

Supplementary information

Gemini ionic liquid-based surfactants: Efficient synthesis, surface activity, and use as inducers for the fabrication of Cu₂O nanoparticles

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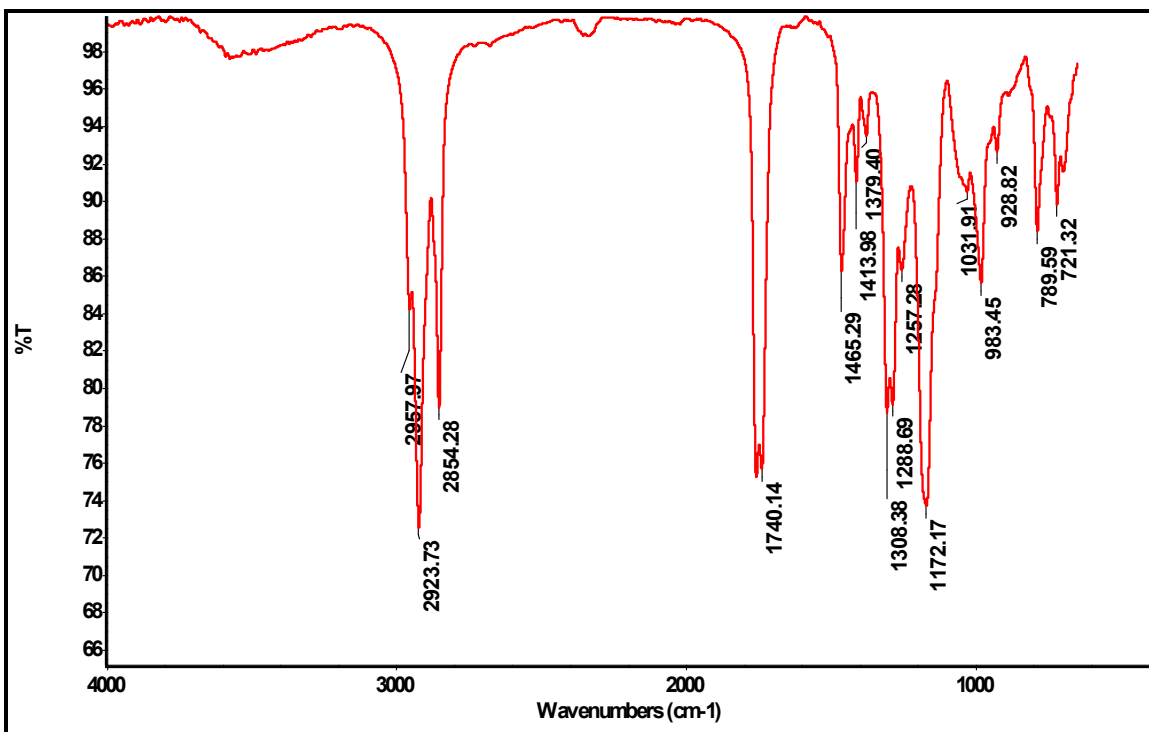


Figure S1. FT-IR spectrum of decyl 2-chloroactate 2a.

