Fig 1

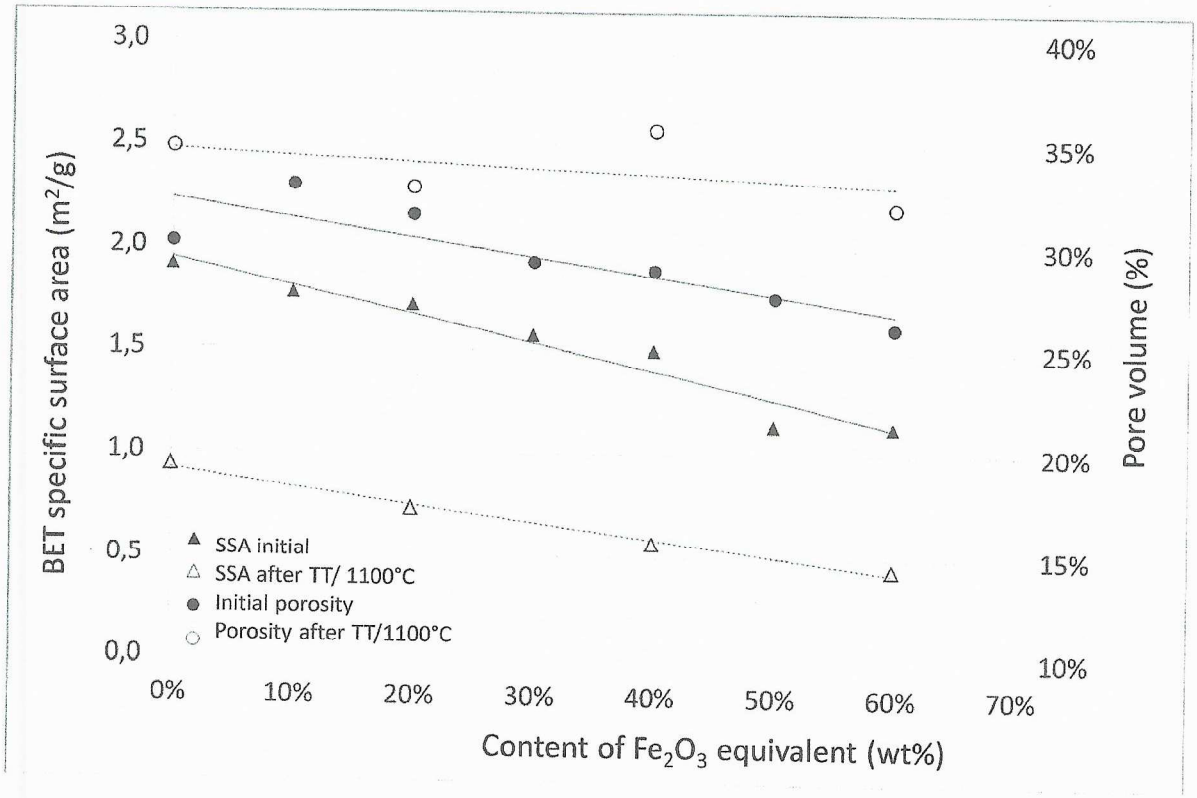

3,0
2,5
2,0
1,5
1,0
0,5
0,0
BET specific surface area (m²/g)
40%
35%
30%
25%
20%
15%
10%
Pore volume (%)
SSA initial
SSA after TT/ 1100°C
Initial porosity
Porosity after TT/1100°C
0%
10%
20%
30%
40%
50%
60%
70%
Content of Fe2O3 equivalent (wt%)

