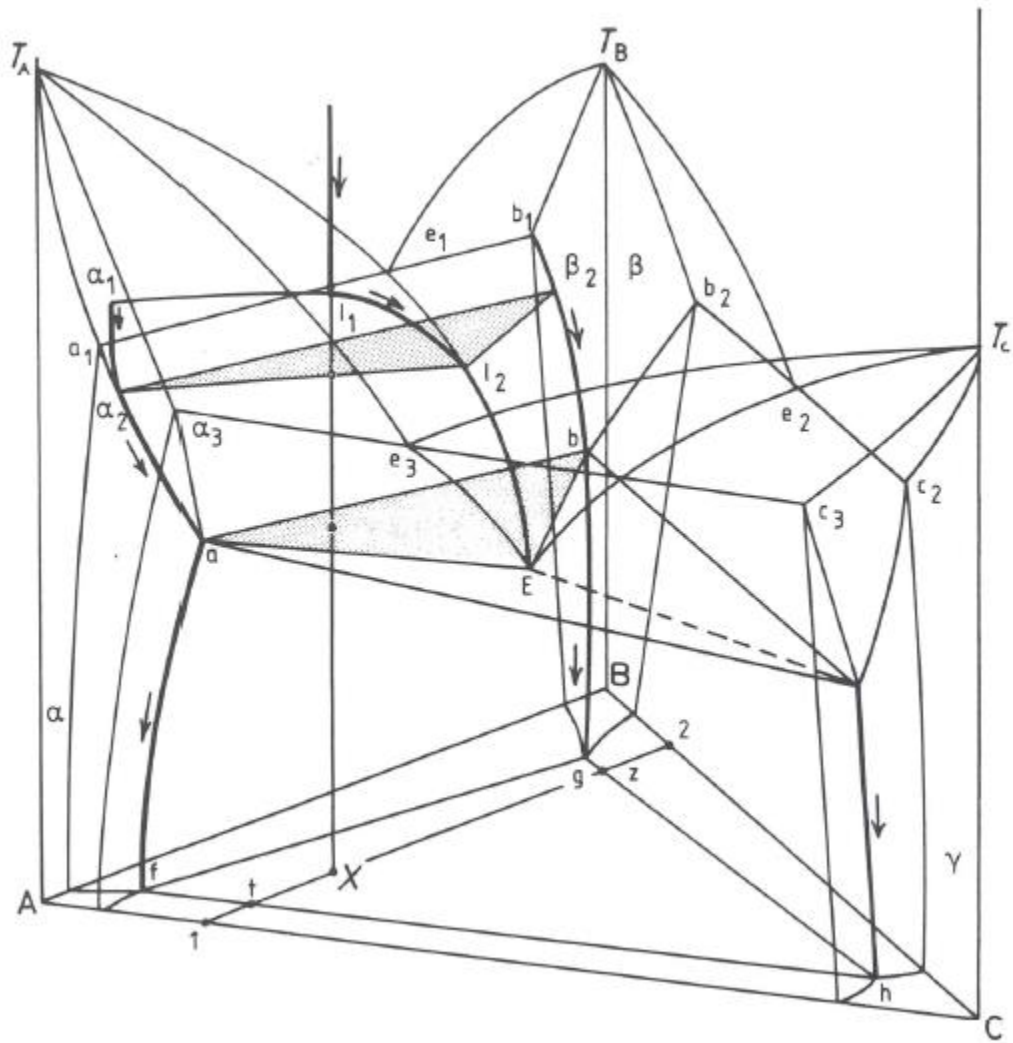
Ternary diagrams











