

Supplementary Materials

Influence of Carboxylate Anions on Phase Behavior of Choline Ionic Liquid Mixtures

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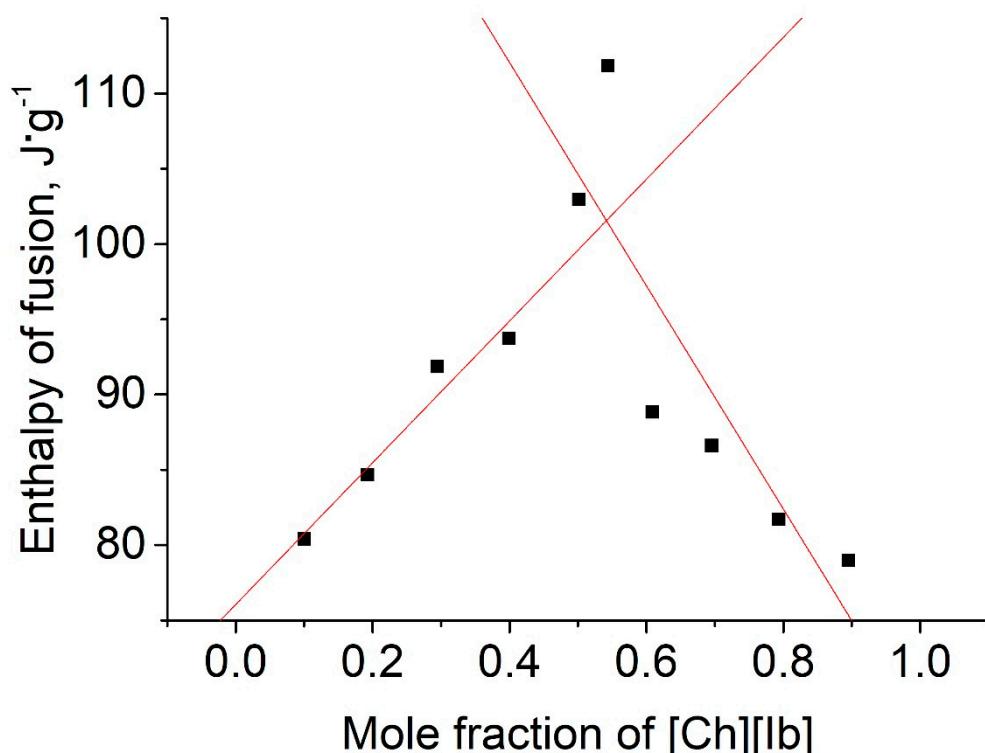


Figure S1. Tammann diagram of the mixture from $[\text{Ch}][\text{Ac}] + [\text{Ch}][\text{Ib}]$.

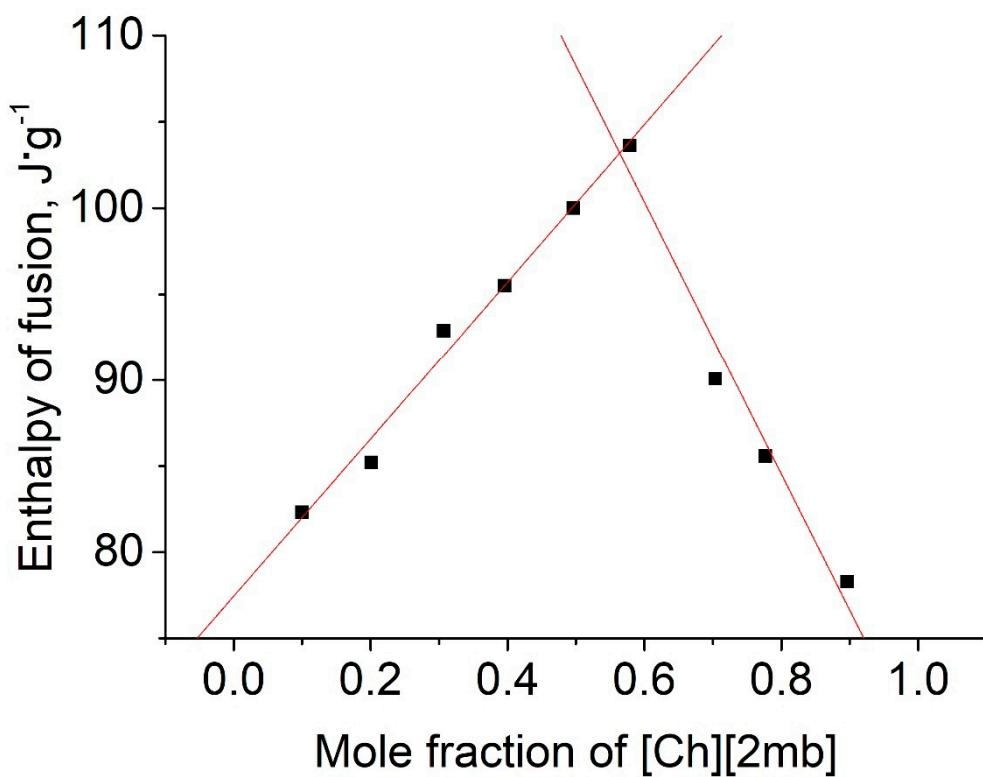


Figure S2. Tammann diagram of the mixture from [Ch][Ac] + [Ch][2mb].

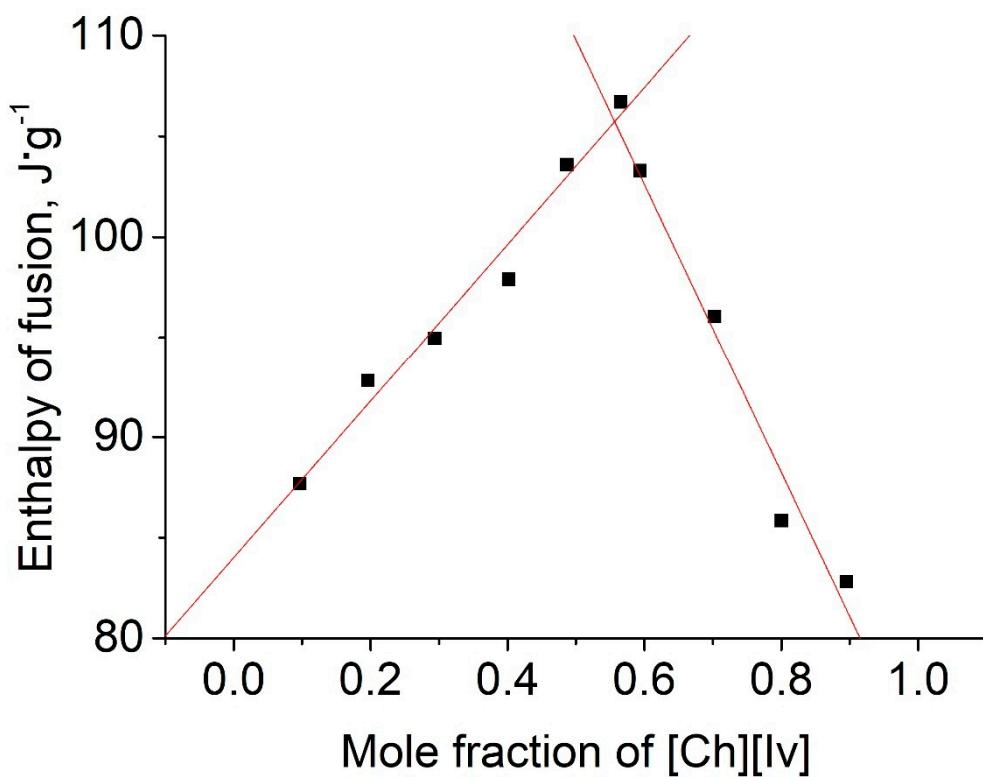


Figure S3. Tammann diagram of the mixture from [Ch][Ac] + [Ch][Iv].

