

Supplementary Materials for
**An integrated process for the production of 2, 5-
dihydroxymethylfuran and its polymer from fructose**

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Figs. S1 to S5

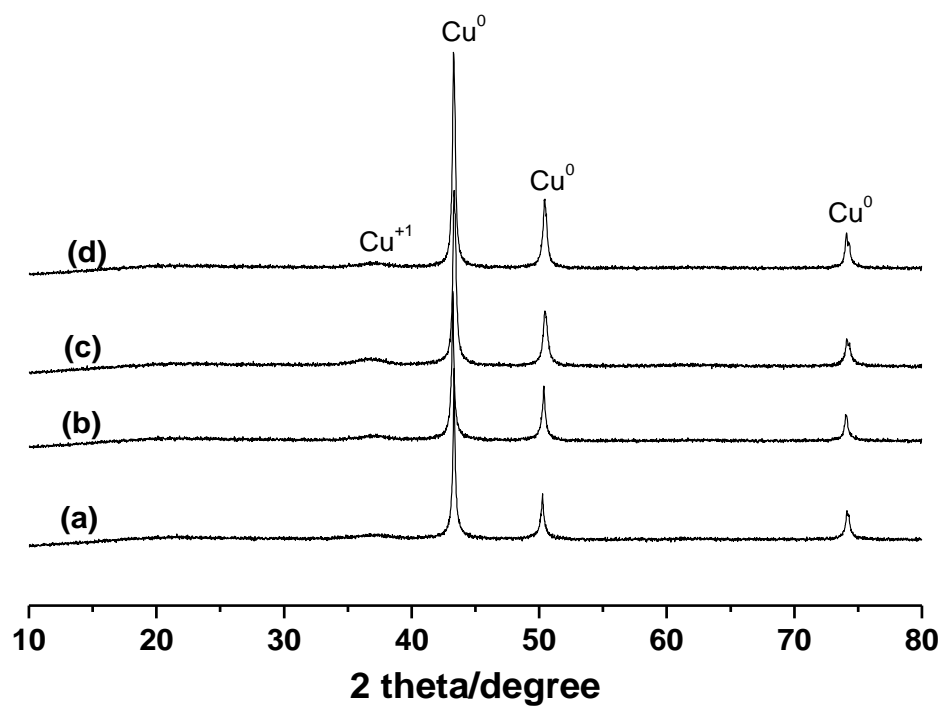


Figure S1. XRD of catalysts, a) Cu(40)-SiO₂, b) Cu(50)-SiO₂, c) Cu(60)-SiO₂, and d) Cu(80)-SiO₂.