Fig 2

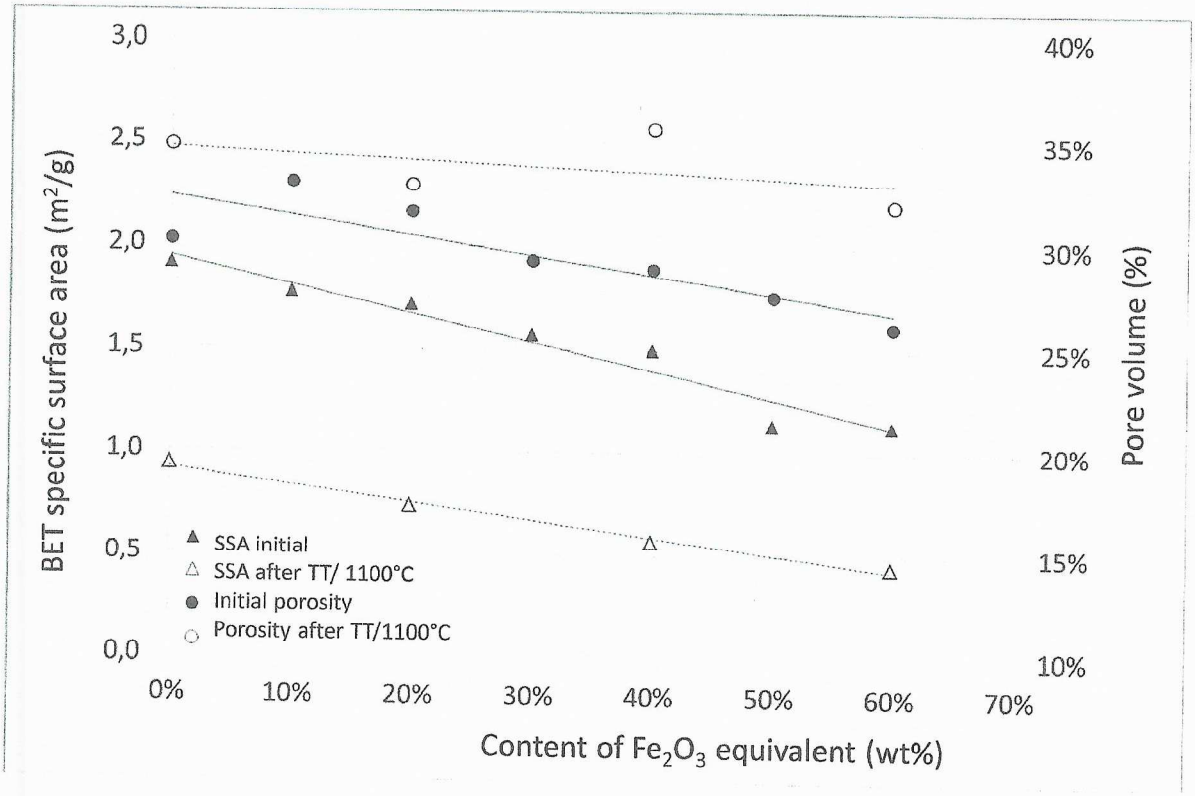

3,0
2,5
2,0
1,5
1,0
0,5
0,0
BET specific surface area (m²/g)
40%
35%
30%
25%
20%
15%
10%
Pore volume (%)
SSA initial
SSA after TT/ 1100°C
Initial porosity
Porosity after TT/1100°C
0%
10%
20%
30%
40%
50%
60%
70%
Content of Fe2O3 equivalent (wt%)

