

Amount of precipitate verses temperature for SB5

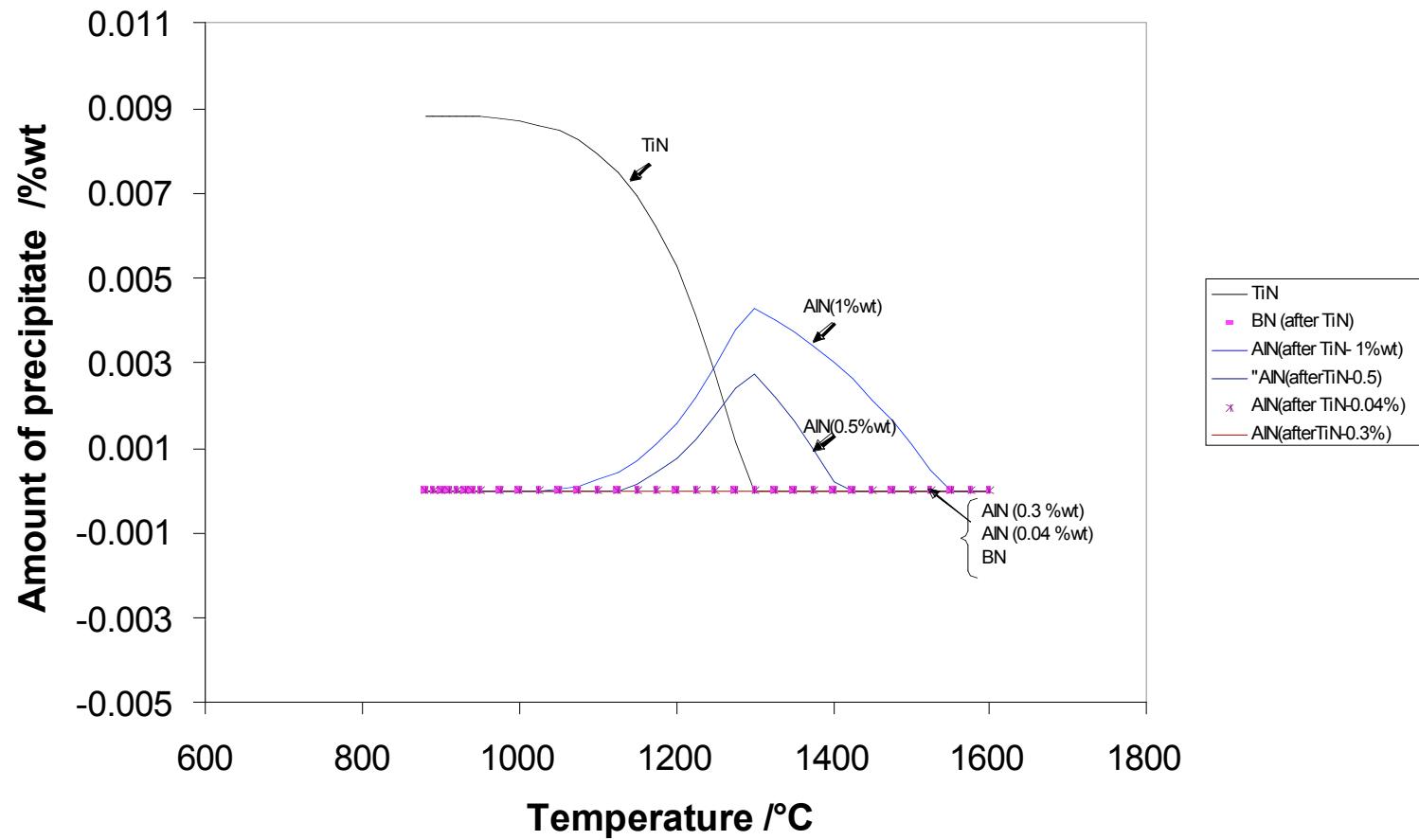


Figure 1- Solubility product vs temperature for SB5

SB5 C = 0.35 Si = 1.50 Mn = 2.00 Al = 1.00 Co = 1.00 Cr = 0.00
 B = 0.0025 Ti = 0.01 Mo = 0.00 N = 0.002 (wt%)

