

ELECTRONIC SUPPLEMENTARY INFORMATION

Alcoholamine enhanced fractionation of cellulose from lignocellulosic biomass in ionic liquids

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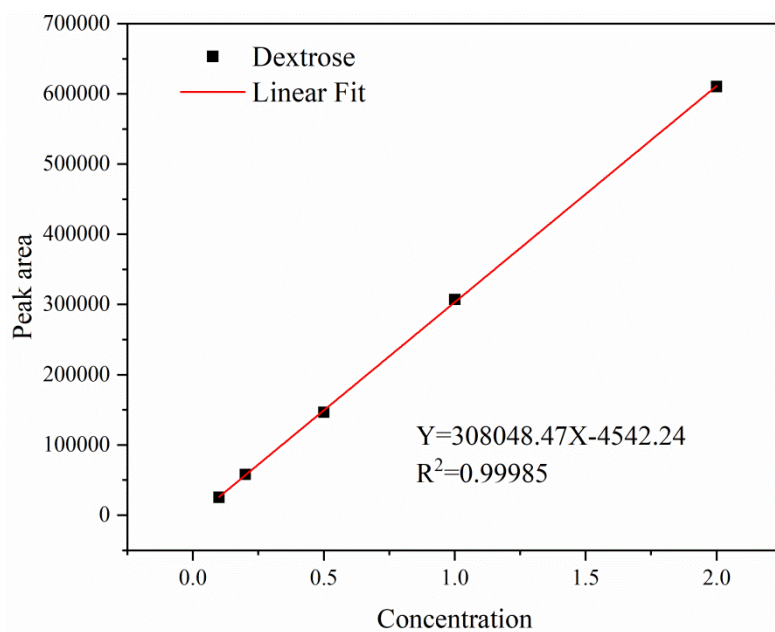


Fig. S1. The standard curve of dextrose for quantitative analysis.

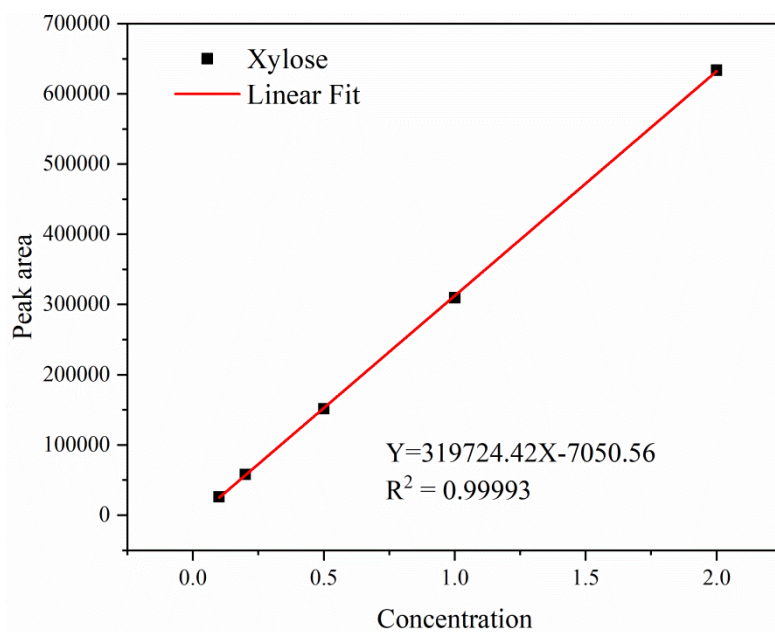


Fig. S2. The standard curve of xylose for quantitative analysis.

