

## Supporting Information

### **Decoding Drug–Protic Ionic Liquids Interplay: Spectrophotometric, Electrochemical, and DFT Exploration of Mitoxantrone**

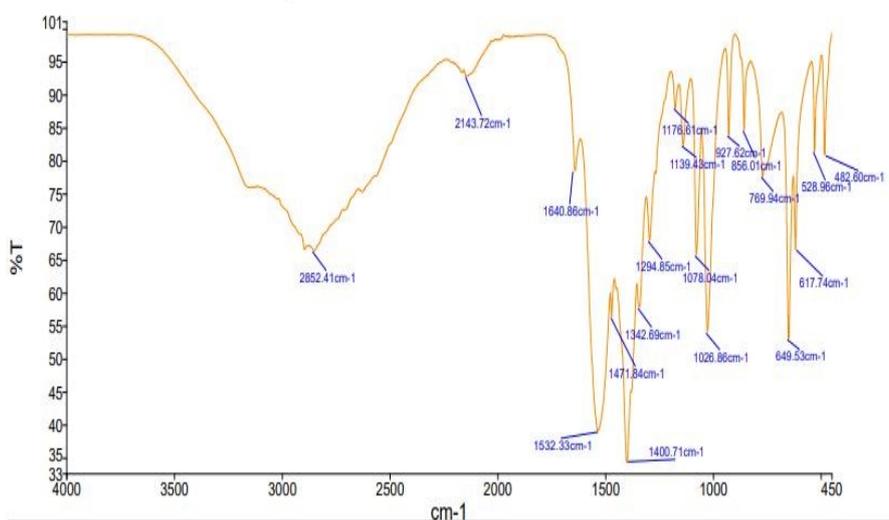
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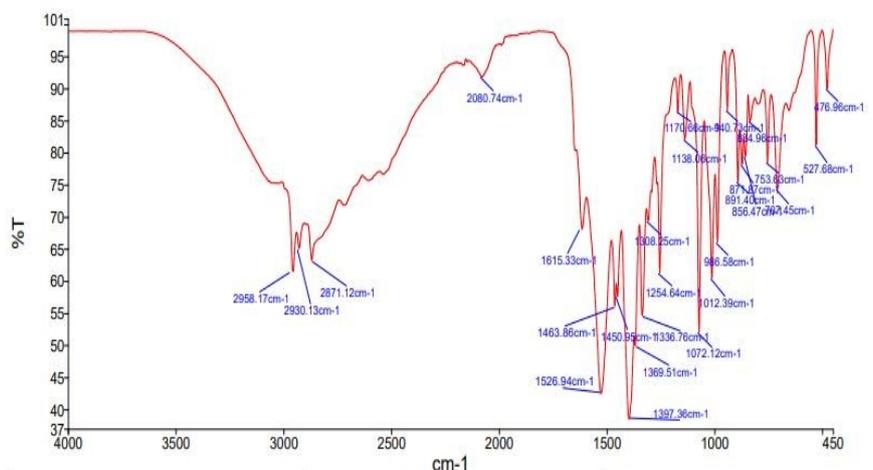
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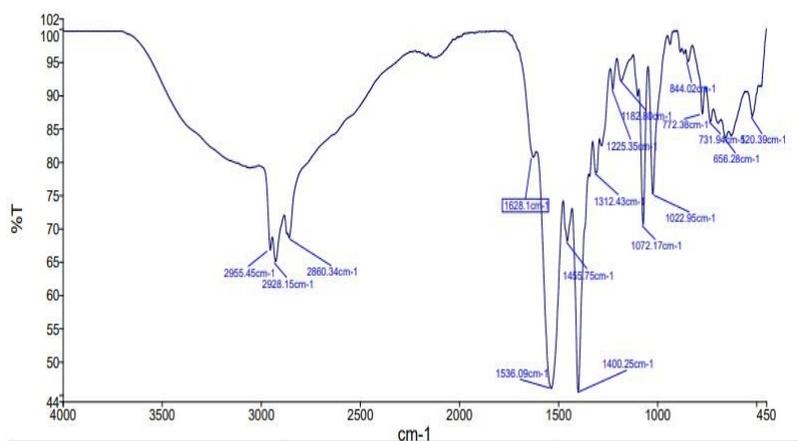
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**Figure S1** FTIR spectra of (a) ethanol ammonium acetate (EAAC)