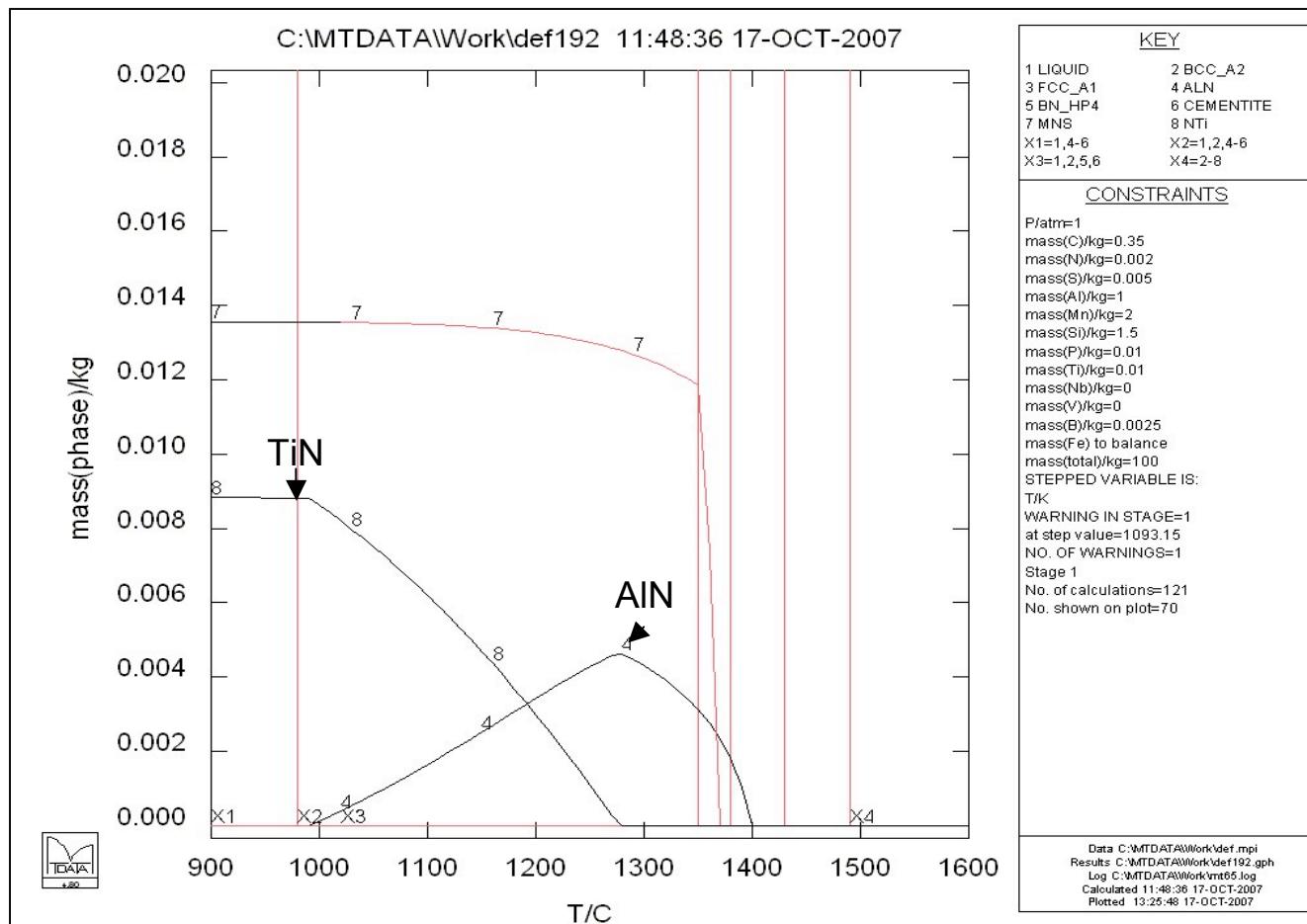


Figure 2

Amount of precipitate BN & AlN (Al varied (0.04 to 2 wt %) verses temperature