Fig 3

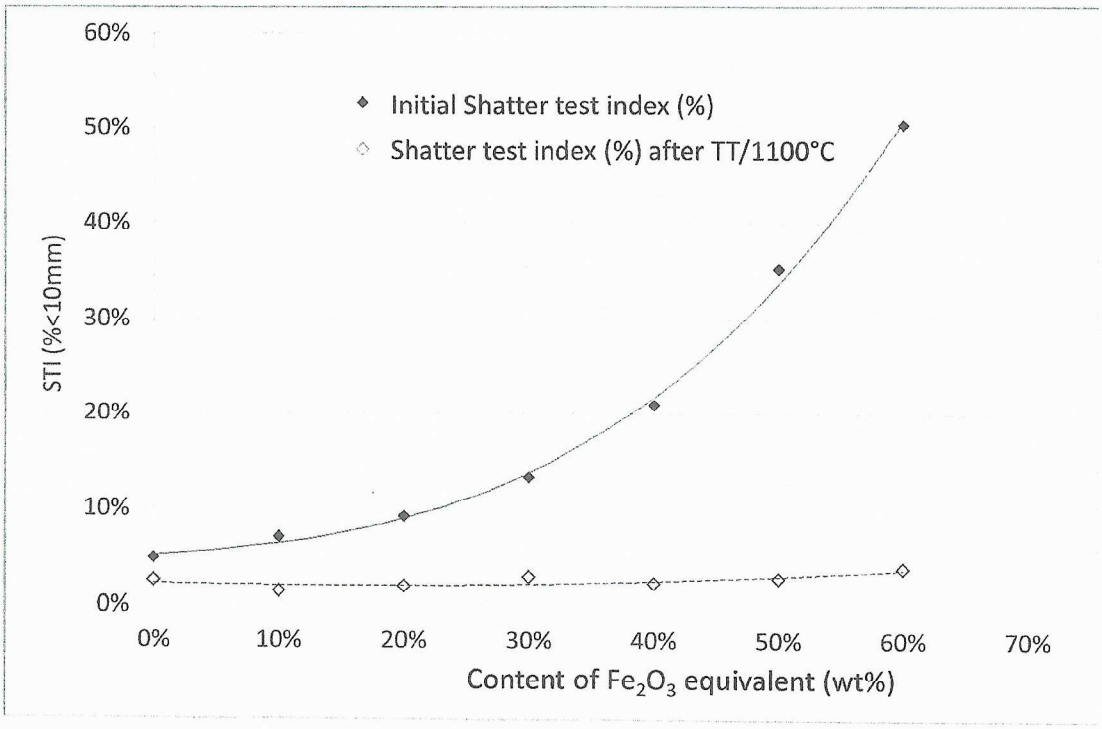

60%
50%
40%
30%
20%
10%
0%
STI (%<10mm)
Initial Shatter test index (%)
Shatter test index (%) after TT/1100°C
0%
10%
20%
30%
40%
50%
60%
70%
Content of Fe_2O_3 equivalent (wt%)

Fig 4

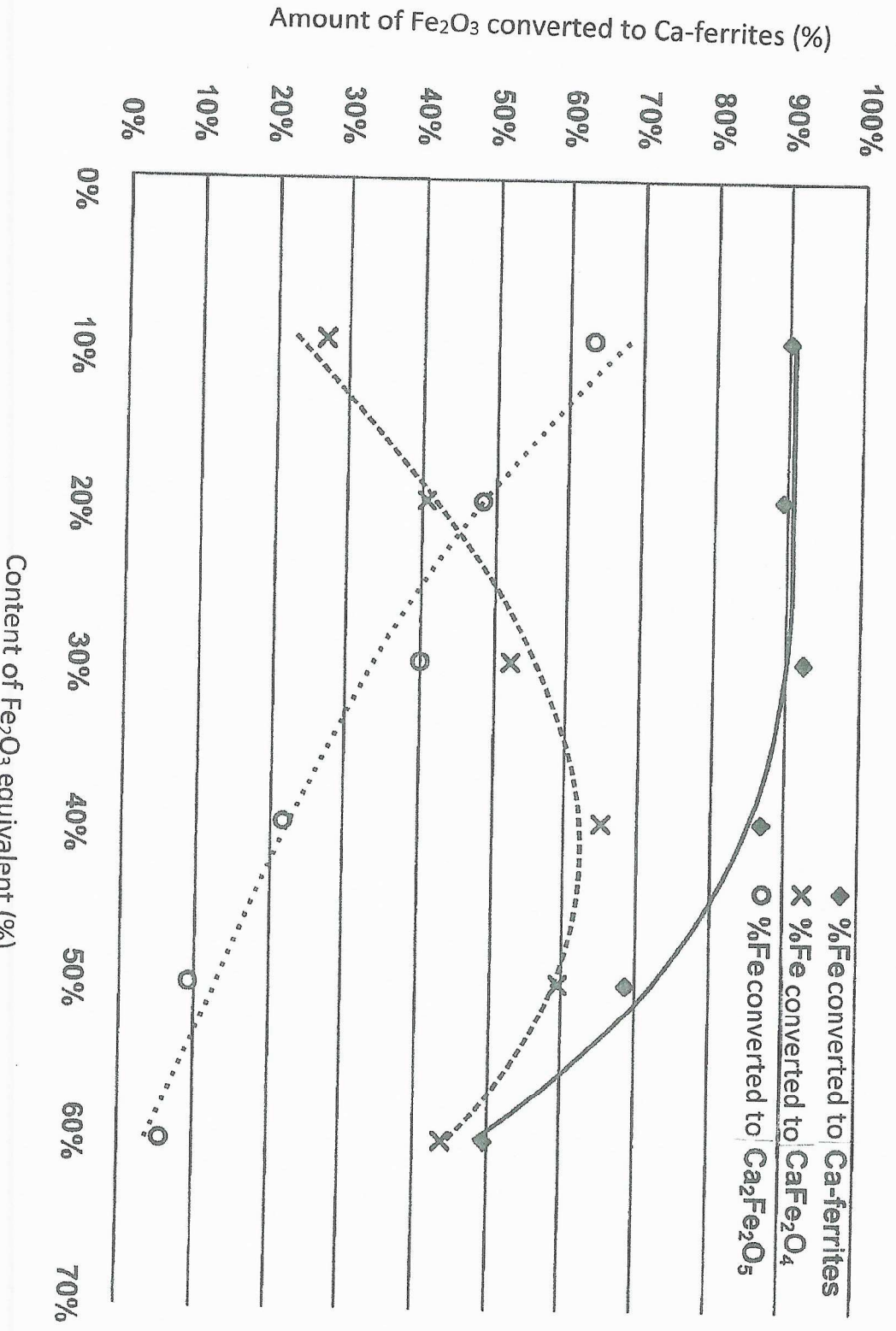

Amount of Fe_2O_3 converted to Ca-ferrites (%)
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
◆ %Fe converted to Ca-ferrites
× %Fe converted to $CaFe_2O_4$
○ %Fe converted to $Ca_2Fe_2O_5$
0%
10%
20%
30%
40%
50%
60%
70%
Content of Fe_2O_3 equivalent (%)