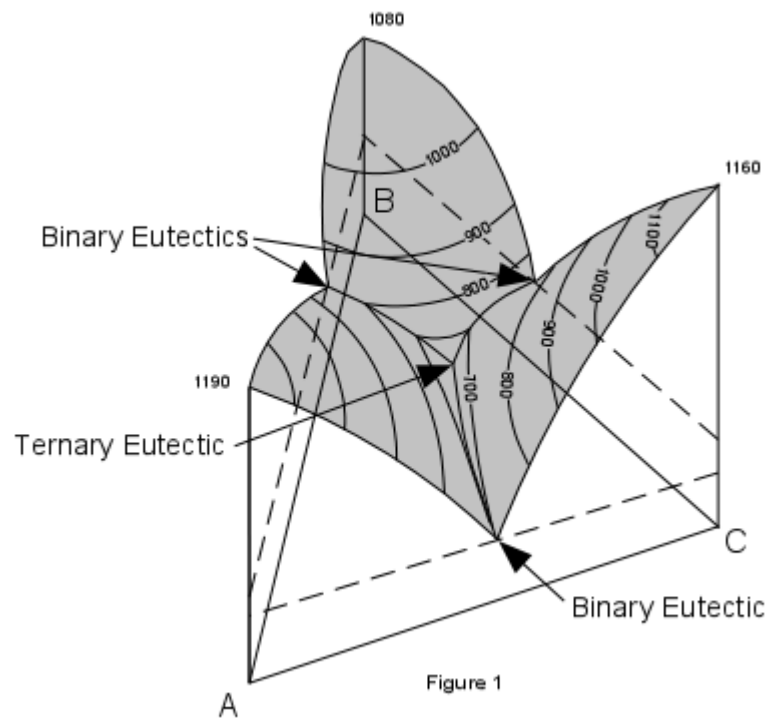