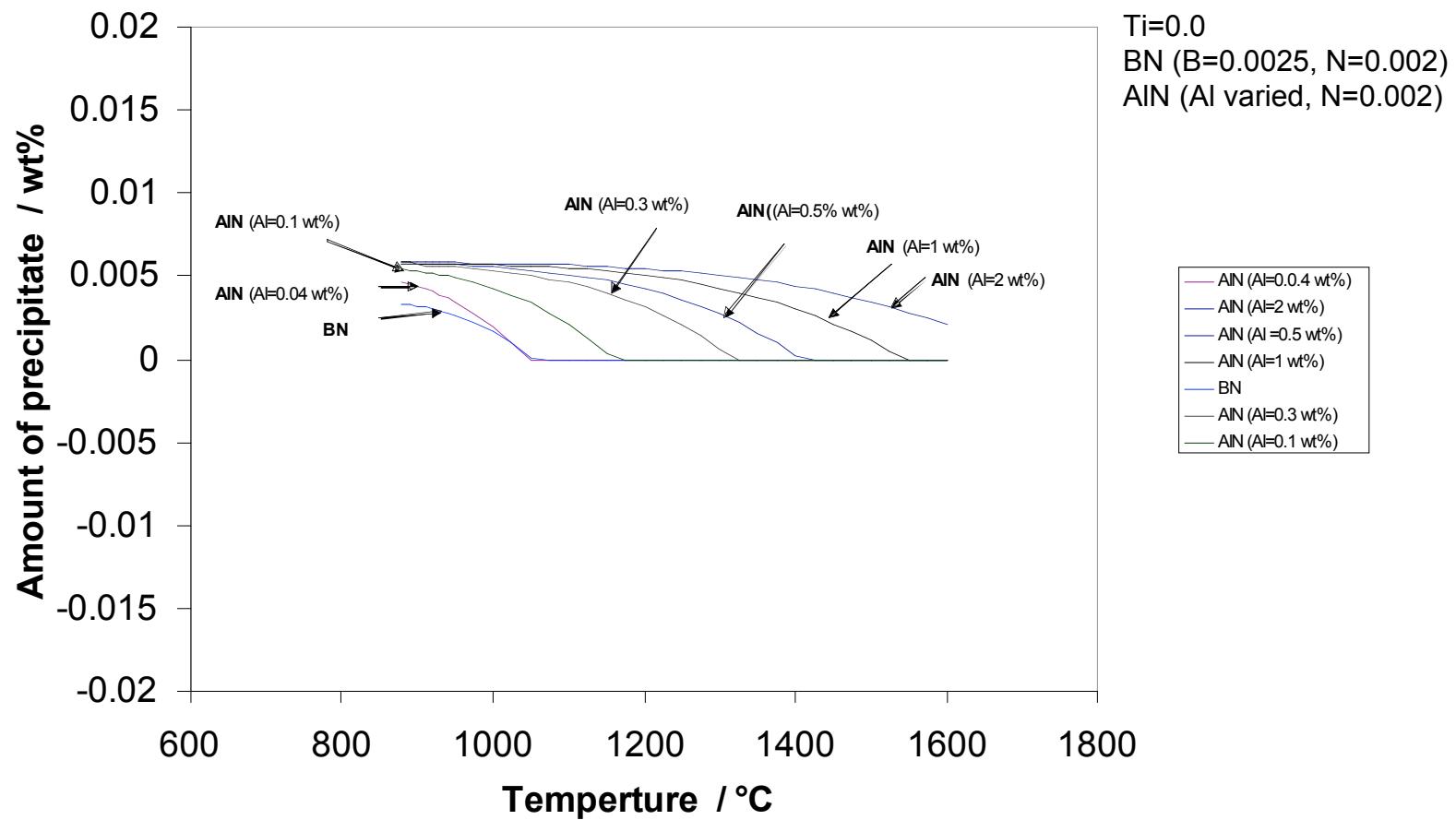


Figure 3

$Al=1$, $B=0.0025$, $N=0.002$ wt% but $Ti=0$

