

Electronic Supplementary Materials

For <https://doi.org/10.1631/jzus.A2000039>

Behavior of alkali minerals in oxyfuel co-combustion of biomass and coal at elevated pressure

Oris CHANSA¹, Zhong-yang LUO^{†1}, Wen-nan ZHANG², Chun-jiang YU¹

¹The State Key Laboratory of Clean Energy Utilization, Zhejiang University, Hangzhou 310027, China

²Department of Chemical Engineering, Mid Sweden University, 85170 Sundsvall, Sweden

[†]E-mail: zylo@zju.edu.cn

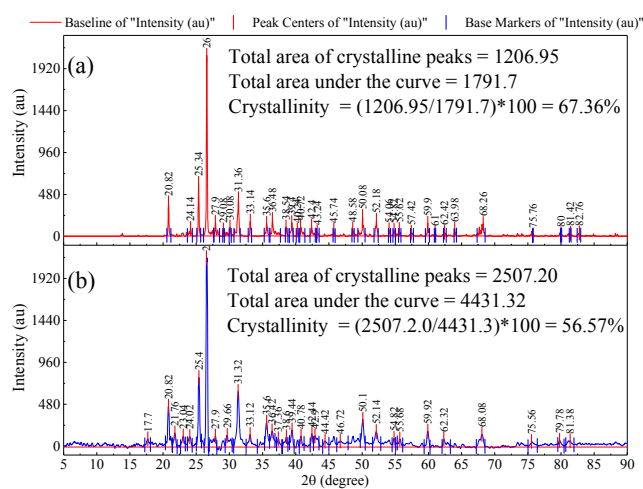


Fig. S1 Crystalline peak positions in the 30% blend sample at 0.1 MPa (a) and 0.5 MPa (b)

Table S1 Summary of crystalline peak positions and areas in the 30% blend sample at 0.1 and 0.5 MPa

Pressure: 0.1 MPa			Pressure: 0.5 MPa		
*Peak position	Individual peak areas	¹ Total area	*Peak position	Individual peak areas	² Total area
20.82	53.65		17.70	40.44	
24.14	24.81		20.82	50.53	
25.34	83.79		21.76	51.48	
26.00	328.79		23.04	51.36	
27.90	36.55		24.04	48.82	
29.08	9.49		25.40	193.78	
30.08	15.52		26.00	524.11	
31.36	108.92		27.90	28.82	
33.14	25.60		29.66	59.46	
35.60	34.34		31.32	243.41	
36.48	66.39		33.12	34.72	
38.54	15.63		35.60	102.00	
39.10	32.41		36.42	76.10	
40.50	11.35		37.36	35.32	
41.42	32.22		38.60	20.88	
42.40	28.31		39.44	71.74	
43.24	9.76		40.78	31.33	
45.74	11.21		42.44	62.20	
48.58	12.98		42.90	70.14	
50.08	55.89		44.42	62.30	
52.18	40.70		46.72	46.32	
54.06	10.49		50.10	117.67	
54.62	11.44		52.14	94.50	
55.82	11.60		54.82	29.42	
57.42	9.44		55.68	33.60	
59.90	26.01		59.92	58.18	
61.00	3.64		62.32	50.29	
62.42	8.32		68.08	84.54	
63.98	11.66		75.56	42.63	
68.26	58.80		79.78	36.67	
75.76	0.22		81.36	54.42	
80.00	3.20				
81.42	4.83				
82.76	8.99				
Total	1206.95	1791.72	Total	2507.20	4432.32

¹Total area obtained by curve integration from 12.56° to 88.8° as shown in Fig. S1

²Total area obtained by curve integration from 5.0° to 89.68° as shown in Fig. S1

*The peaks are for crystalline phases