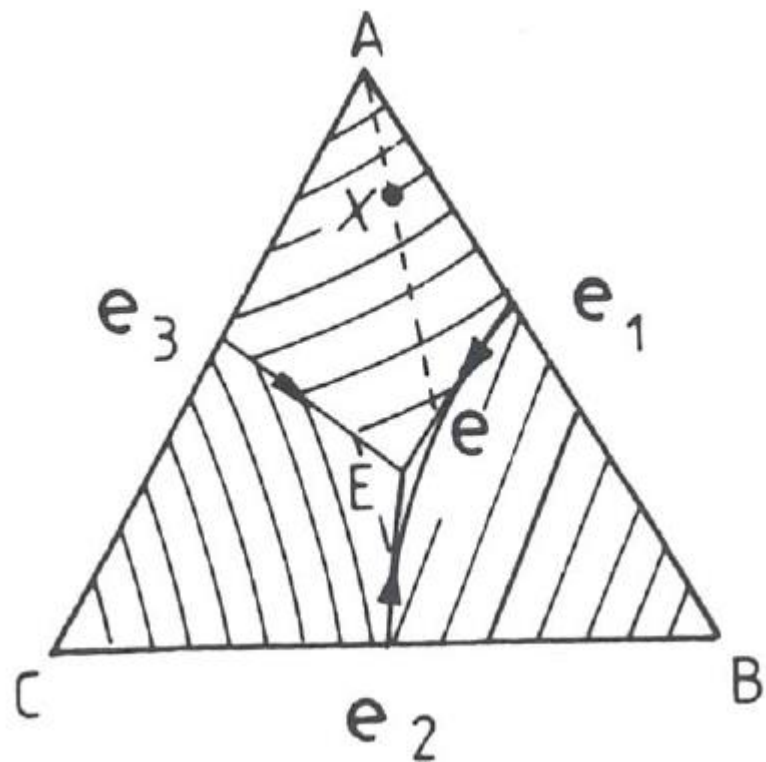
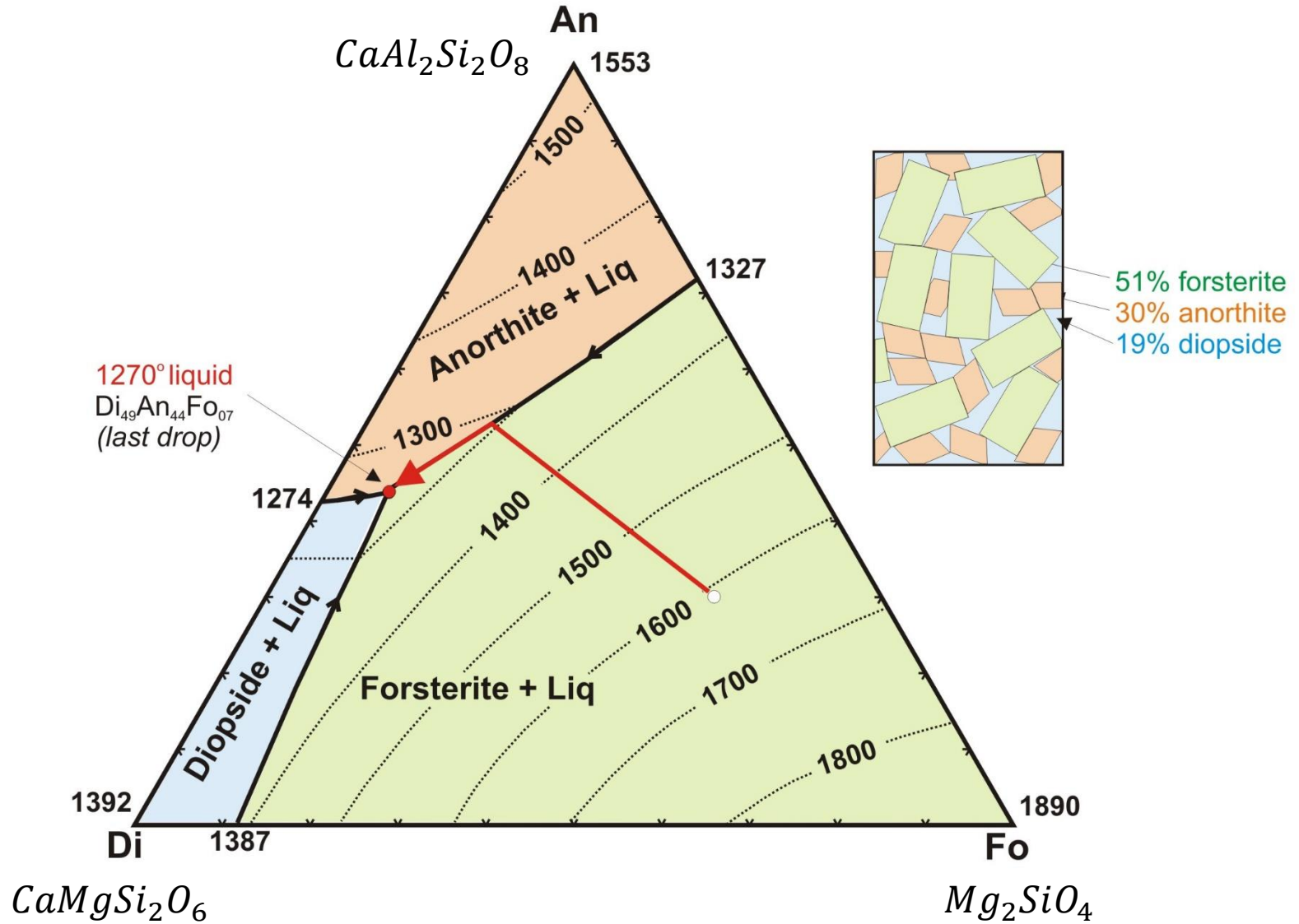