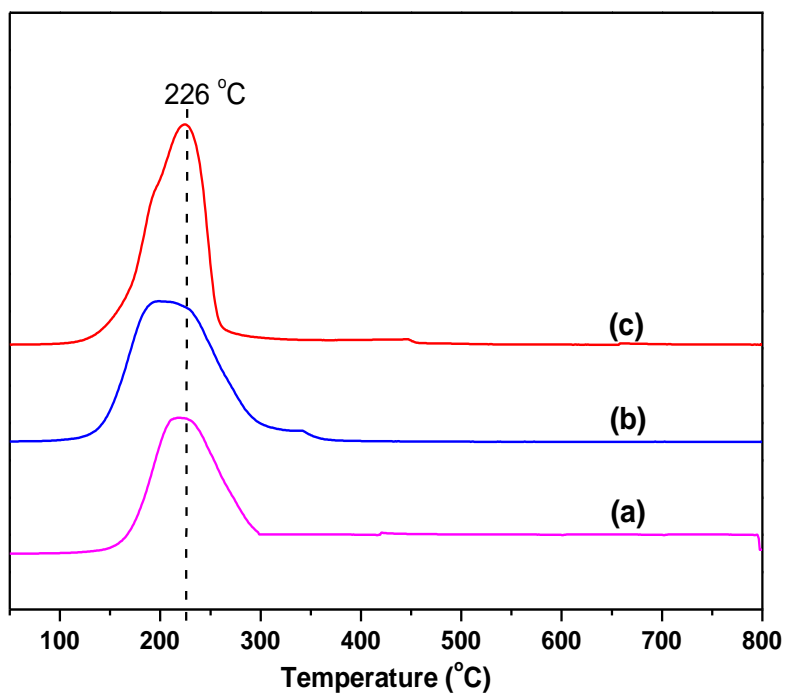
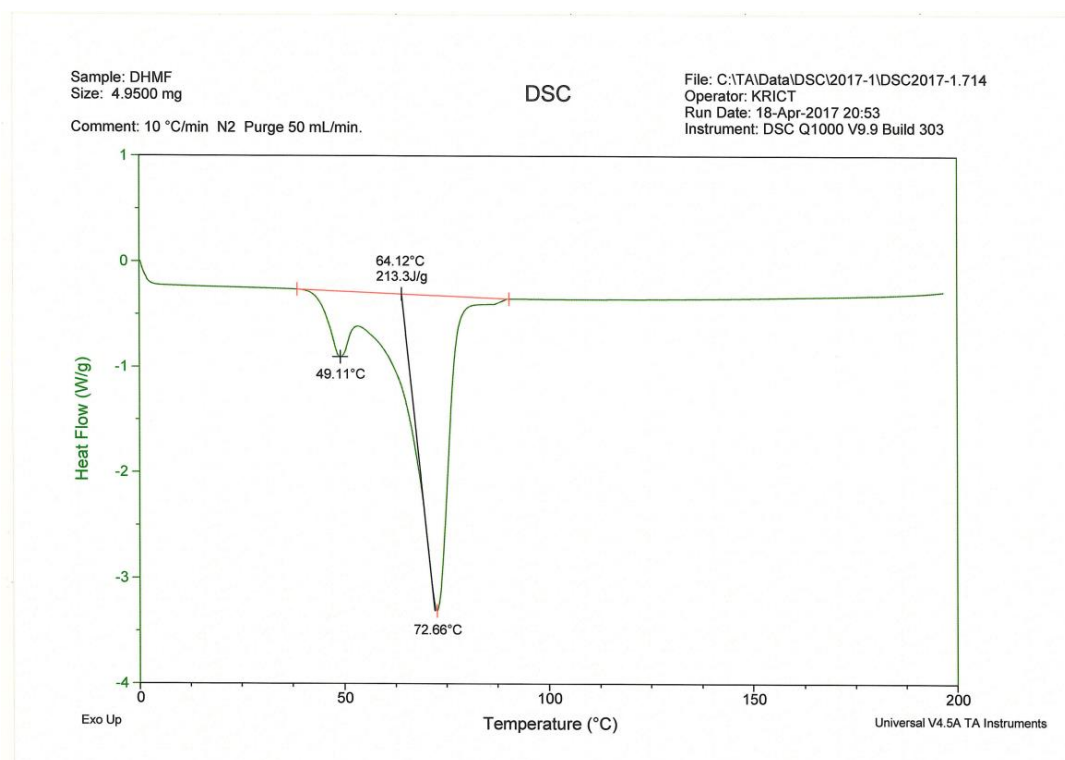
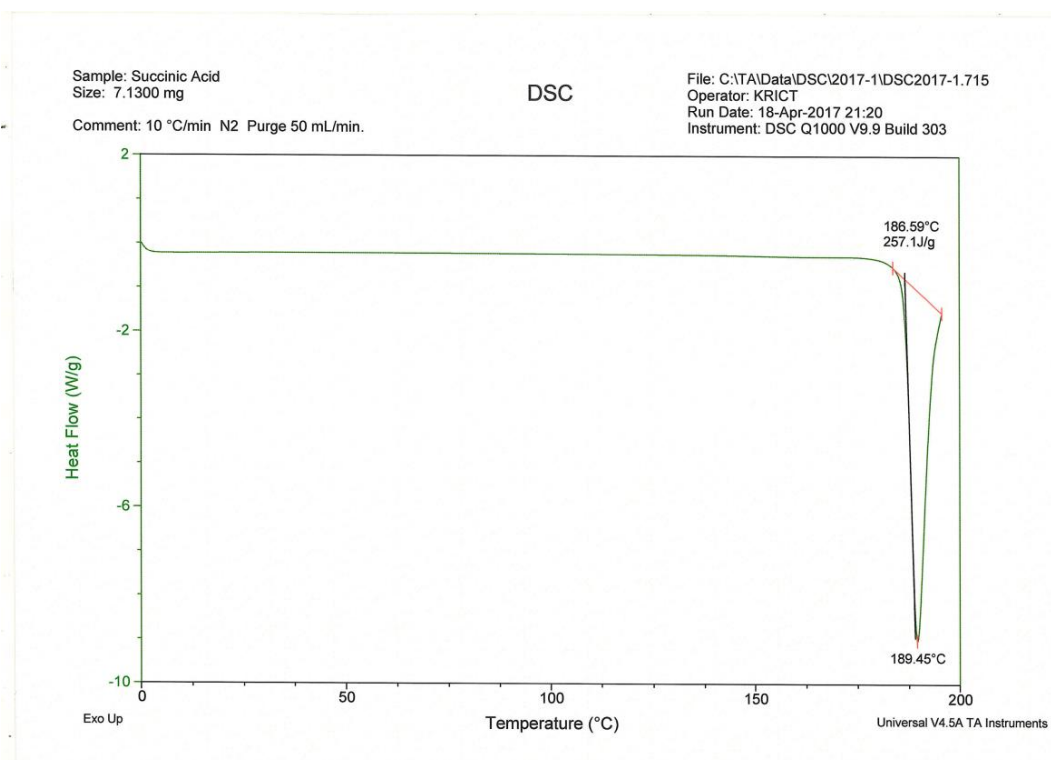


