Electronic Supplementary Information

Graphitization of *Miscanthus* grass biocarbon enhanced by *in situ* generated FeCo nanoparticles

Ian Major,^{1,2} Jean-Mathieu Pin,¹ Ehsan Behazin,^{1,2} Arturo Rodriguez-Uribe,¹ Manjusri Misra,^{1,2}

Amar Mohanty*^{1,2}

¹Bioproducts Discovery and Development Centre, Department of Plant Agriculture, Crop Science Building, University of Guelph, Guelph, NIG 2W1, Ontario, Canada

²School of Engineering, Thornbrough Building, University of Guelph, Guelph, N1G 2W1, Ontario, Canada

*mohanty@uoguelph.ca



Figure S1. SEM micrographs of Raw Miscanthus (A) and Co + Fe nitrate impregnated Miscanthus (B).

Element	Element	Element	Atomic	Weight	
Number	Symbol	Name	Conc.	Conc.	
8	0	Oxygen	50.52	55.51	
6	С	Carbon	48.30	39.83	
27	Со	Cobalt	0.60	2.45	
26	Fe	Iron	0.58	2.21	

Table S1	FDS	element	analysis	manning	from the	microgram	h in	Figure	S1 (F	3)
Table SI.		ciement	anarysis	mapping	nom me	merograf	<u>יוו ווי</u>	riguie	21 (1	J).



Figure S2. Pore volume distribution for Raw Miscanthus and Miscanthus impregnated with both Co and Fe nitrate.



Figure S3. Thermogram of the impregnated miscanthus with both Co and Fe nitrate at 10°C.min⁻¹ with the electromagnet active.