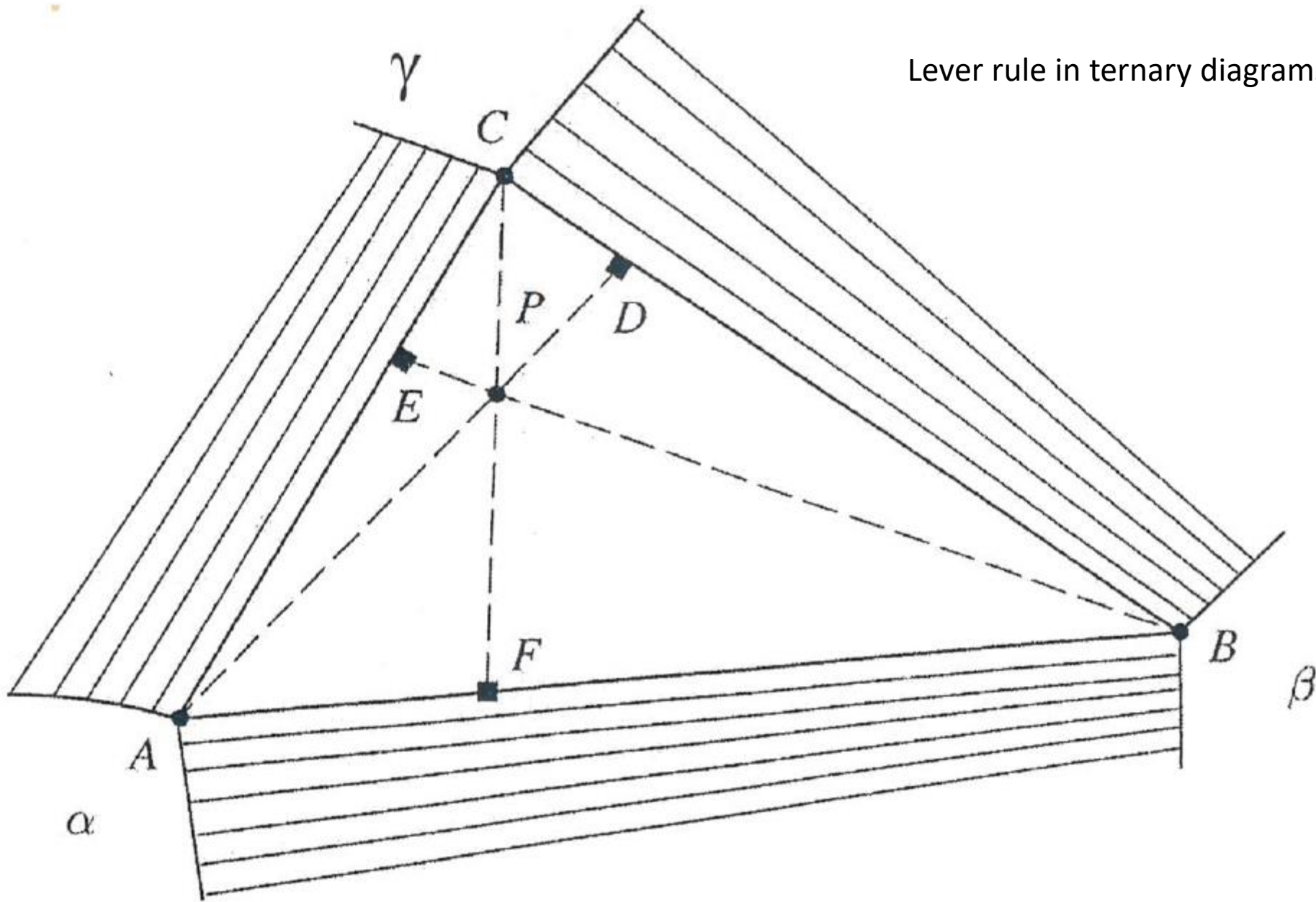
Figure 1



Di-An-Fo at 1 atm. (0.1 MPA)