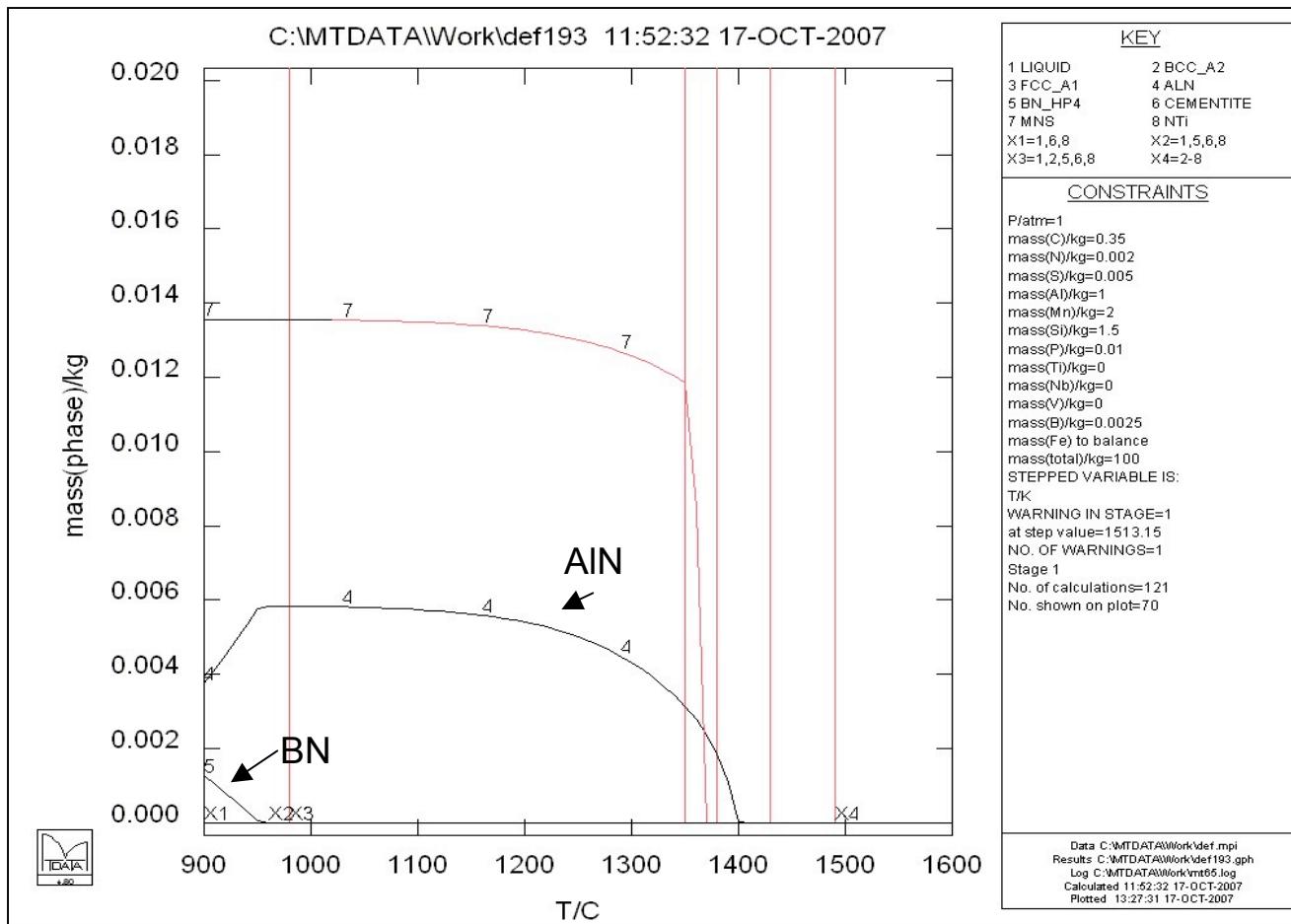


Figure 4

Al=0.04, B=0.0025, N=0.002 wt% but Ti =0

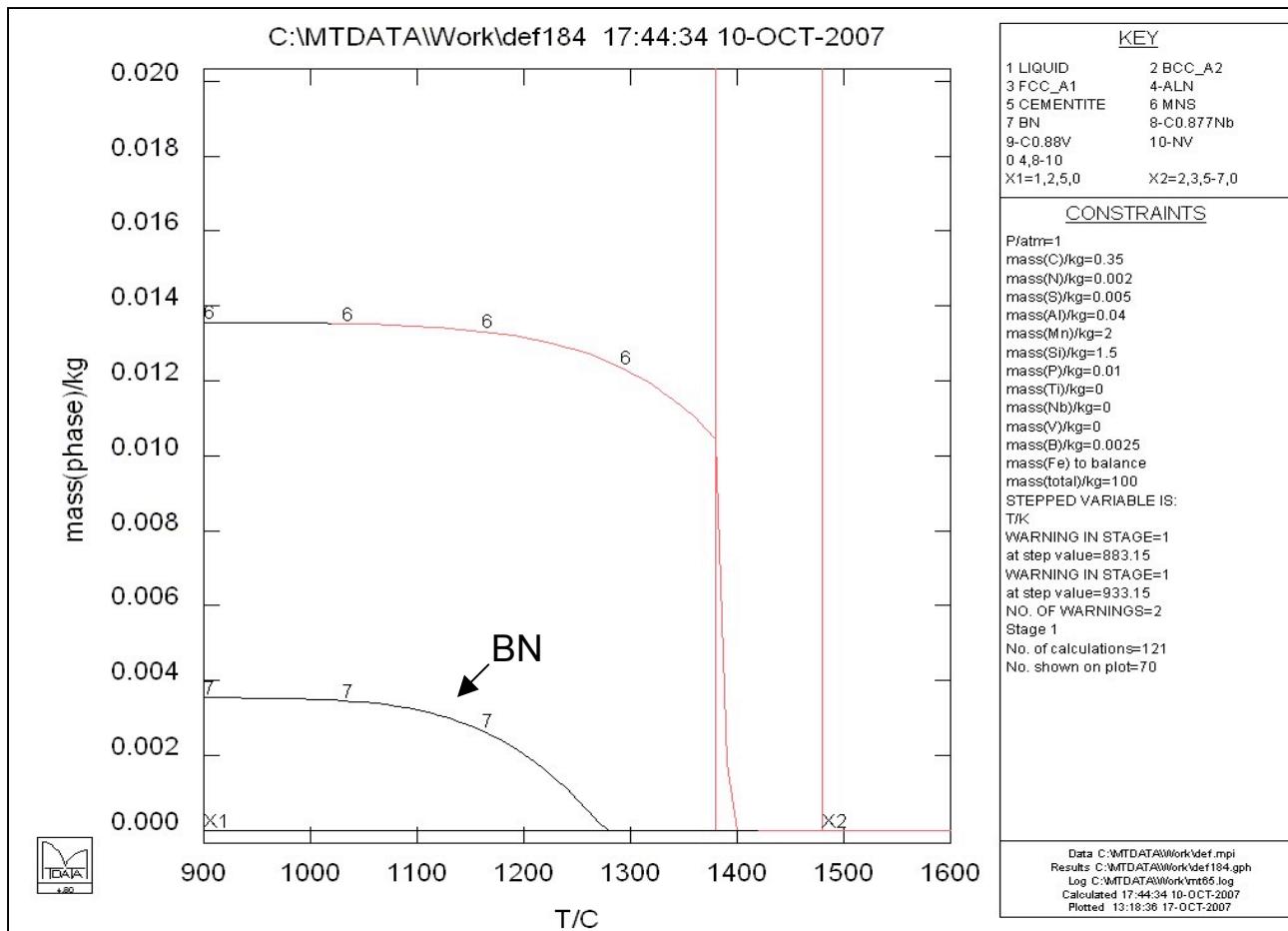