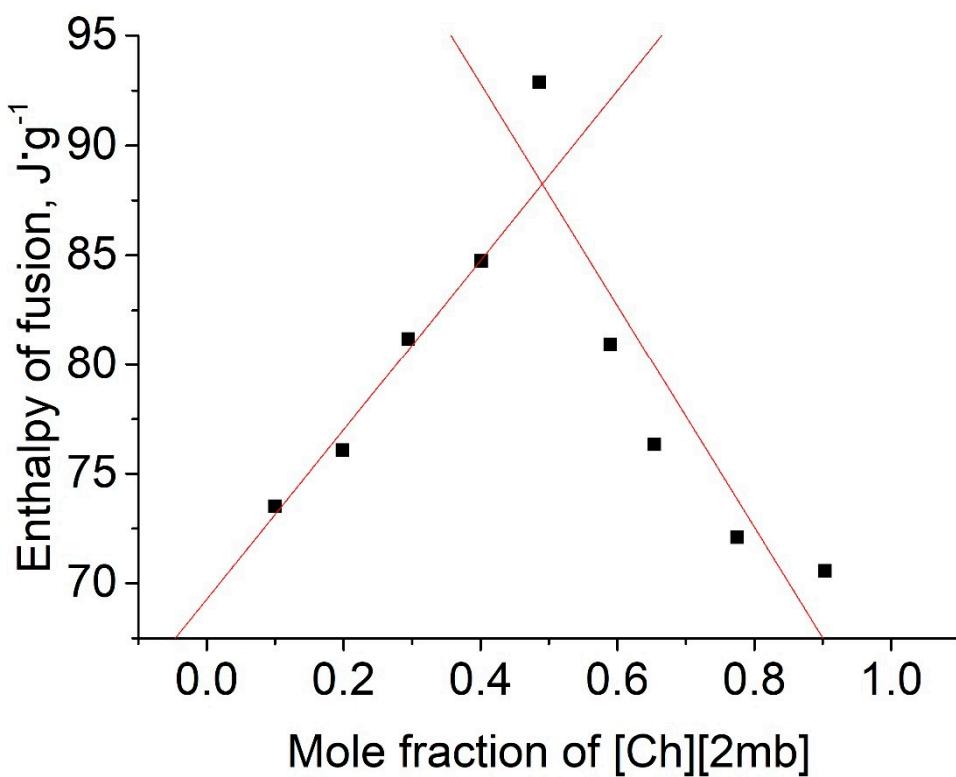


Figure S4. Tammann diagram of the mixture from [Ch][Ib] + [Ch][2mb].

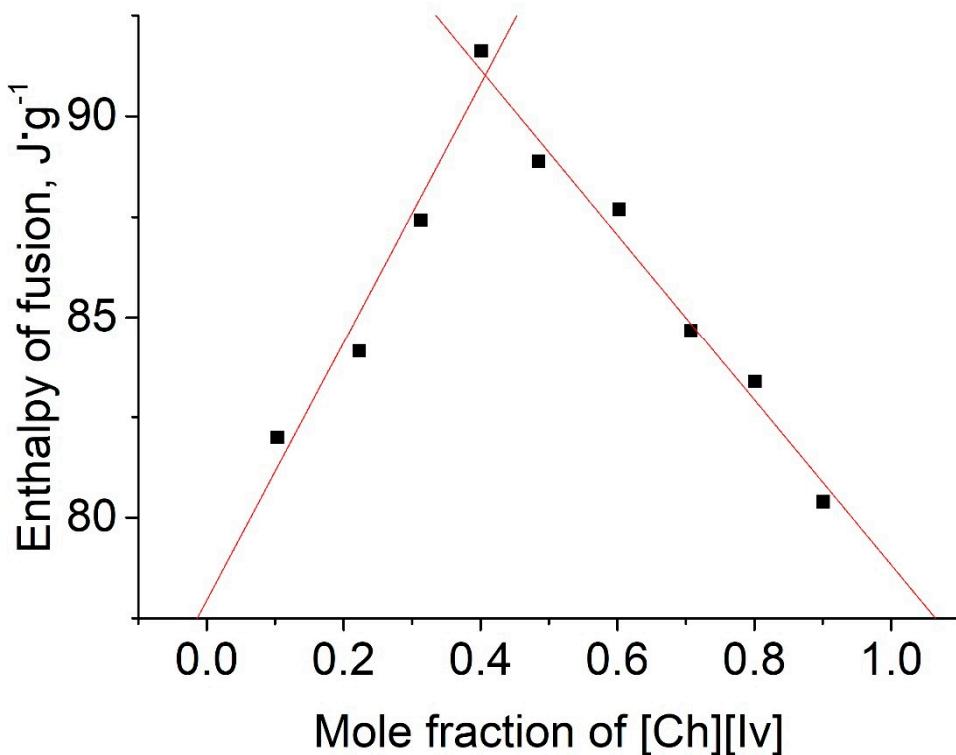


Figure S5. Tammann diagram of the mixture from [Ch][Ib] + [Ch][Iv].

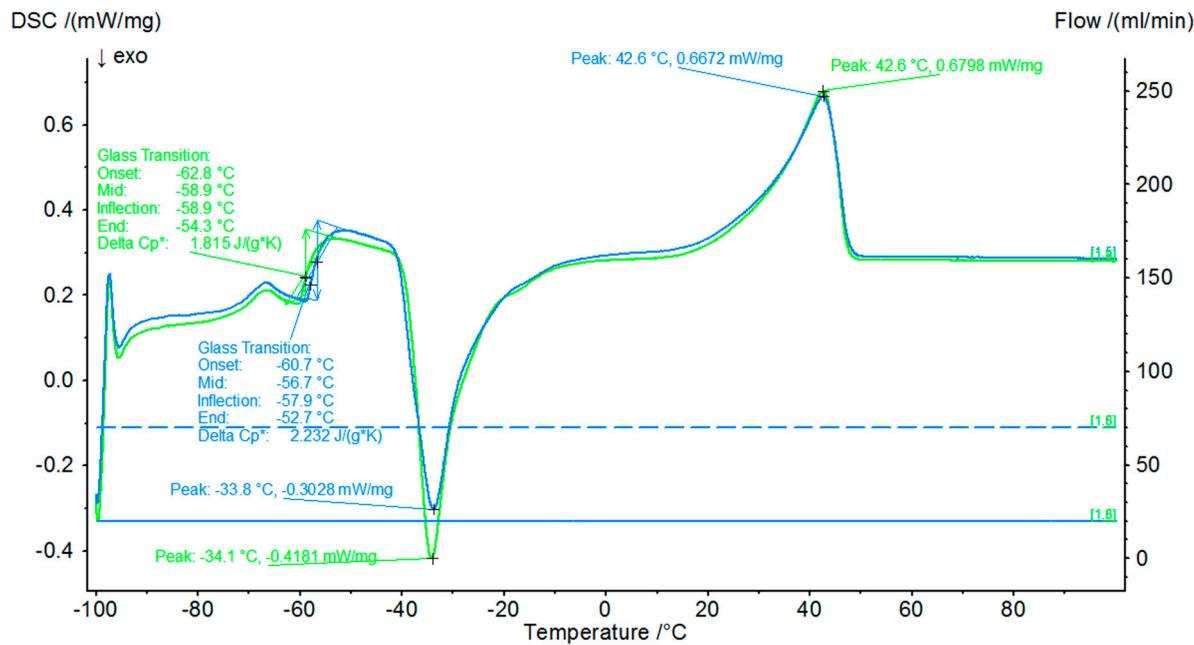


Figure S6. DSC thermogram of [Ch][Ac] (39.1%) and [Ch][Ib] (60.9%) mixture showing the cold-crystallization peak at -34°C.