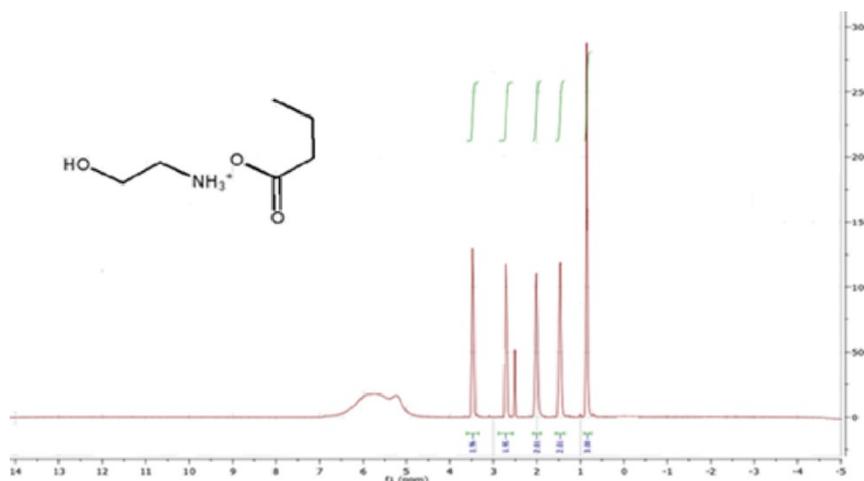
**Figure S2** FTIR spectra of ethanol ammonium acetate (EABu).



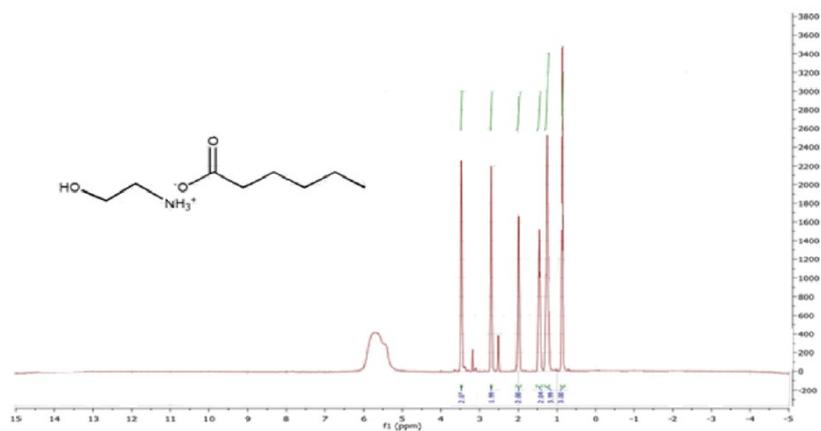
**Figure S3** FTIR spectra of ethanol ammonium hexanoate (EAHx).



**Figure S4**  $^1\text{H}$  NMR spectra of ethanol ammonium acetate (EAAC).  $^1\text{H}$  NMR analysis- 6.4 (Broad peak of  $\text{NH}_3$  and OH), d = 1.9 (s, 3H); d = 2.7(t, 2H); d = 3.54 (t, 2H).



**Figure S5**  $^1\text{H}$  NMR spectra of ethanol ammonium butyrate (EABu).  $^1\text{H}$  NMR analysis- 5.5 (Broad peak of  $\text{NH}_3$  and OH), 0.9(t, 3H); d = 1.4 (m, 2H); d = 2.0 (t, 2H); d = 2.64 (t, 2H); d = 3.42 (t, 2H).<sup>12, 29</sup>



**Figure S6**  $^1\text{H}$  NMR spectra of ethanol ammonium hexanoate (EAHx).  $^1\text{H}$  NMR analysis- 5.8(Broad peak of  $\text{NH}_3$  and  $\text{OH}$ ),  $\delta = 0.9(\text{t}, 3\text{H})$ ;  $\delta = 1.2(\text{m}, 4\text{H})$ ;  $\delta = 1.4(\text{m}, 2\text{H})$ ;  $\delta = 1.99(\text{m}, 2\text{H})$ ;  $\delta = 2.8(\text{t}, 2\text{H})$ ;  $\delta = 3.5(\text{t}, 2\text{H})$ .