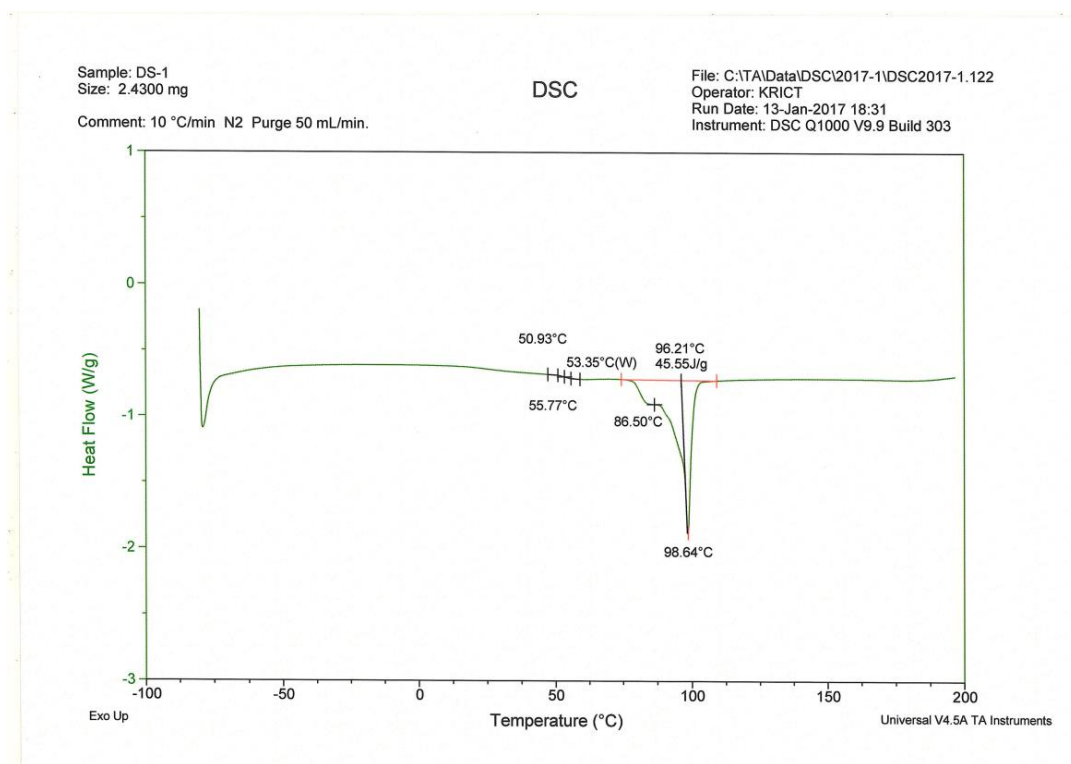
Figure S2 H₂-TPR of calcined catalysts, a) Cu(40)-SiO₂, b) Cu(50)-SiO₂, and c) Cu(60)-SiO₂



