Supporting Information for

Oxidation-resistant Acidic Resins Prepared by Partial Carbonization as Cocatalysts in Synthesis of Adipic Acid

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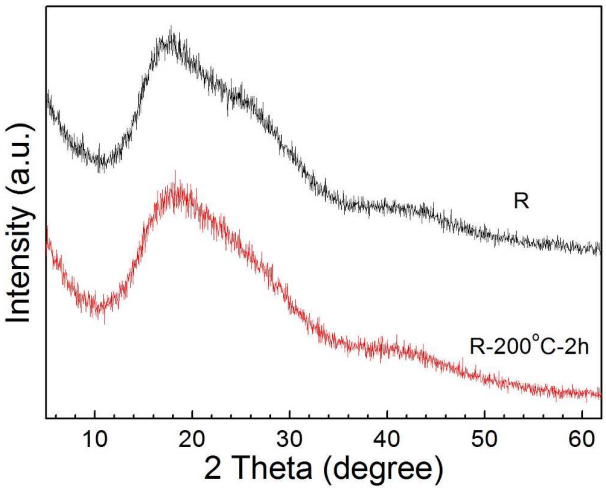

Figure S1. The XRD spectra of R and R-200°C-2h sample.

Powder X-ray diffraction (XRD) were performed on Panalytical X' pert PRO Diffractometer with Cu Kα (λ=1.5406 Å) and a scanning rate of 1.2 °min^{-1} in the 2 theta ranges from 5 ° to 80 °.

For the R and R-200°C-2h sample, the XRD pattern both exhibit two broad, weak diffraction peaks (2 Theta= 10–30°, 35–50°), which are probably attributed to amorphous carbon composed of aromatic carbon.[S1,S2]

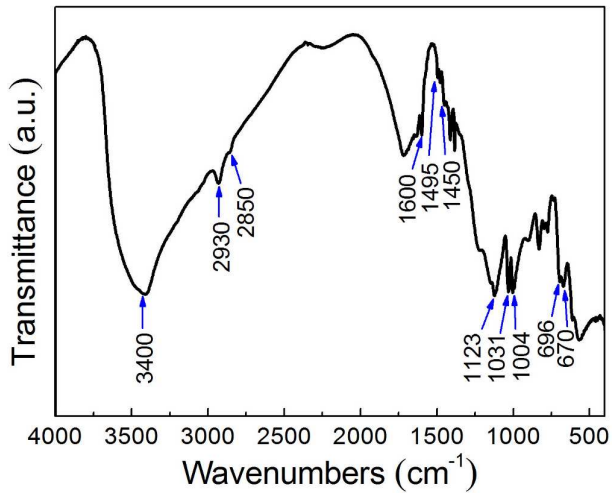

Figure S2. FT–IR spectrum of R-200°C-2h after the sixth reaction.

Table S1. The surface compositions of R and R-200°C-2h.

Sample	C (%)	O (%)	S (%)
R	71.7	22.9	5.4
R-200°C-2h	79.1	16.5	4.5

References

(S1) Hara, M.; Yoshida, T.; Takagaki, A.; Takata, T.; Kondo, J. N.; Hayashi, S.; Domen, K. *Angew. Chem. Int. Ed.* **2004**, *43*, 2955–2958.

(S2) Suganuma, S.; Nakajima, K.; Kitano, M.; Yamaguchi, D.; Kato, H.; Hayashi, S.; Hara, M. *J. Am. Chem. Soc.* **2008**, *130*, 12787–12793.