Figure 5

Temperature dependence of solubility product for TiN, AlN & BN

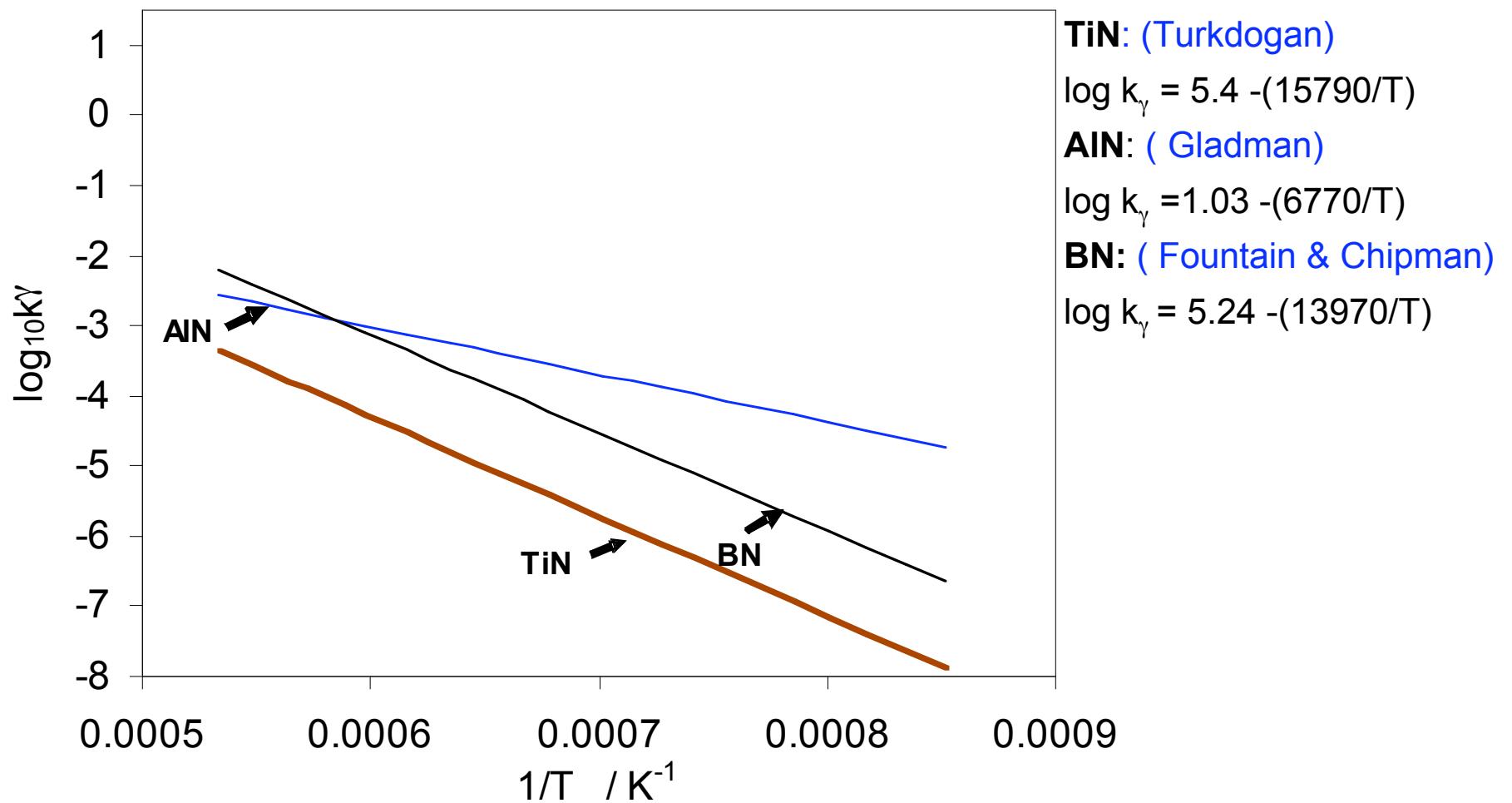