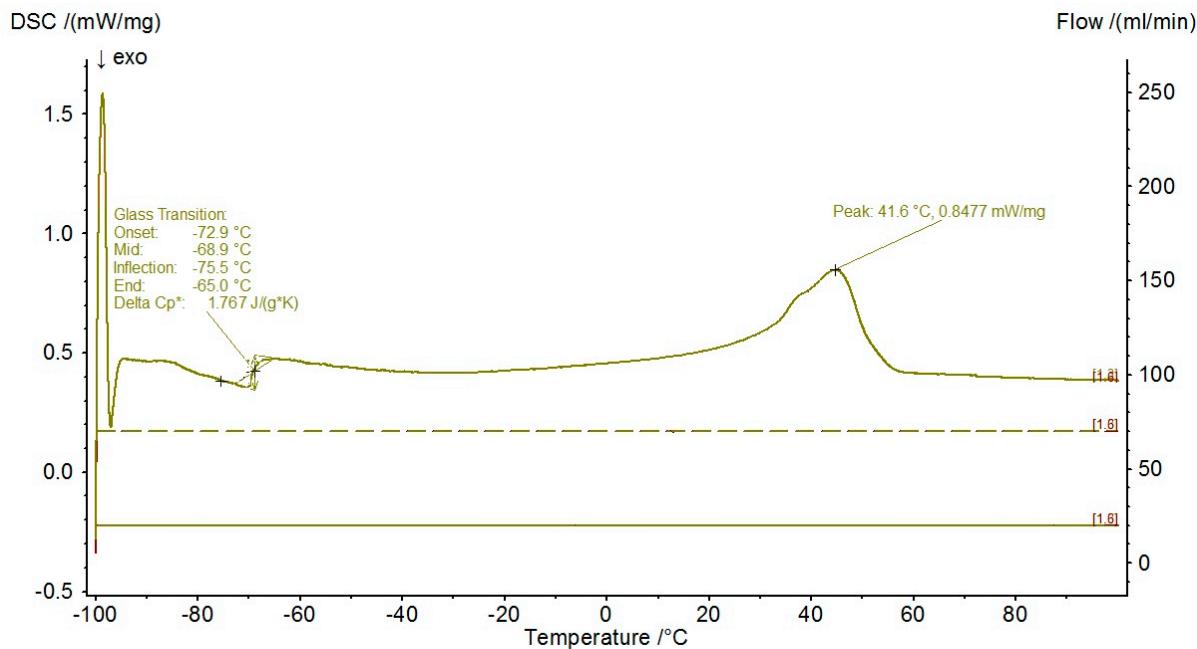


Figure S7. An example of a DSC thermogram of [Ch][Ac] (0.46) and [Ch][Ib] (0.54) eutectic mixture.

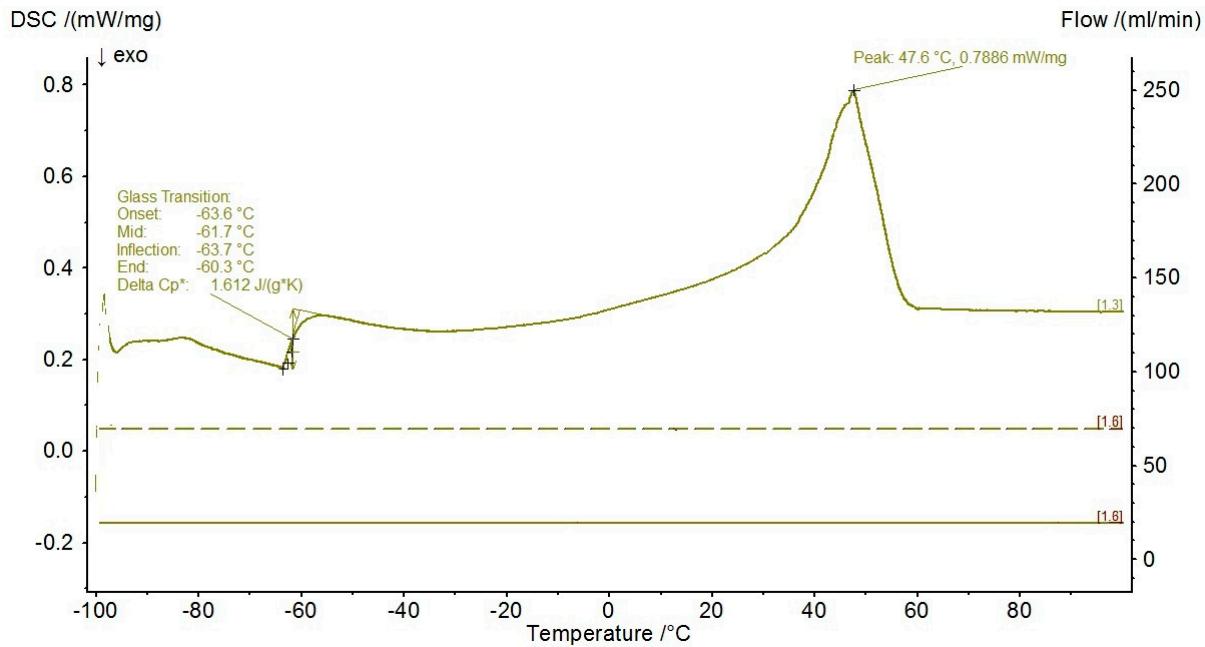


Figure S8. An example of a DSC thermogram of [Ch][Ac] (0.42) and [Ch][2mb] (0.58) eutectic mixture

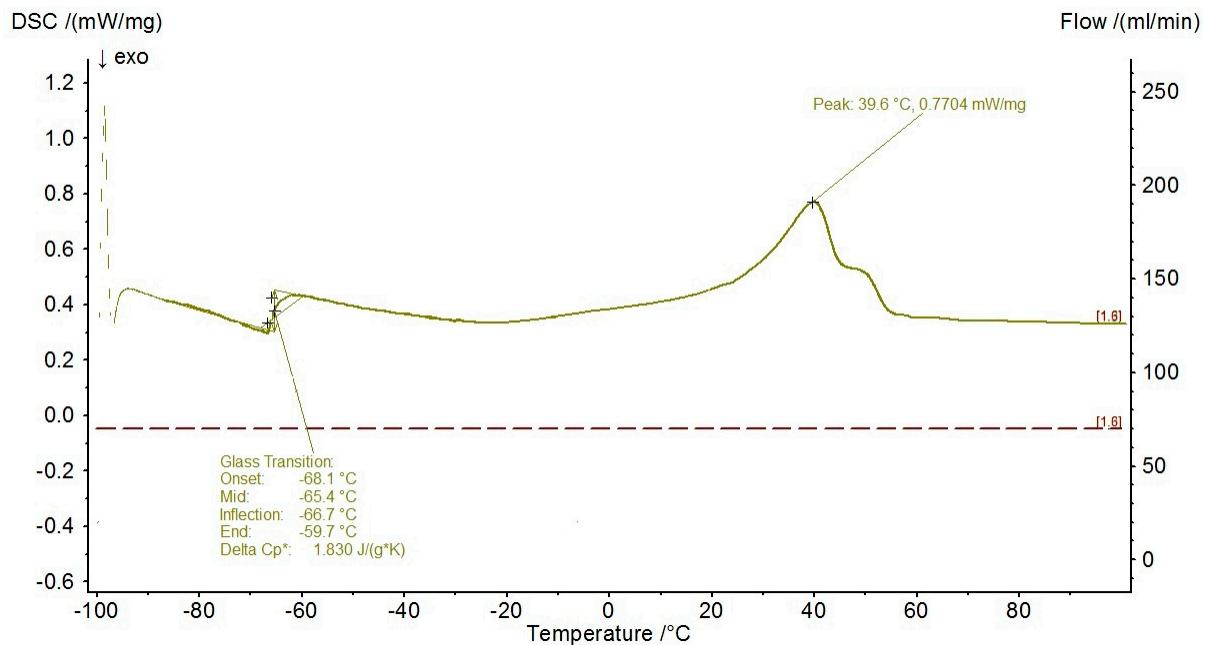


Figure S9. An example of a DSC thermogram of [Ch][Ac] (0.43) and [Ch][Iv] (0.57) eutectic mixture