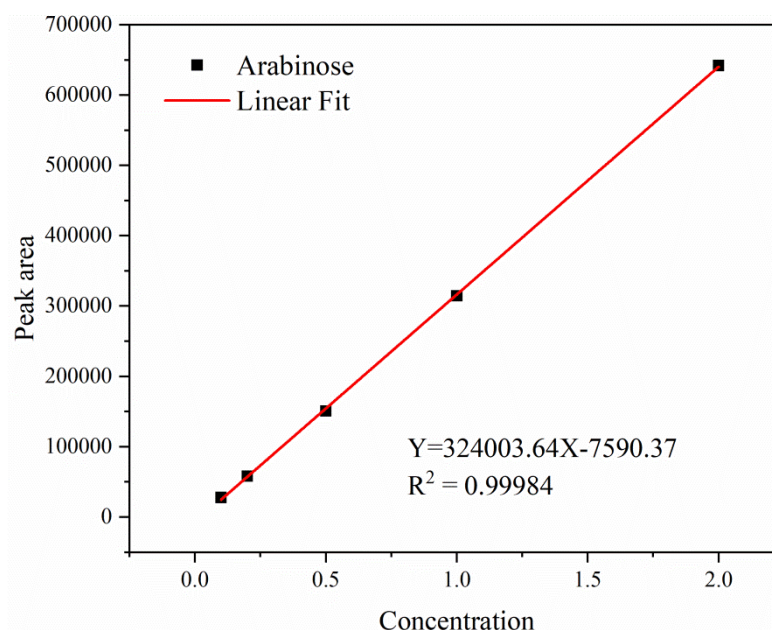


Fig. S3. The standard curve of arabinose for quantitative analysis.

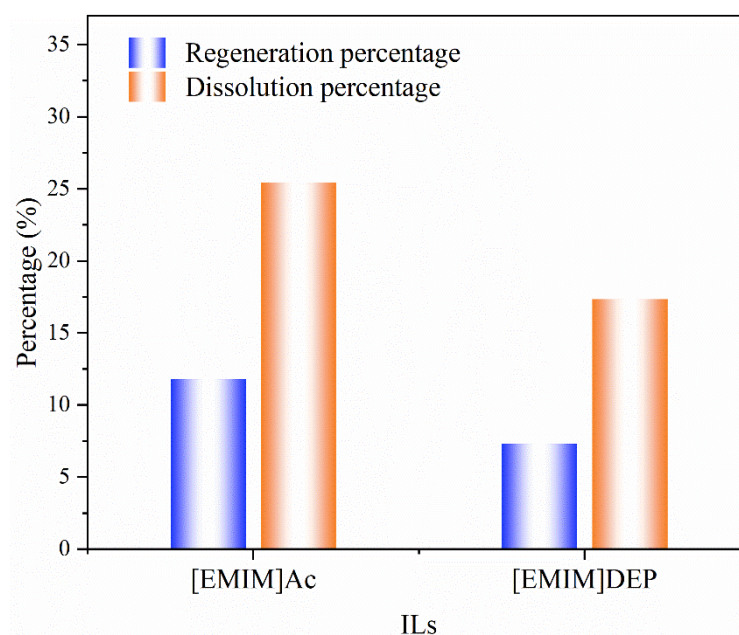


Fig. S4. The dissolution and regeneration efficiency of wheat straw in [EMIM]Ac and [EMIM]DEP under the same conditions (The dissolution temperature was 100 °C and the time was 10 h).

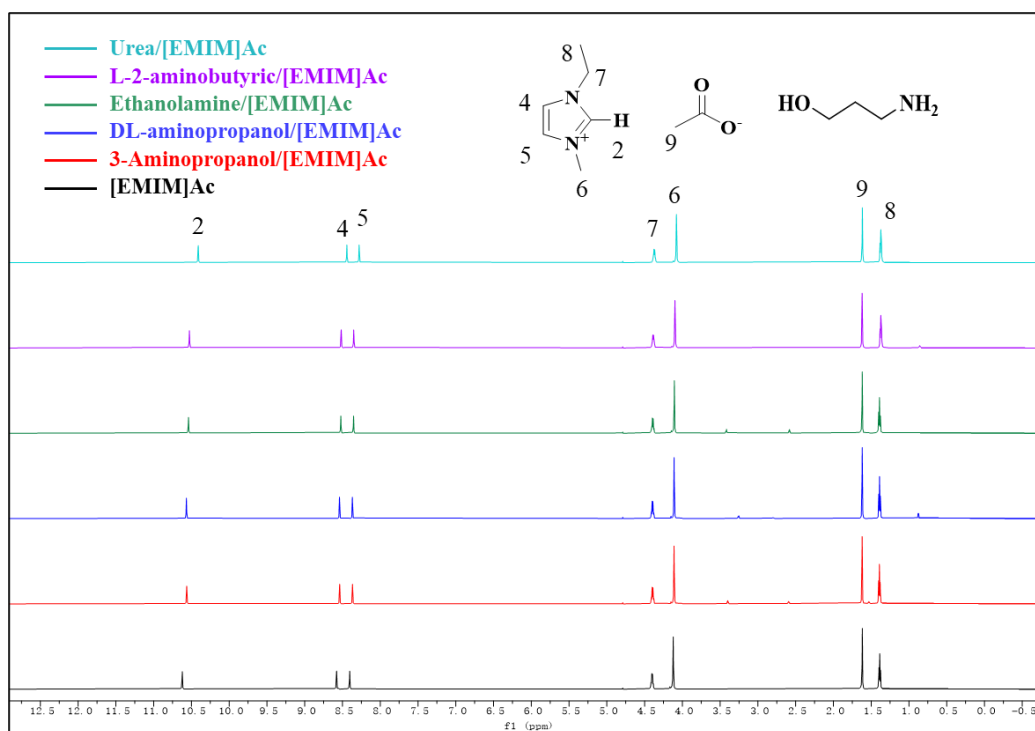


Fig. S5. ^1H NMR spectra of [EMIM]Ac and additive/[EMIM]Ac using D_2O as the external lock.