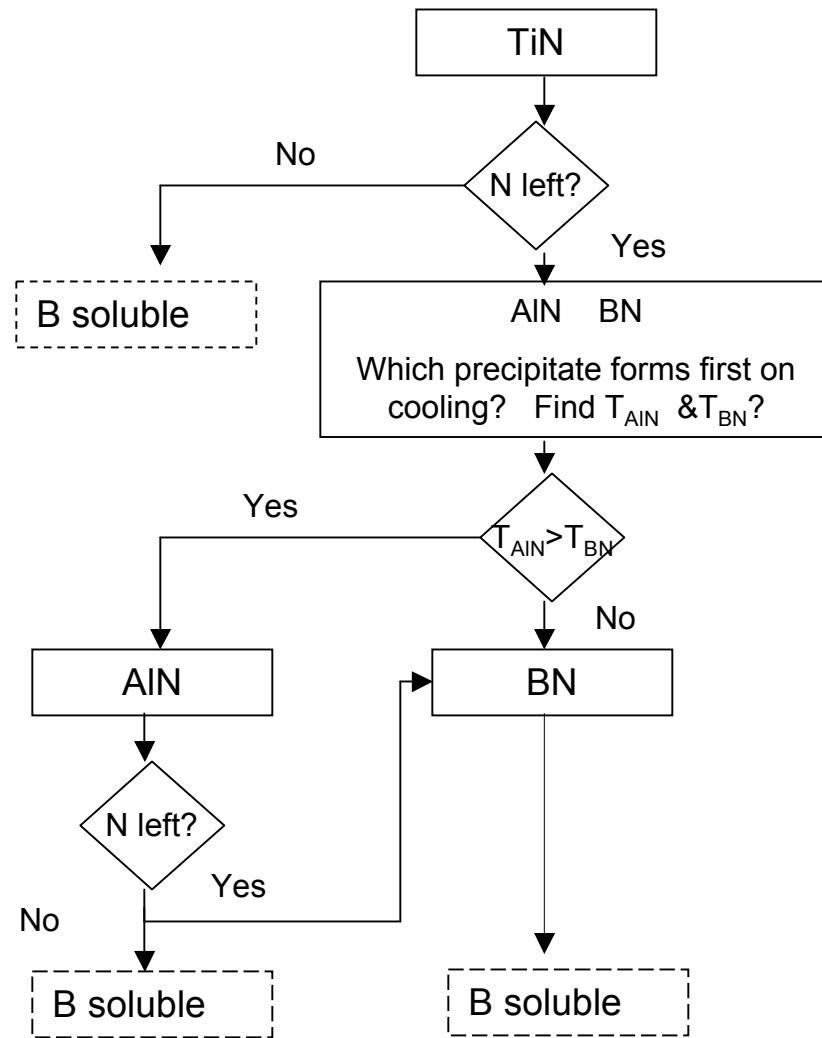


Figure 6

Flow chart to include effect of soluble boron on TTT diagram



T_{AIN} : Temperature at which AIN precipitate forms first.
 T_{BN} : Temperature at which BN precipitate forms first.

Figure 7