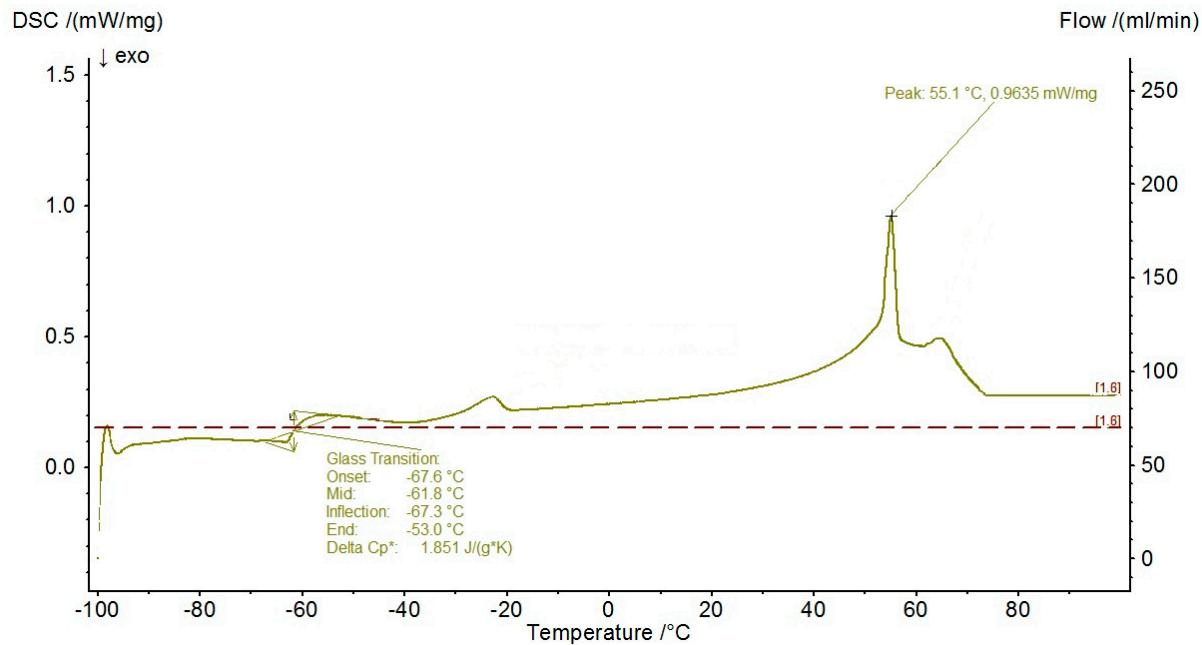


Figure S10. An example of a DSC thermogram of [Ch][Ib] (0.51) and [Ch][2mb] (0.49) eutectic mixture

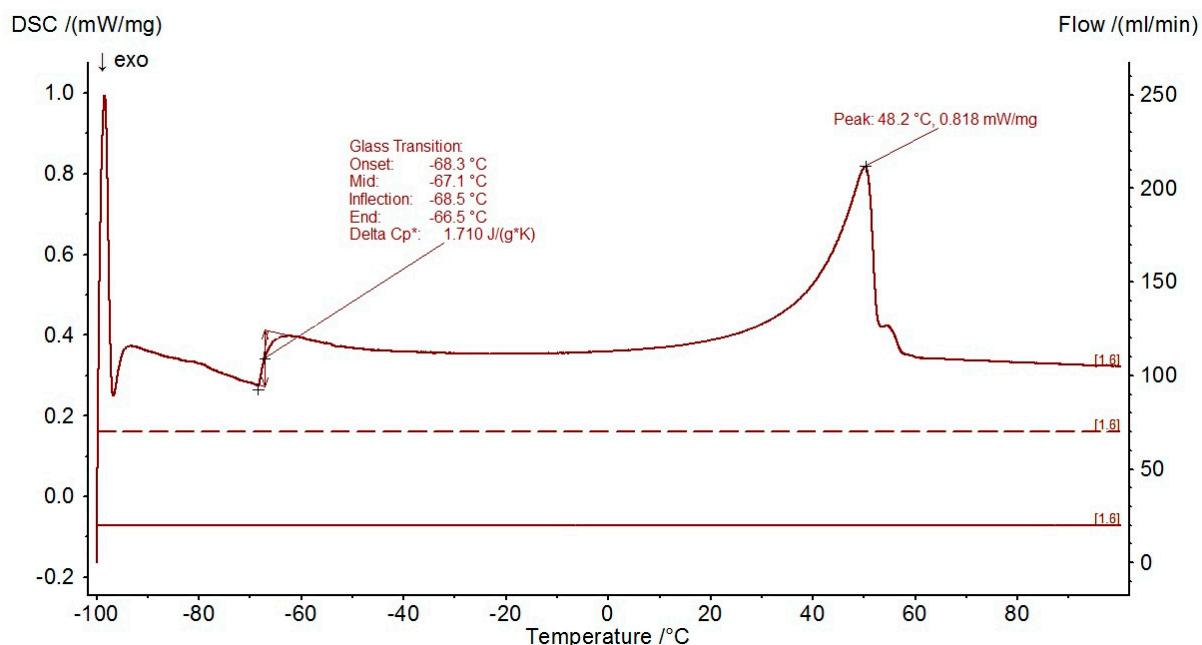


Figure S11. An example of a DSC thermogram of [Ch][Ib] (0.60) and [Ch][Iv] (0.40) eutectic mixture

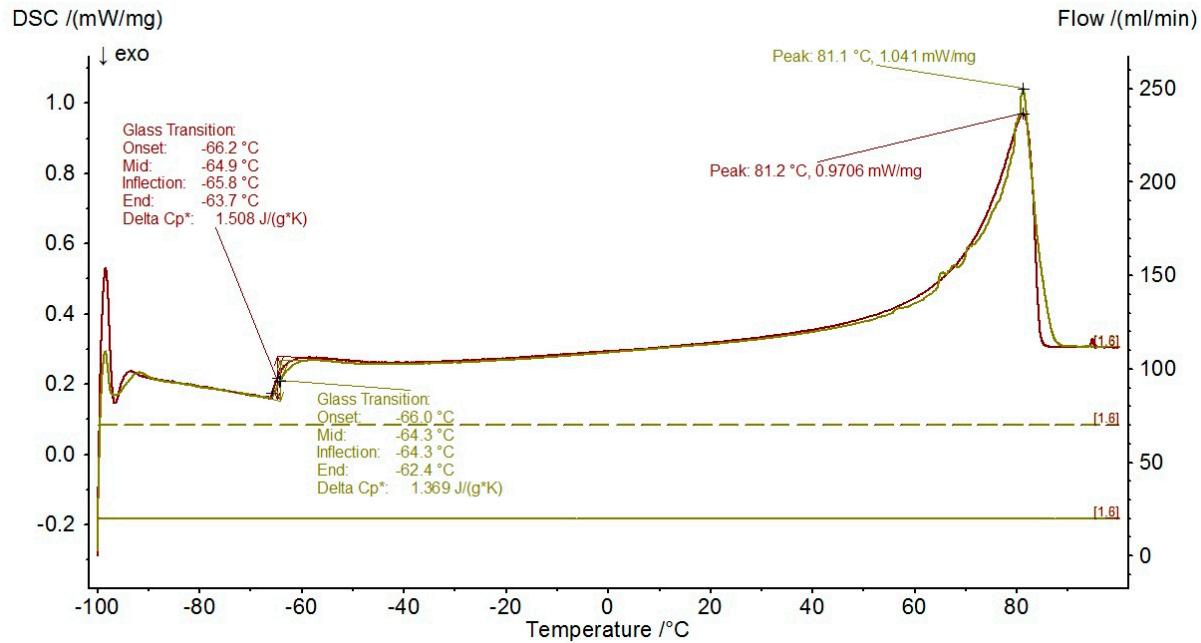


Figure S12. The DSC diagram of [Ch][Ac].

