

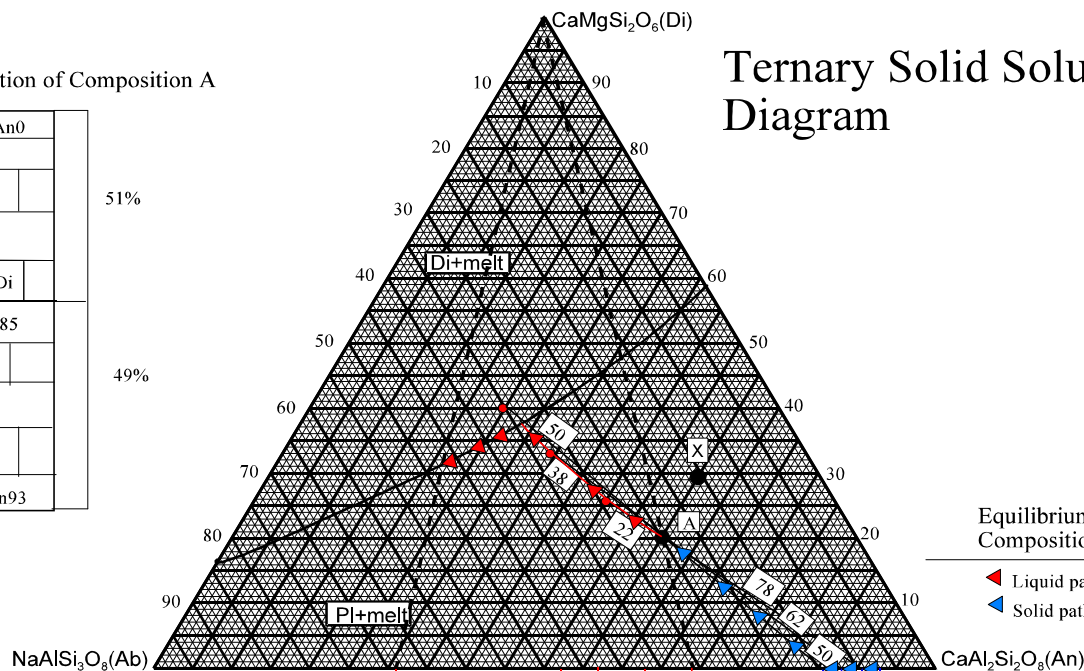
Fractional Crystallization of Composition A

Di	An0	Di	An0
Di	An85	Di	
An85	An85	An85	
An93	An93	An93	

51%

49%

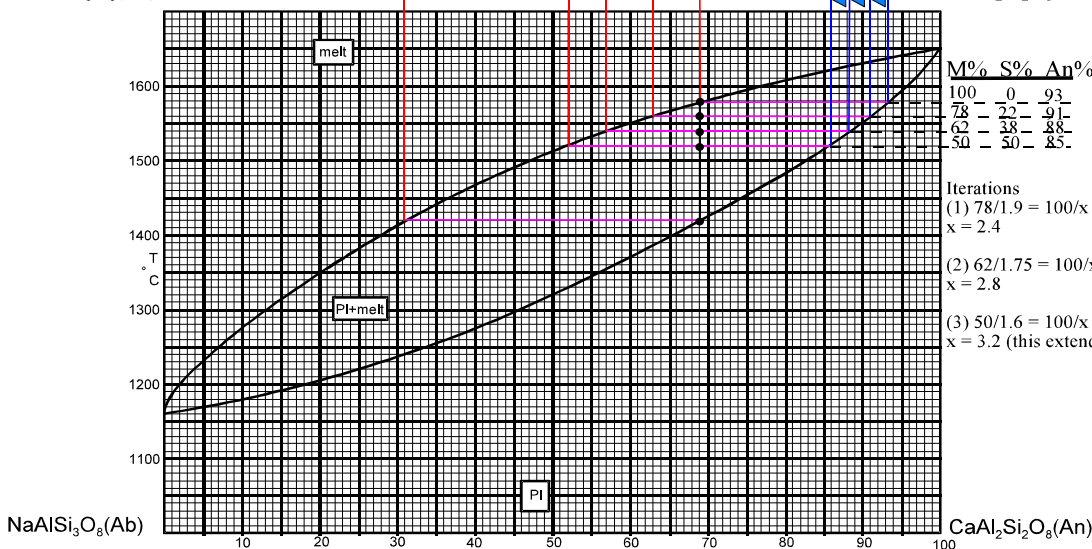
Ternary Solid Solution Phase Diagram



Equilibrium Crystallization of Composition A

- ◄ Liquid path
- ◄ Solid path

NaAlSi₃O₈(Ab) CaAl₂Si₂O₈(An)



M%	S%	An%
100	0	93
78	22	91
62	38	88
50	50	85

Iterations

- (1) $78/1.9 = 100/x$ (where x = total ternary tie line length)
 $x = 2.4$
- (2) $62/1.75 = 100/x$
 $x = 2.8$
- (3) $50/1.6 = 100/x$
 $x = 3.2$ (this extended past the cotectic)

NaAlSi₃O₈(Ab) CaAl₂Si₂O₈(An)