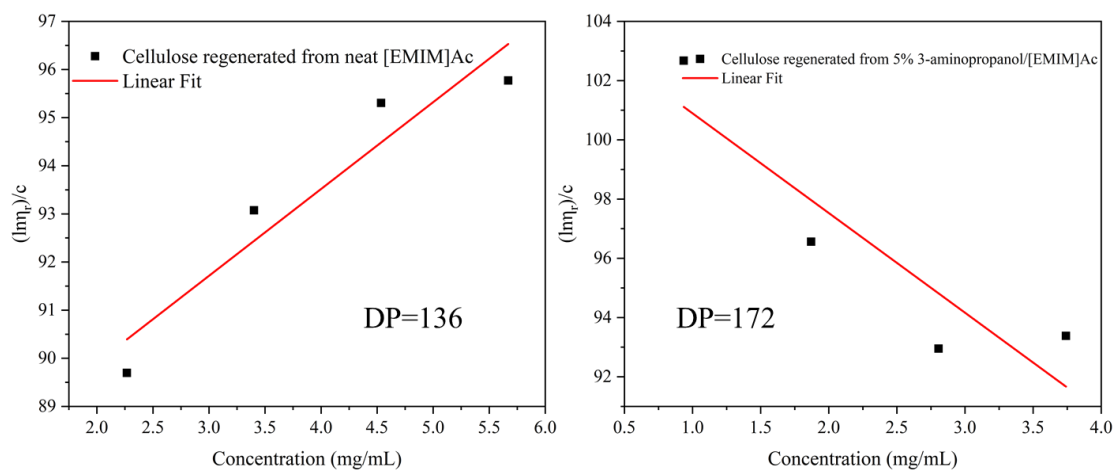


Fig. S6. The polymerization degree of cellulose regenerated from neat [EMIM]Ac (left) and 3-aminopropanol/[EMIM]Ac system (right).

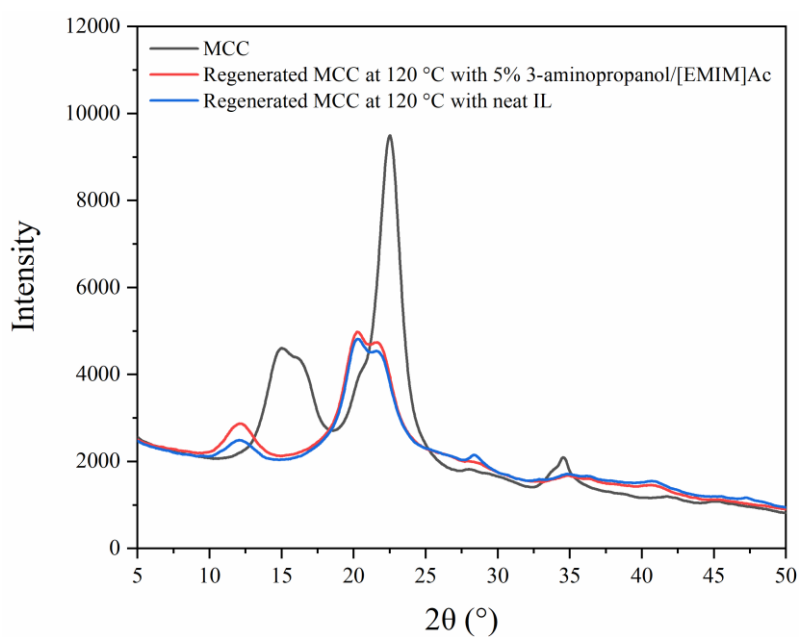


Fig. S7. XRD patterns of the raw MCC and regenerated MCC.