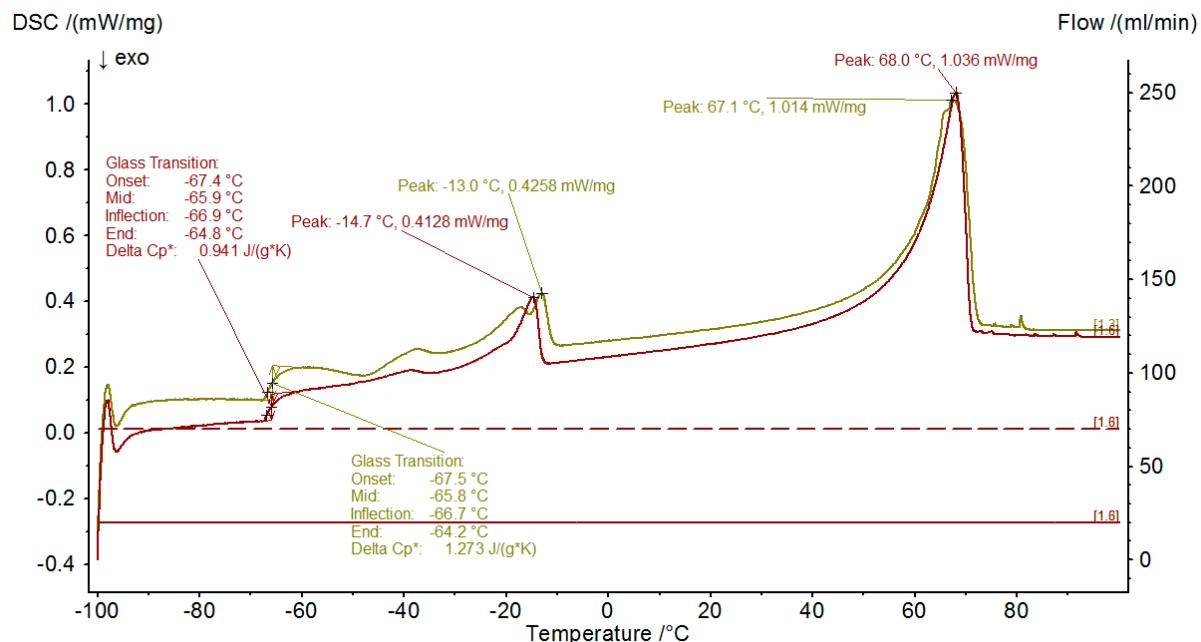


Figure S13. The DSC diagram of [Ch][Ib].

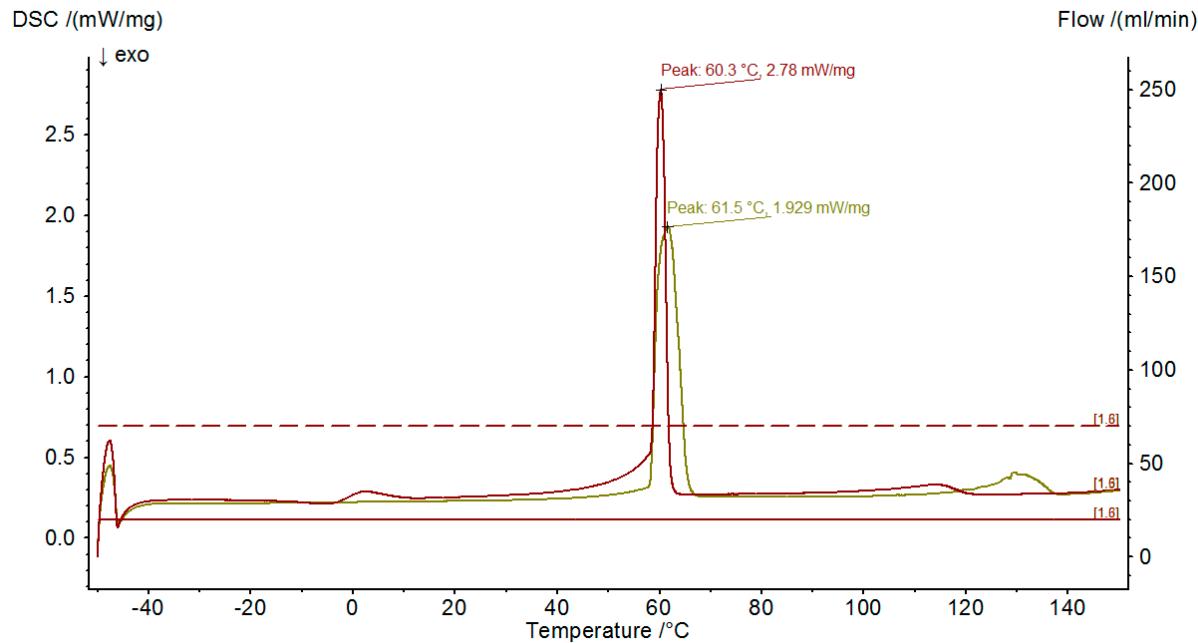


Figure S14. The DSC diagram of [Ch][Iv].

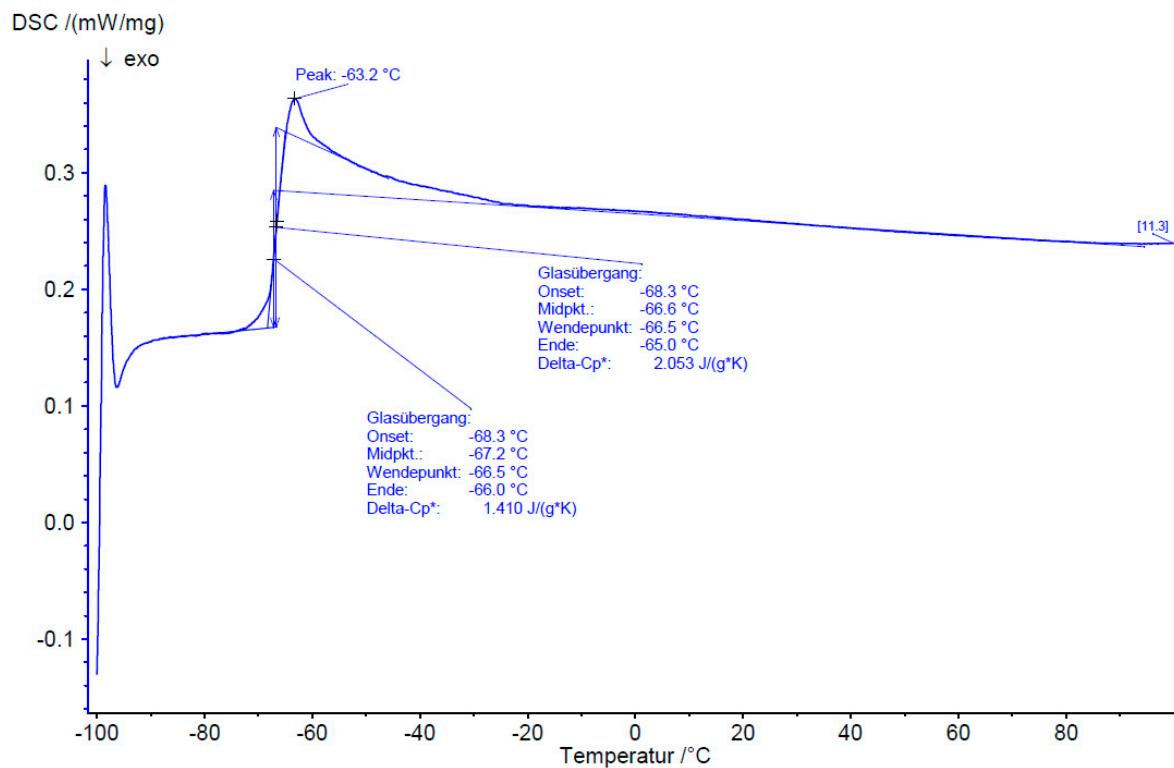


Figure S15. The DSC diagram of [Ch][Mal].