(A) DHMF



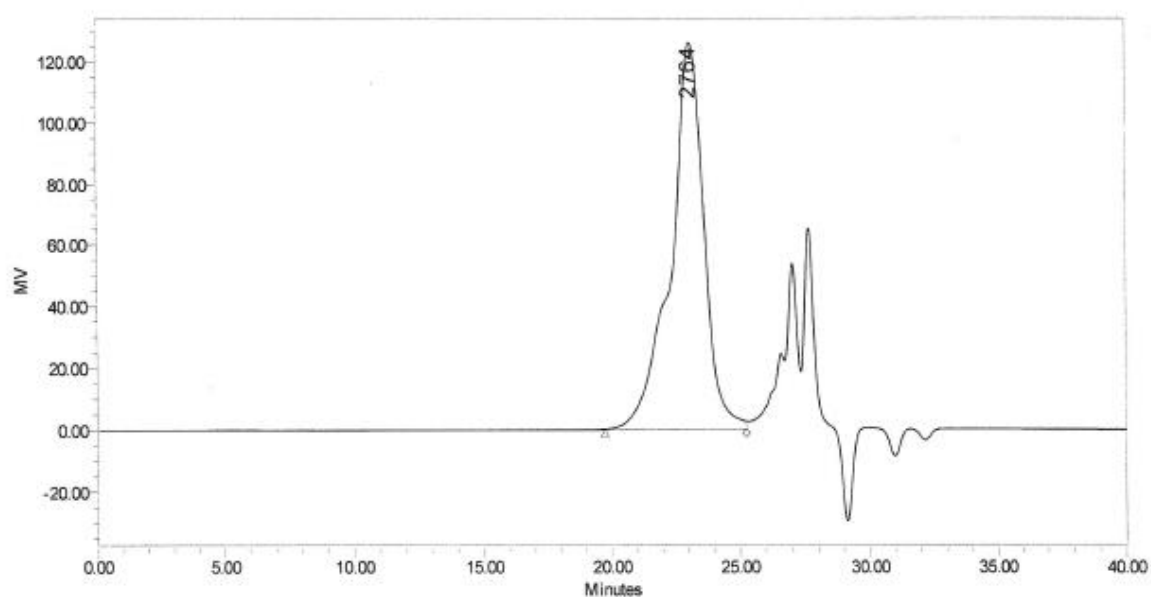
(B) succinic acid



(C) PFS polymer

Figure S3. DSC profile of A) DHMF, B) succinic acid, and C) poly (2, 5-furandimethylene succinate)

SAMPLE INFORMATION			
Sample Name:	DS-1	Acquired By:	System
Sample Type:	Broad Unknown	Sample Set Name	20160907
Vial:	2	Acq. Method Set:	THF_1
Injection #:	2	Processing Method:	THF 27 00B
Injection Volume:	100.00 ul	Channel Name:	410
Run Time:	40.0 Minutes	Proc. Chnl. Descr.:	410
Date Acquired: 9/7/2016 5:17:38 PM KST			
Date Processed: 9/8/2016 2:56:44 AM KST			



GPC Results

Dist Name	Mn	Mw	MP	Mz	Mz+1	Polydispersity
1	2719	4046	2764	6723	11444	1.488348

Figure S4. GPC analysis of poly-(2, 5-furandimethylene succinate)

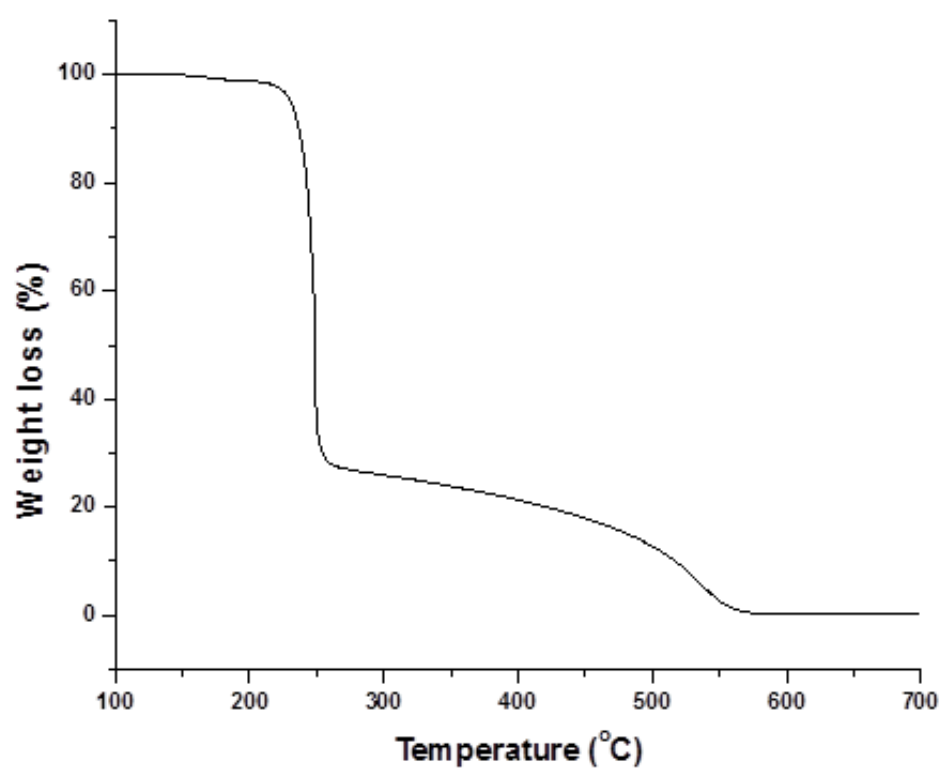


Figure S5. TGA of poly-(2, 5-furandimethylene succinate)