

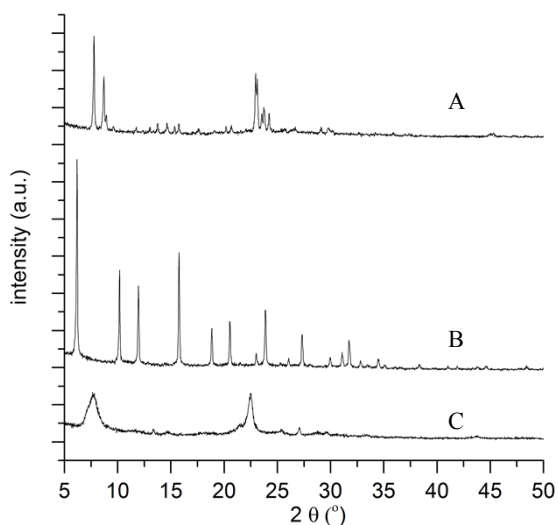
Supporting Information

Correlating lignin structure to aromatic products in the catalytic fast pyrolysis of lignin model compounds containing β -O-4 linkages

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SFigure 1 XRD patterns of A) Z23, B) ZY, and C) ZB.

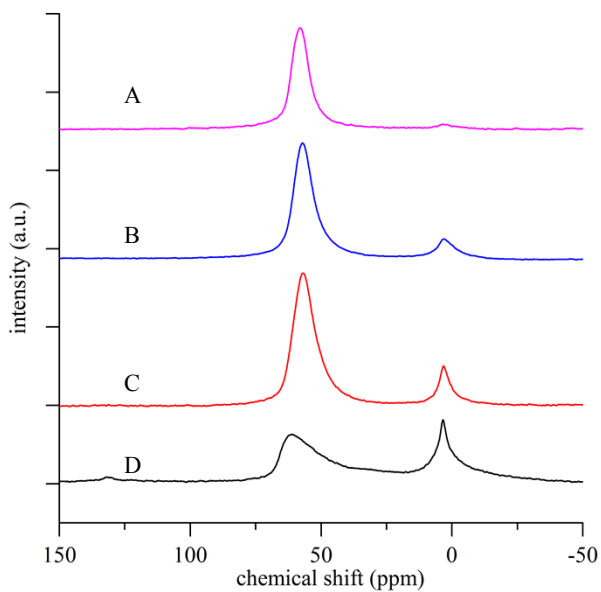


Figure 2 ^{27}Al MAS NMR of A) Z50, B) Z23, C) ZB, and D) ZY

Table S1. Textural properties of hierarchical materials. Adapted with permission from (G. T. Neumann and J. C. Hicks, *Crystal Growth & Design*, 2013, **13**, 1535-1542.). Copyright (2013) American Chemical Society.

Material	V_{Total} (cm^3/g) ^a	V_{micro} (cm^3/g) ^b	V_{meso} (cm^3/g) ^c	Total Acidity (mmol/g) ^d	BJH Pore Diameter (\AA)	SA_{BET} (m^2/g)
micro	0.35	0.14	0.02	0.19	-	410
4 hr	0.51	0.14	0.32	0.14	57	855
12 hr	0.50	0.14	0.30	0.17	125	588
18 hr	0.43	0.14	0.25	0.19	250	405
48 hr	0.37	0.14	0.19	0.14	250	385
216 hr	0.34	0.14	0.16	0.13	370	320