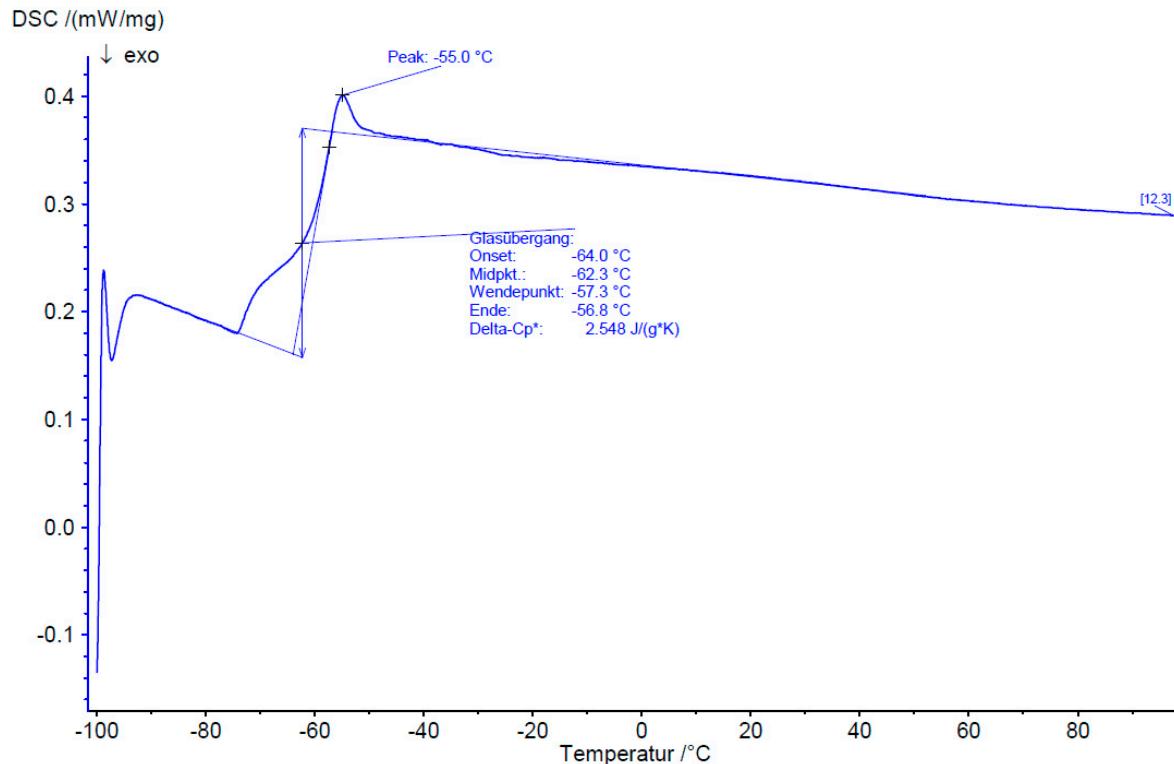


Figure S16. The DSC diagram of [Ch][Lac].

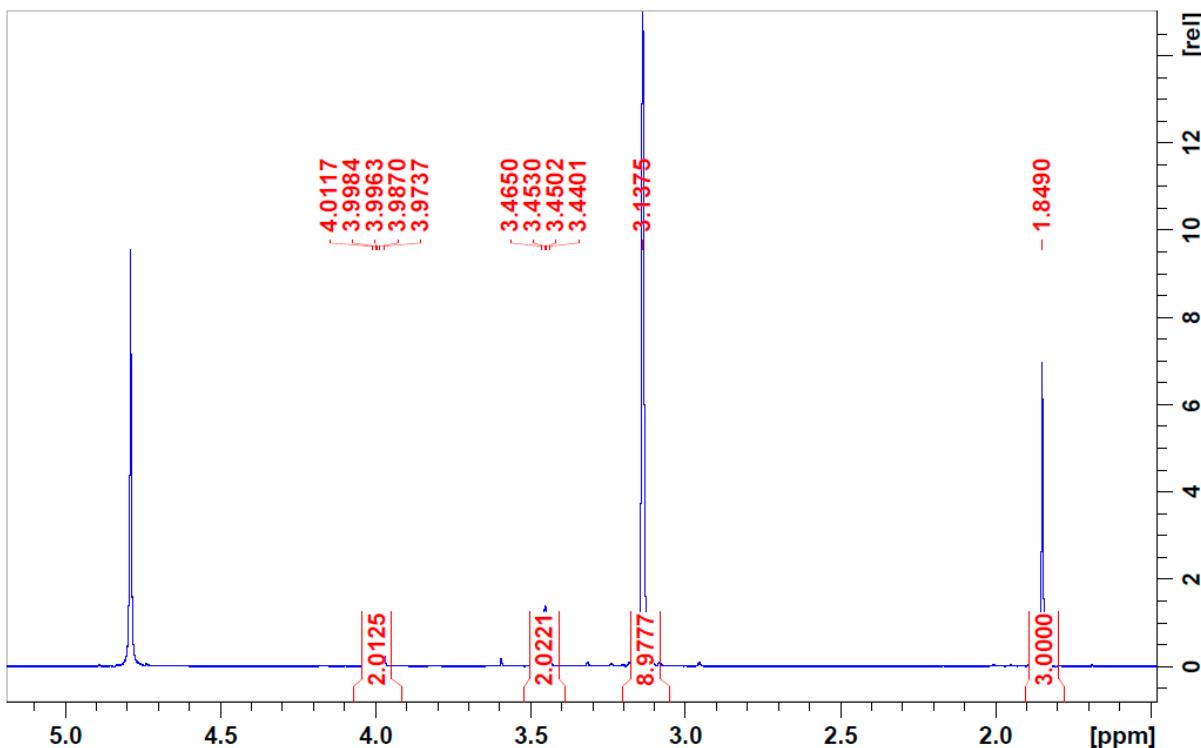


Figure S17. The ¹H NMR of [Ch][Ac].

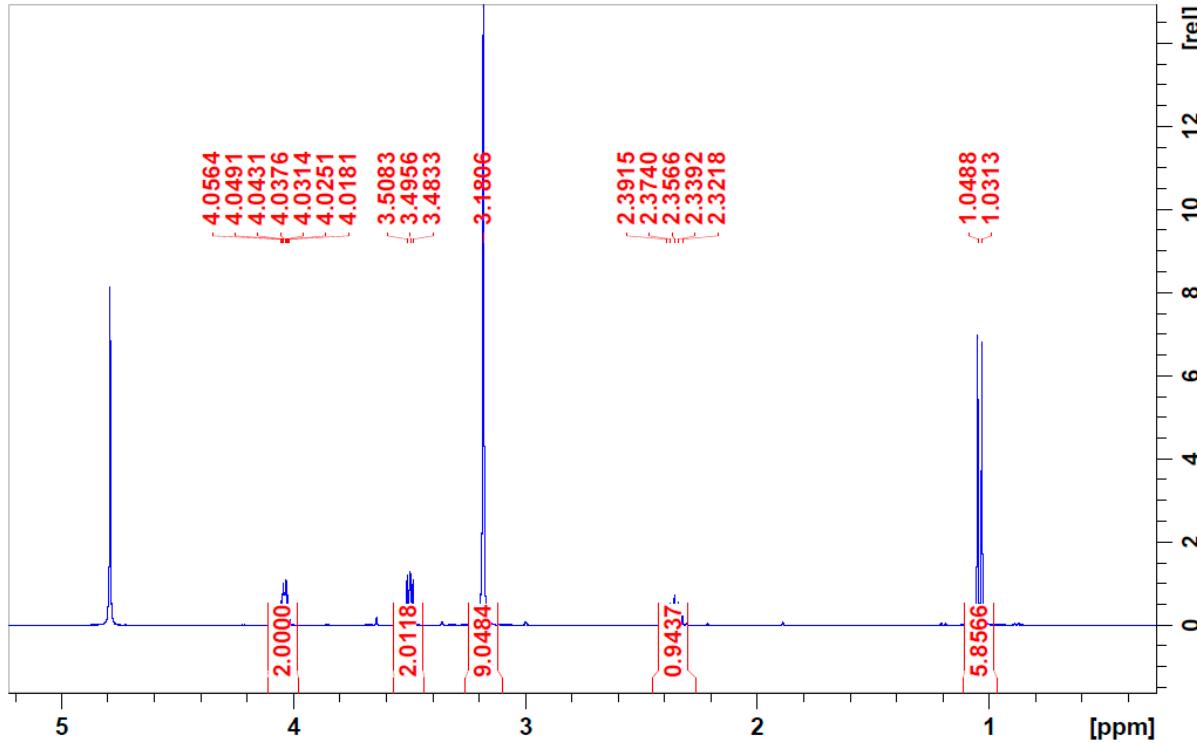


Figure S18. The ¹H NMR of [Ch][Ib].

