SUPPLEMENTARY INFORMATION

Complete dissolution and partial delignification of wood in the ionic liquid 1-ethyl-3-methylimidazolium acetate

Ning Sun, ^a Mustafizur Rahman, ^a Ying Qin, ^a Mirela L. Maxim, ^a Héctor Rodríguez, ^b and Robin D. Rogers ^{a,b,*}

^b QUILL, School of Chemistry and Chemical Engineering, The Queen's University of Belfast, Belfast, BT9 5AG, Northern Ireland, UK

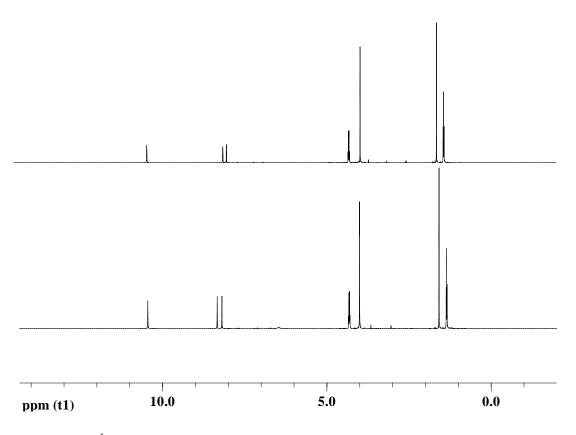


Figure S1. ¹H NMR spectra for original [C₂mim]OAc (top) and for [C₂mim]OAc heated at 110 °C for 48 h (bottom), indicating apparent non-degradation of the IL after the thermal treatment.

^a Center for Green Manufacturing and Department of Chemistry, The University of Alabama, Tuscaloosa, AL 35487, USA

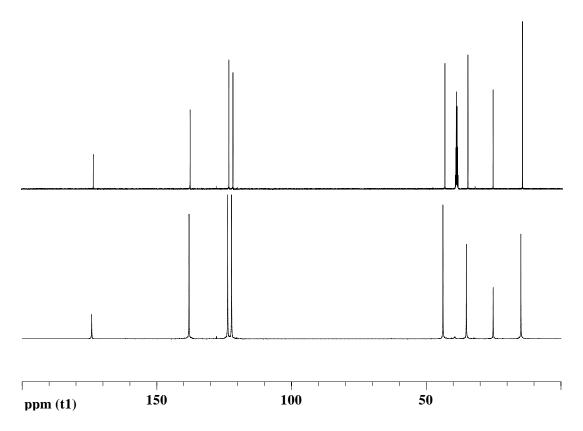


Figure S2. 13 C NMR spectra for original [C₂mim]OAc (top) and for [C₂mim]OAc heated at 110 $^{\circ}$ C for 48 h (bottom) indicating apparent non-degradation of the IL after the thermal treatment.

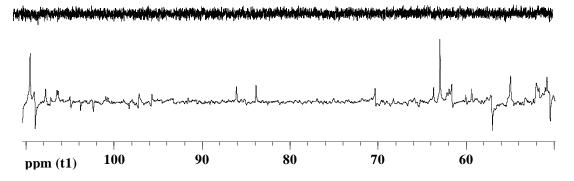


Figure S3. Magnified view of 13 C NMR spectra in the range of 50-110 ppm: original [C₂mim]OAc (top) and [C₂mim]OAc heated at 110 °C for 48 h (bottom), likely indicating some minor degradation of [C₂mim]OAc after the thermal treatment.

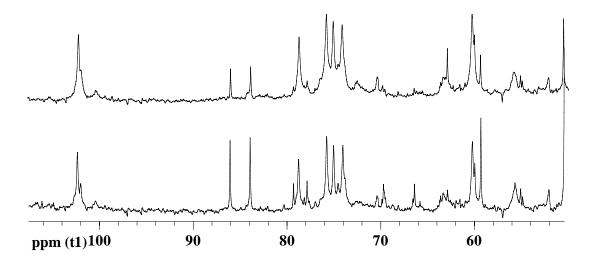


Figure S4. 13 C NMR spectra of 5 parts of wood (southern yellow pine) in 100 parts of [C₂mim]OAc after dissolution at 110 °C for 16 h (top) and for 47 h (bottom), indicating more degradation with longer heating time.