Supplementary Materials

Data obtained for Not Reacted Core model application is detailed in Table S1.

Table S1: Data obtained from Nichols Pilot test at 850 °C.

Time (h)	Temperature (°C)	Volatile material (%)	Ashes (%)	Fixed carbon (%)	Iodine number (mgI$_2$/g)	Apparent density (g/cm^3)	Conversion
0		75,3	9,1	15,6			0,003
1	335	75,5	4,7	19,8		0,41	0,000
2	390	74,7	6,1	19,2		0,39	0,011
3	435	56,8	7,3	35,9		0,39	0,248
4	485	32,8	5,6	61,6		0,36	0,566
5	530	17,9	3,5	78,6		0,41	0,763
6	565	14,2	6,3	79,5		0.42	0,812
7	600	5,9	4,8	89,3	408	0,42	0,922

Then Equation 11 was employed for B constant calculation by lineal regression as it is shown in Figure S1.
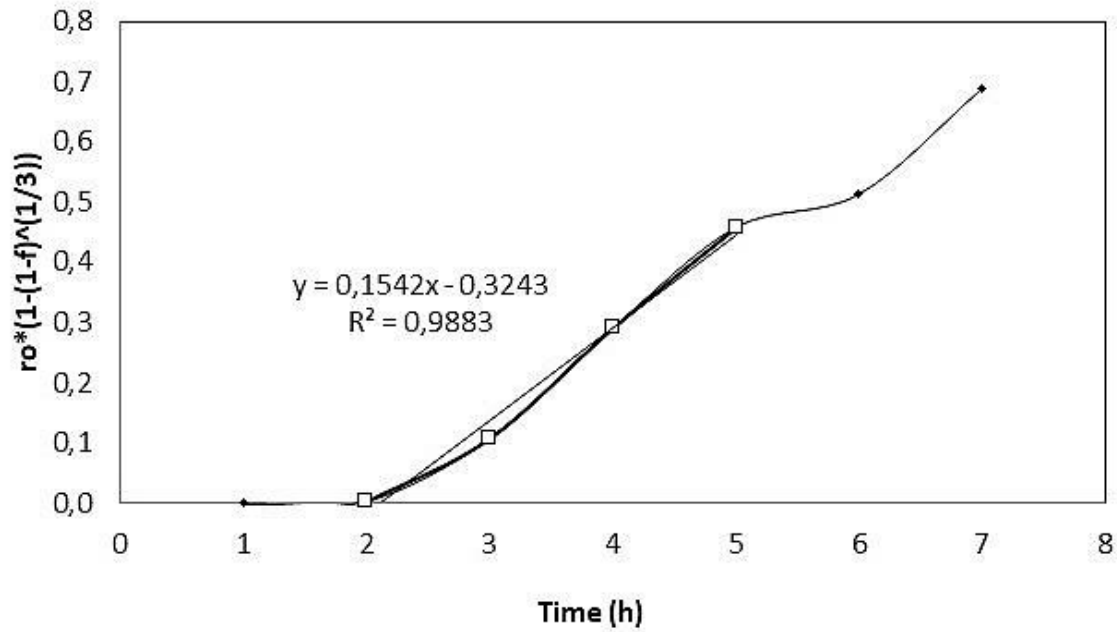
Figure S1: Conversion determined with the Not Reacted Core Model (Equation 11) using data from Table S1.

Finally, Table S2 it is shown conversions obtained with the Not Reacted Core model and those obtained experimentally. This data supports the results demonstrated in Figure 5.

Table S2: Conversion obtained experimentally from Nichols Pilot test at 850 °C and conversion obtained by calculation with the Not Reacted Core Model.

Time (h)	Calculated Conversion (%)	Experimental Conversion (%)
1	33,81	24,77
2	58,98	56,56
3	76,80	76,29
4	88,52	81,19
5	95,43	92,19
6	98,80	
7	99,90	