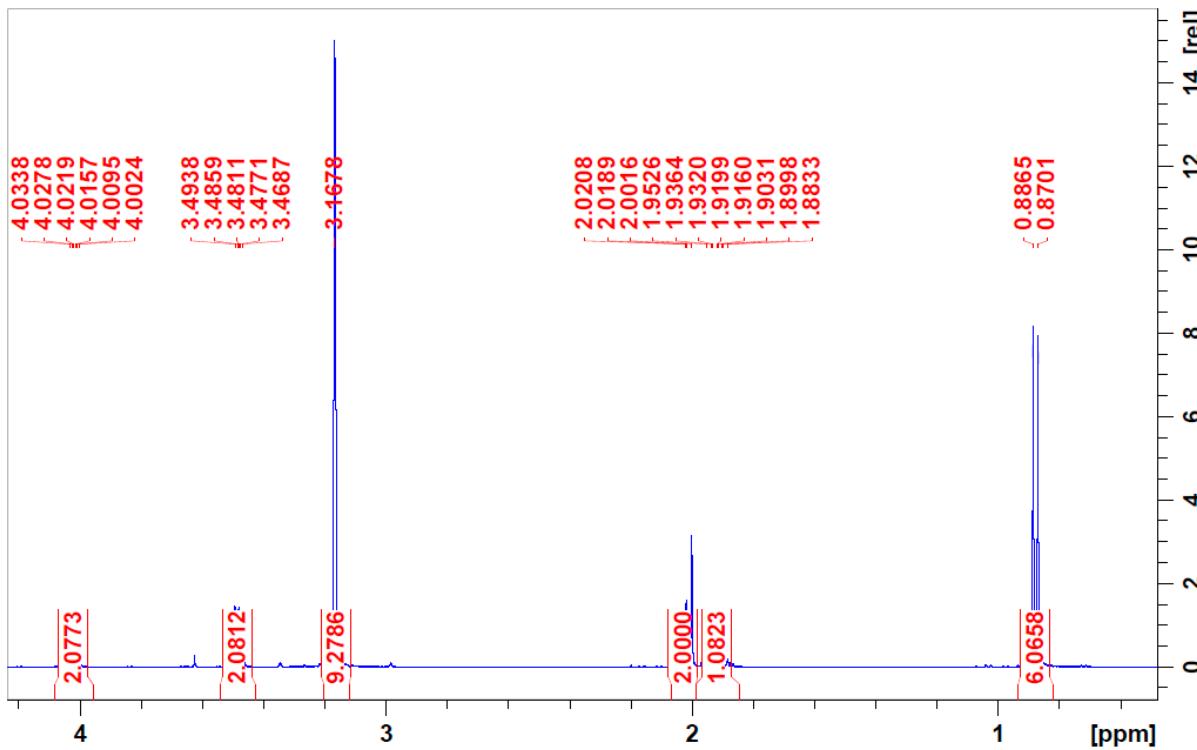


Figure S19. The ¹H NMR of [Ch][Iv].

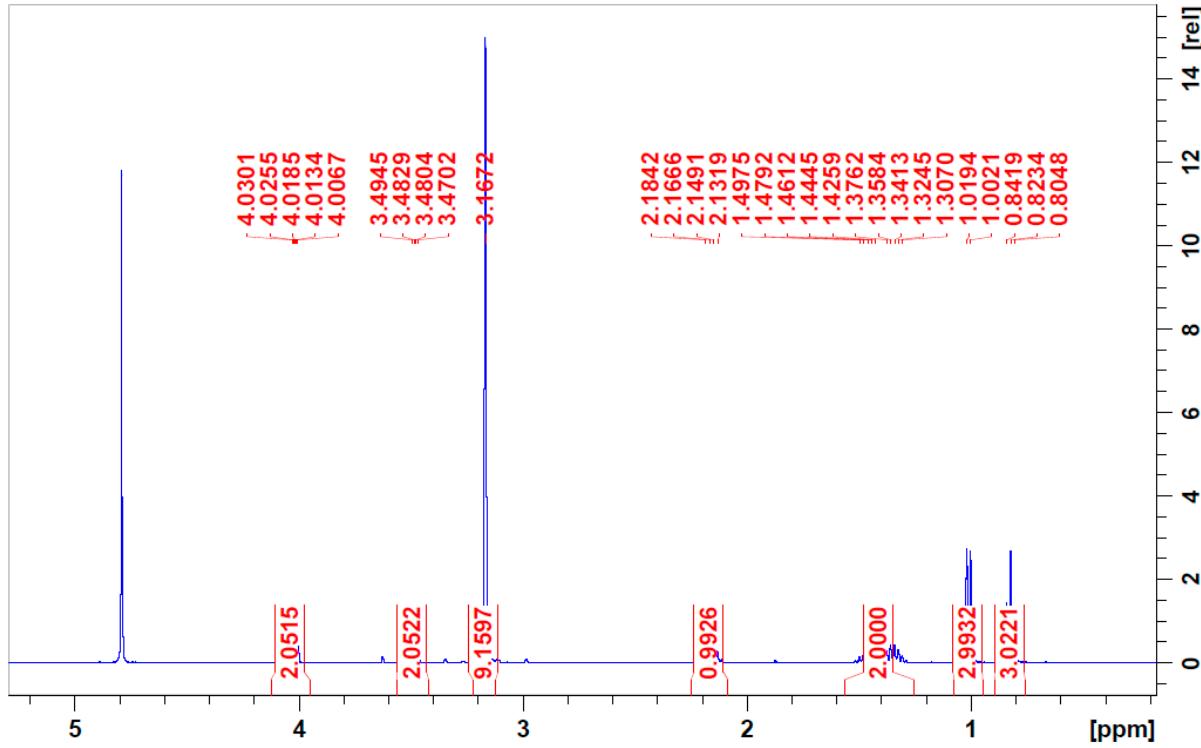


Figure S20. The ¹H NMR of [Ch][2mb].