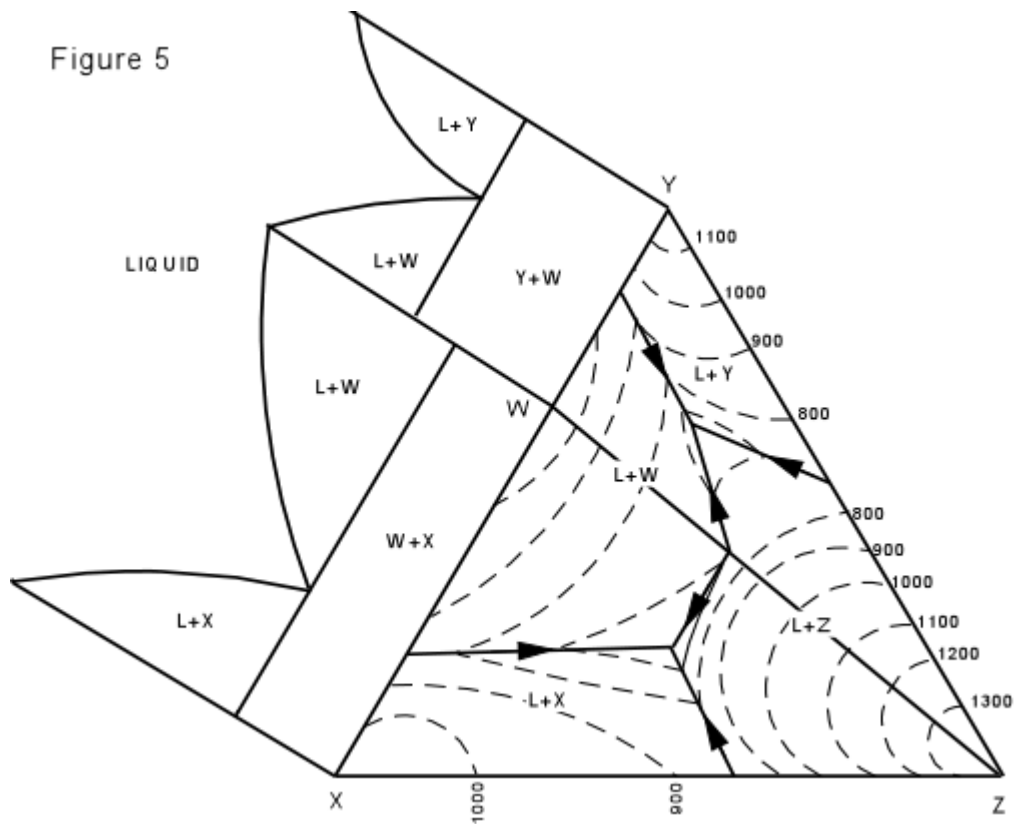


Lever rule in ternary diagrams



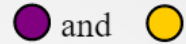
Things get complicated quite quickly...

Figure 5



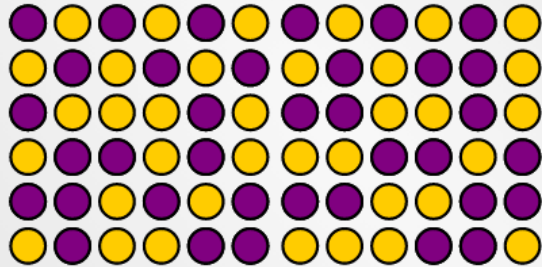
Substitutional Alloy

(solid solution)



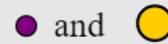
like each other equally.

They can randomly replace each other.



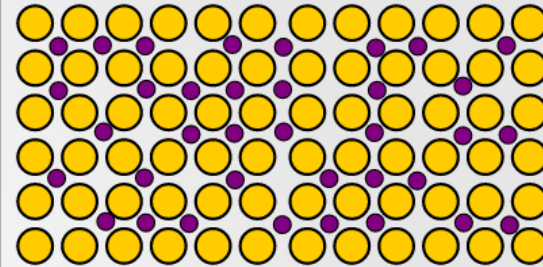
Interstitial Alloy

(solid solution)



like each other equally.

Small atoms randomly squeeze between big atoms.

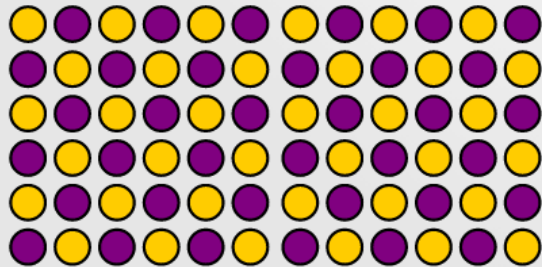


Intermetallic Compound

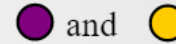


like each other more than themselves

They must be arranged in a specific order to maximize contact.



Two-Phase Alloy



like each other less than themselves

They stay in distinct phases to minimize contact

