

*Electronic Supplementary Information for*

**Catalytic pyrolysis of individual components of biomass**

Kaige Wang, Kwang Ho Kim and Robert C. Brown

Table S1. Minerals and overall ash, moisture content of feedstock (as received basis)

Parameters tested	Cellulose	Hemicellulose	Lignin	Switchgrass	Control Switchgrass	Control Hemicellulose
Zn (ppm)	n.d.	328	384	217	165	351
Al (ppm)	n.d.	14	n.d.	167	1440	318
Ca (ppm)	15	2395	99	809	1614	1092
Cu (ppm)	n.d.	n.d.	n.d.	n.d.	1579	260
Fe (ppm)	n.d.	n.d.	n.d.	n.d.	13242	304
K (ppm)	13	43	56	888	2299	9944
Mg (ppm)	n.d.	n.d.	n.d.	n.d.	882	270
Mn (ppm)	n.d.	n.d.	n.d.	n.d.	6964	297
P (ppm)	n.d.	n.d.	n.d.	n.d.	1542	276
Ash content (wt.%)	0.25	2.34	0.58	2.27	4.31	3.48
Moisture content (wt.%)	5.98	4.44	5.15	4.29	2.46	6.75

n.d.: non-detectable