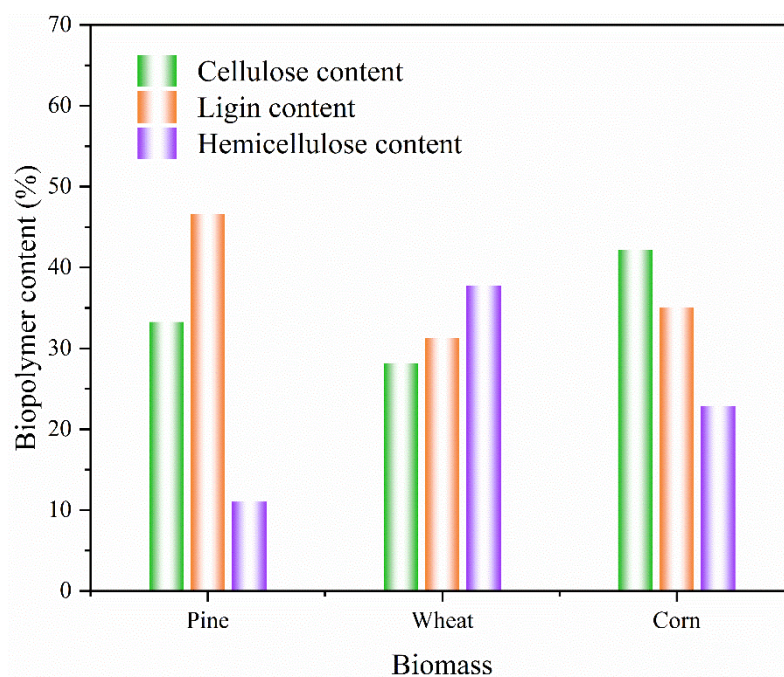


Fig. S8. Contents of cellulose, hemicellulose and lignin in the raw pine, wheat straw and corn straw.

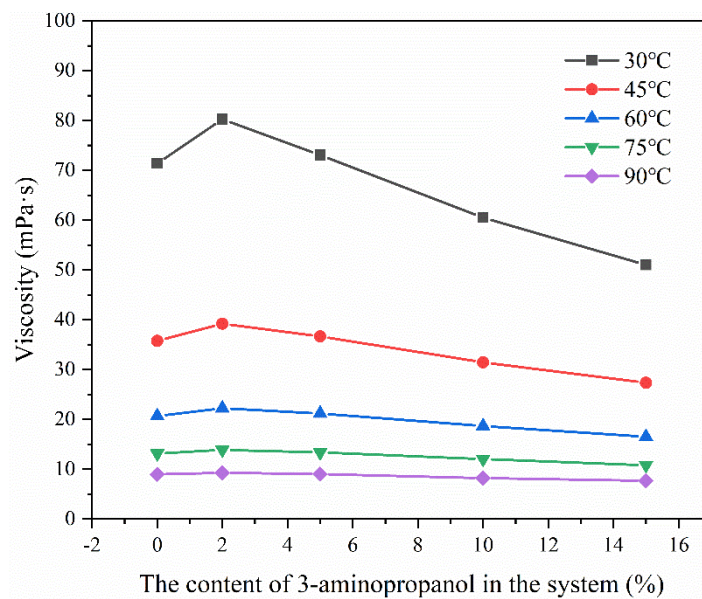


Fig. S9. Viscosity of 3-aminopropanol/[EMIM]Ac systems with different additive contents.

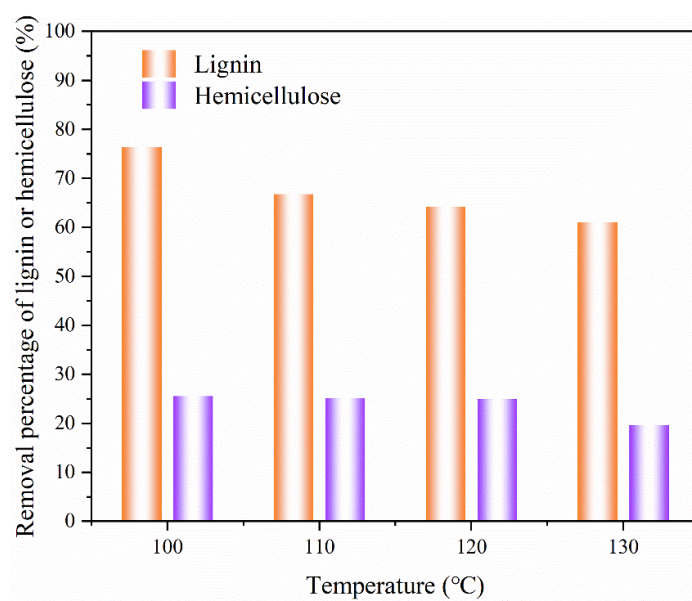


Fig. S10. Removal percentages of lignin and hemicellulose from the raw pine at different temperatures.