Fig 5

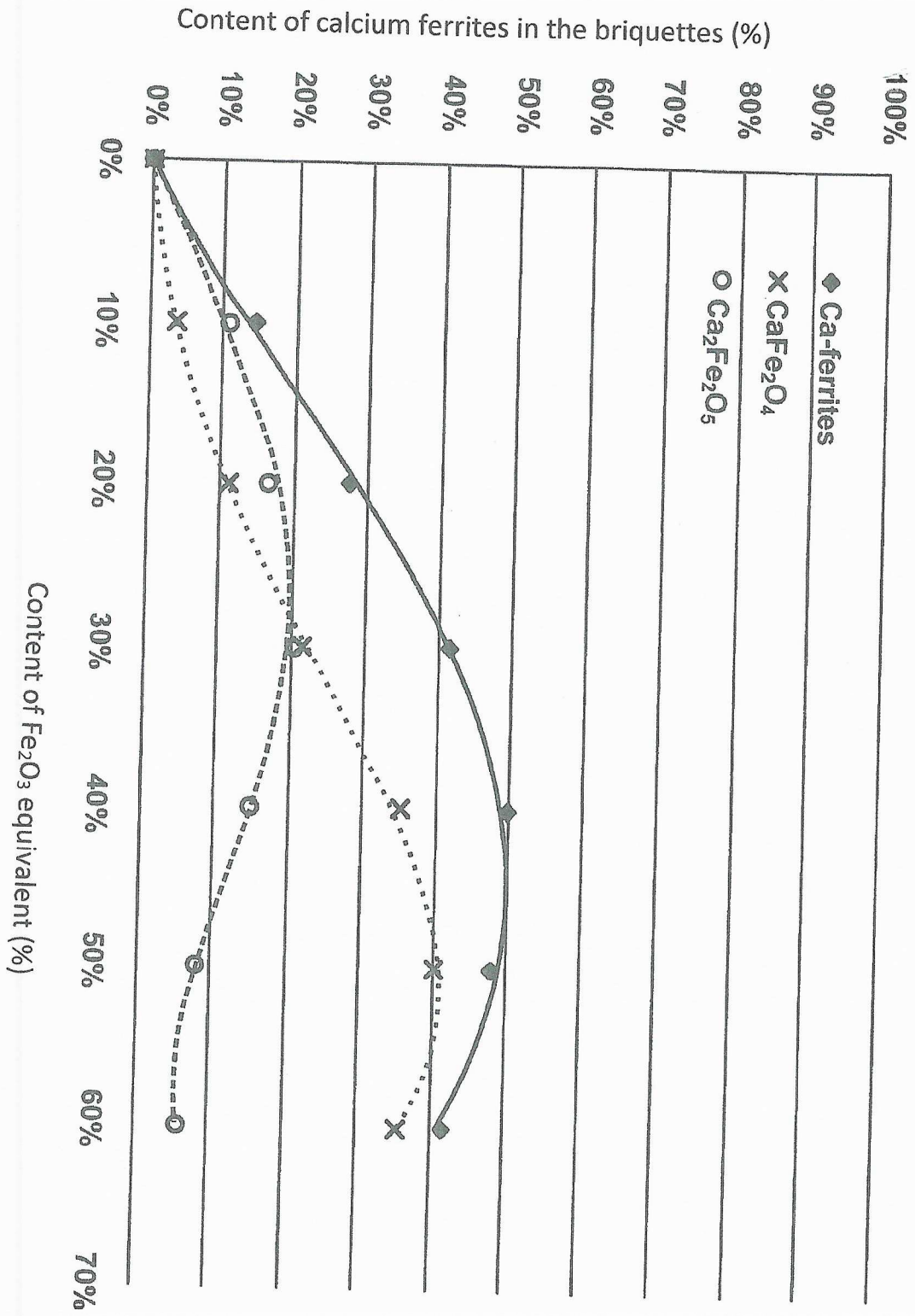
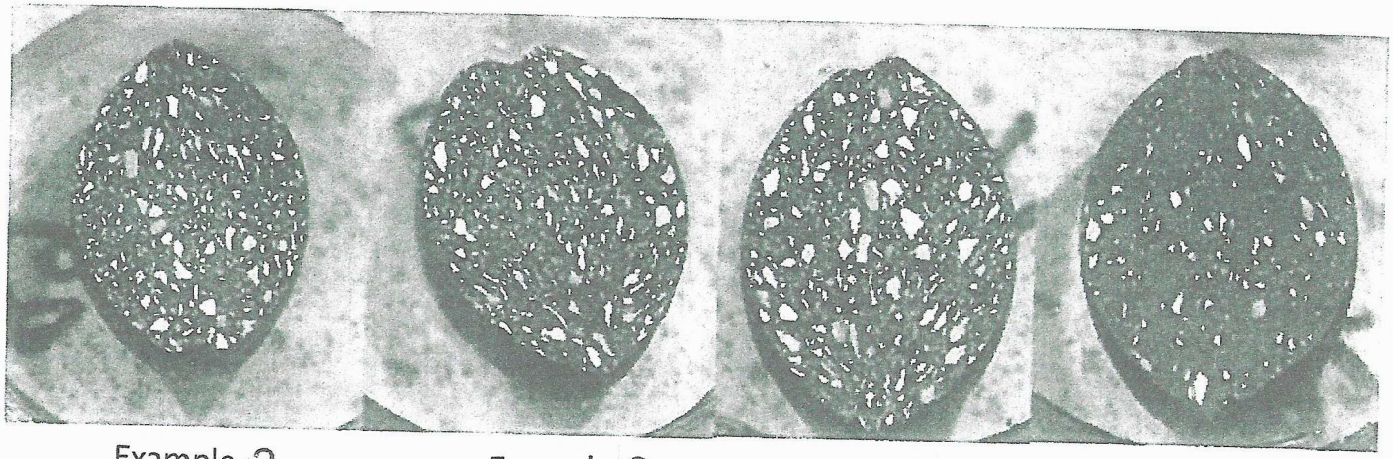
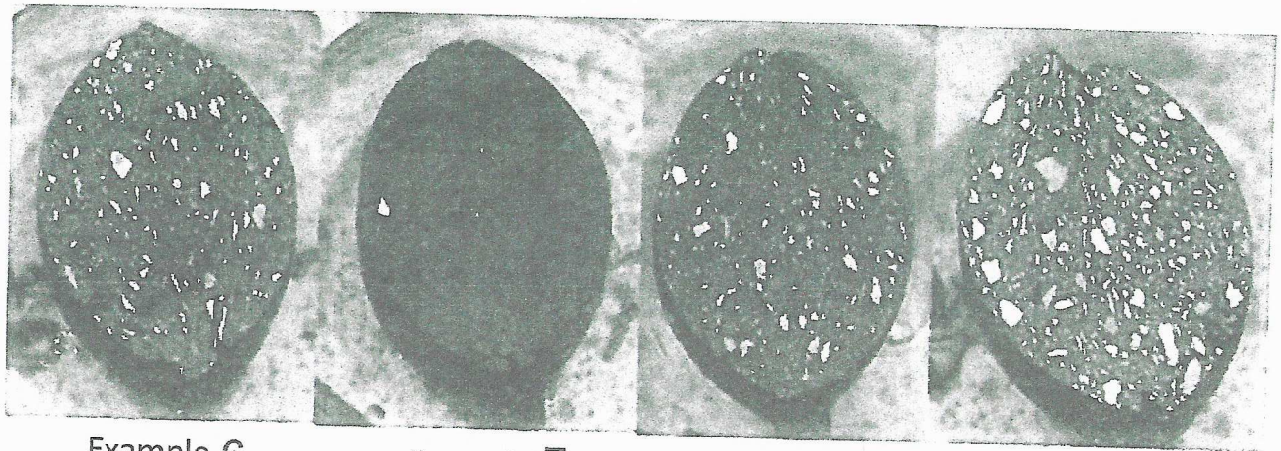

Content of calcium ferrites in the briquettes (%)
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
◆ Ca-ferrites
× $CaFe_2O_4$
○ $Ca_2Fe_2O_5$
0%
10%
20%
30%
40%
50%
60%
70%
Content of Fe_2O_3 equivalent (%)

Fig 6



Example 2 Example 3 Example 4 Example 5



Example 6 Example 7 Example 8 Example 9