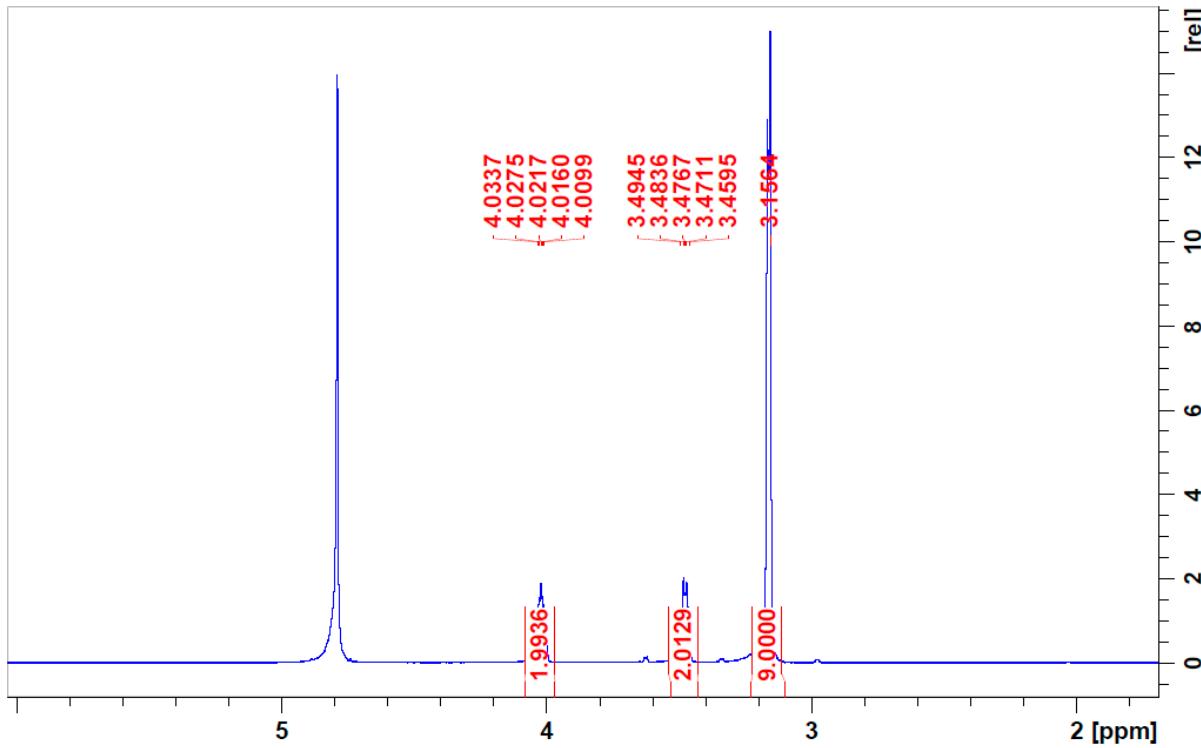


Figure S21. The ¹H NMR of [Ch][Mal].

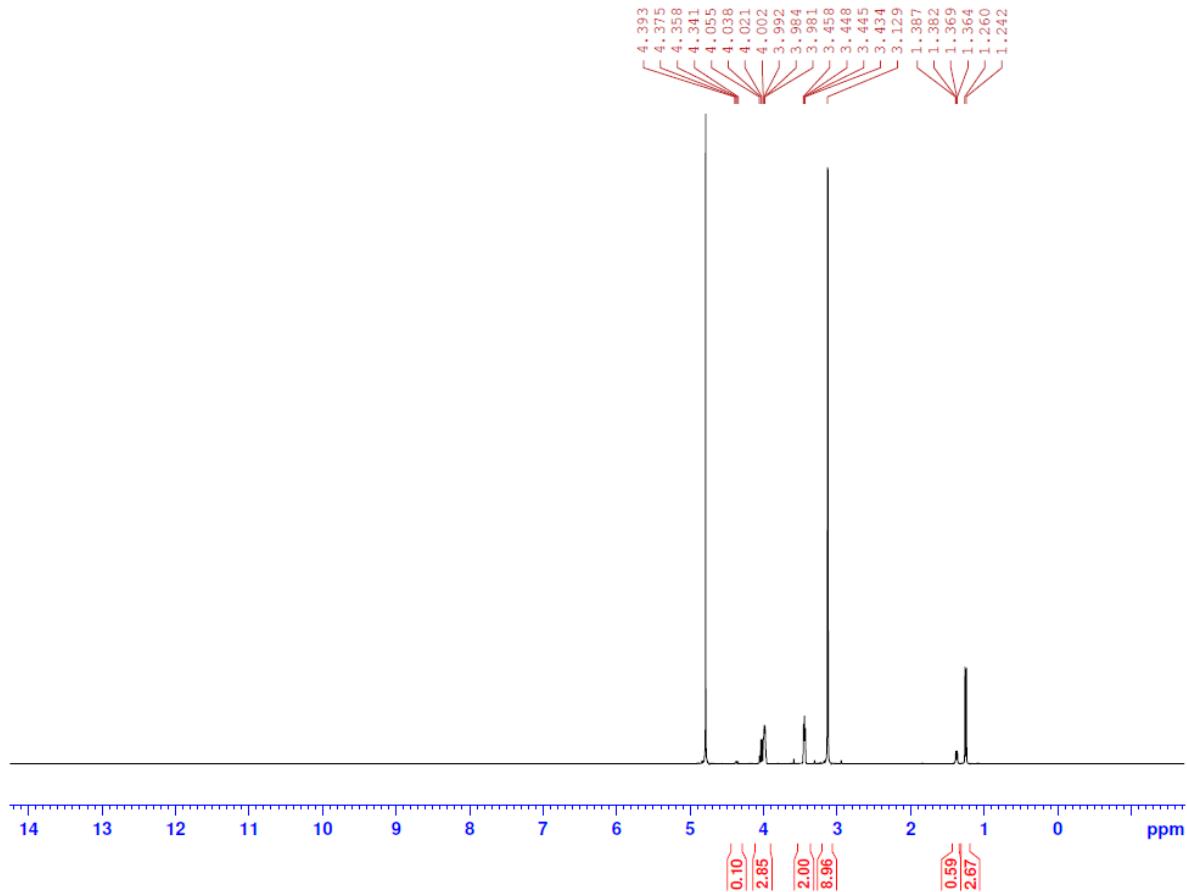


Figure S22. The ¹H NMR of [Ch][Lac].

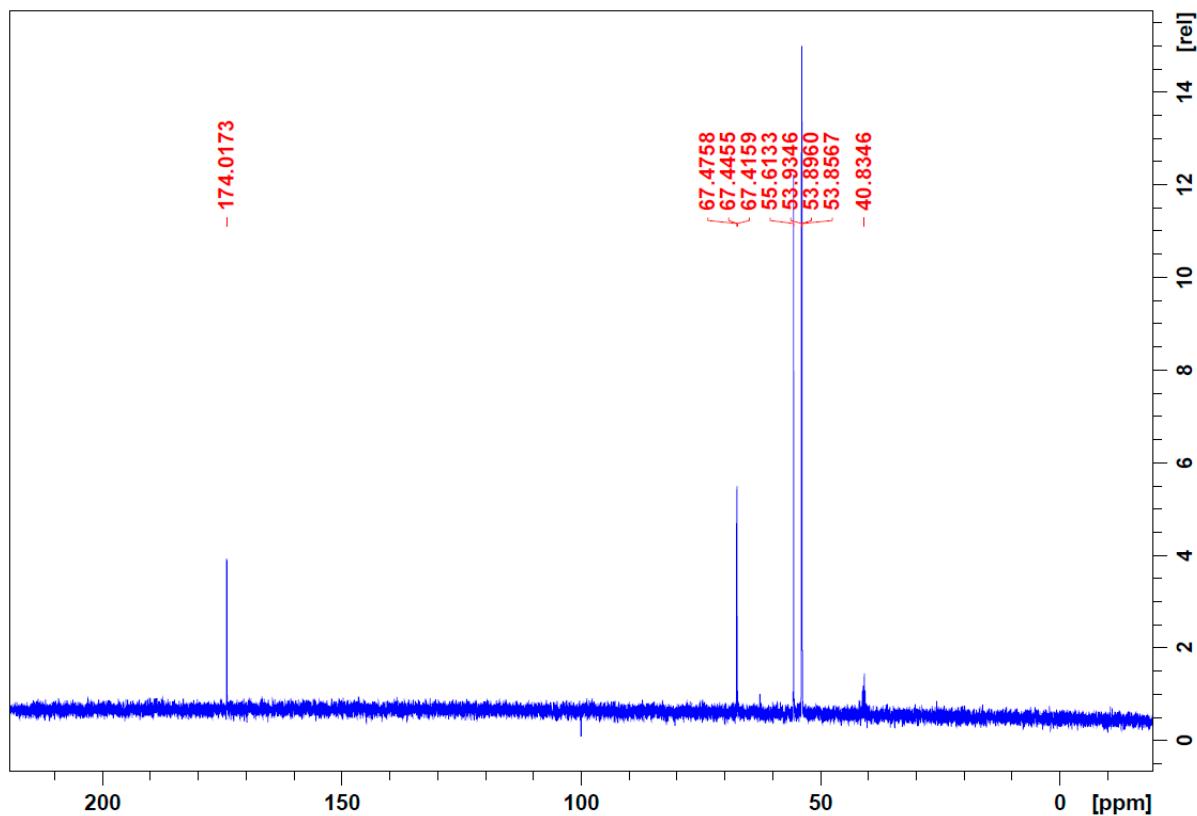


Figure S23. The ¹³C NMR of [Ch][Mal].