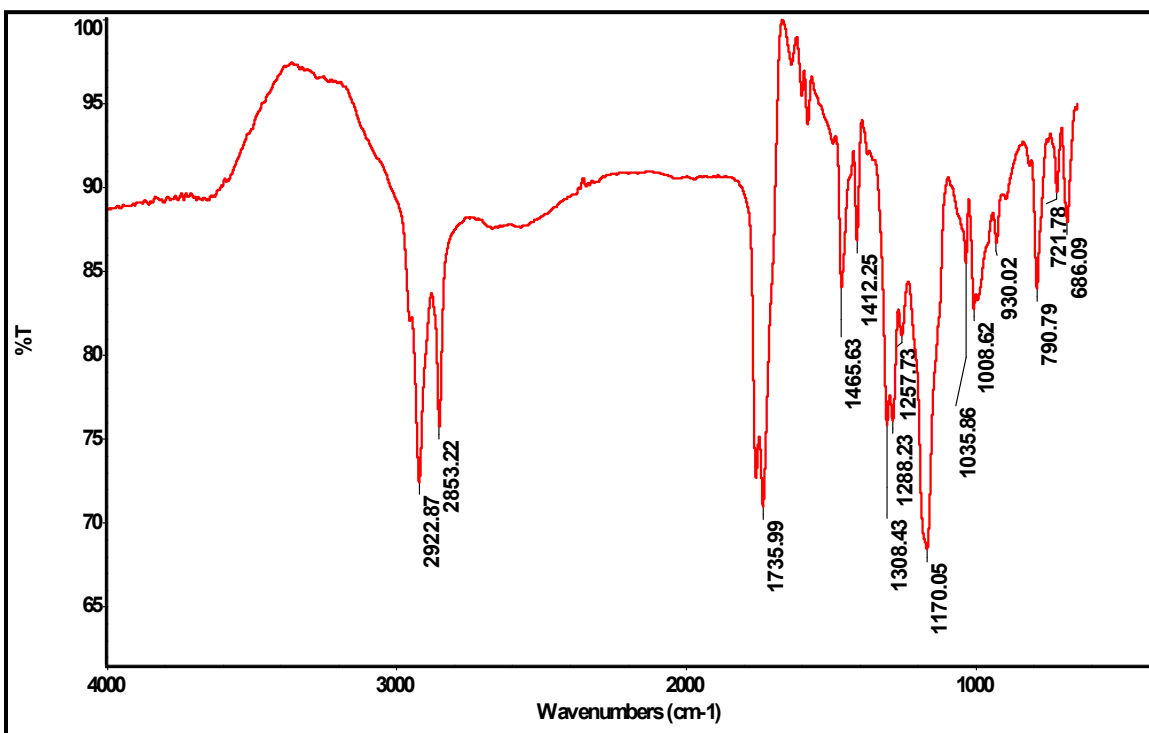


Figure S2. FT-IR spectrum of dodecyl 2-chloroactate 2b.

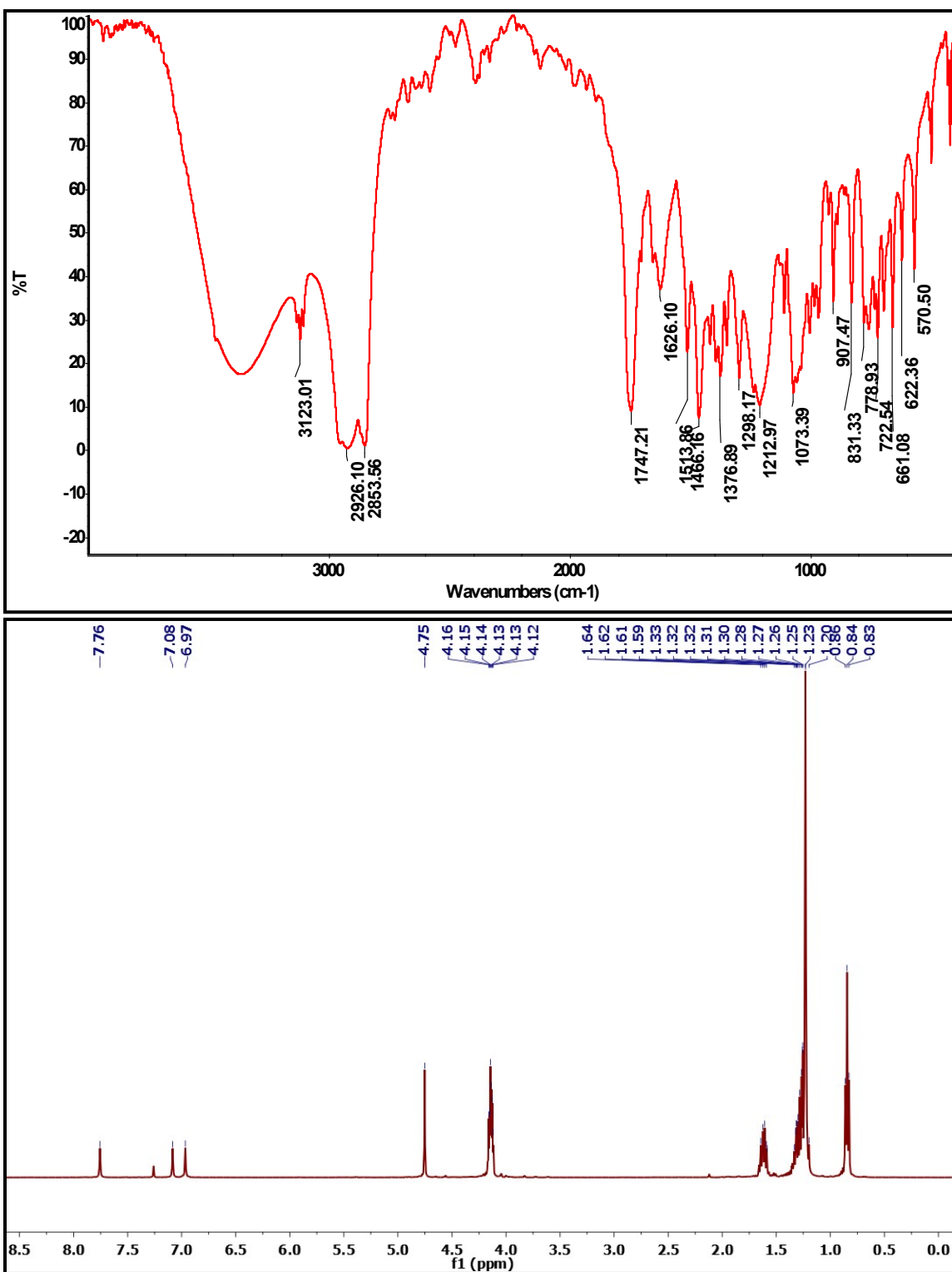


Figure S3. FT-IR and ¹H NMR spectra (CDCl₃) of alkyl imidazole derivative 3a.

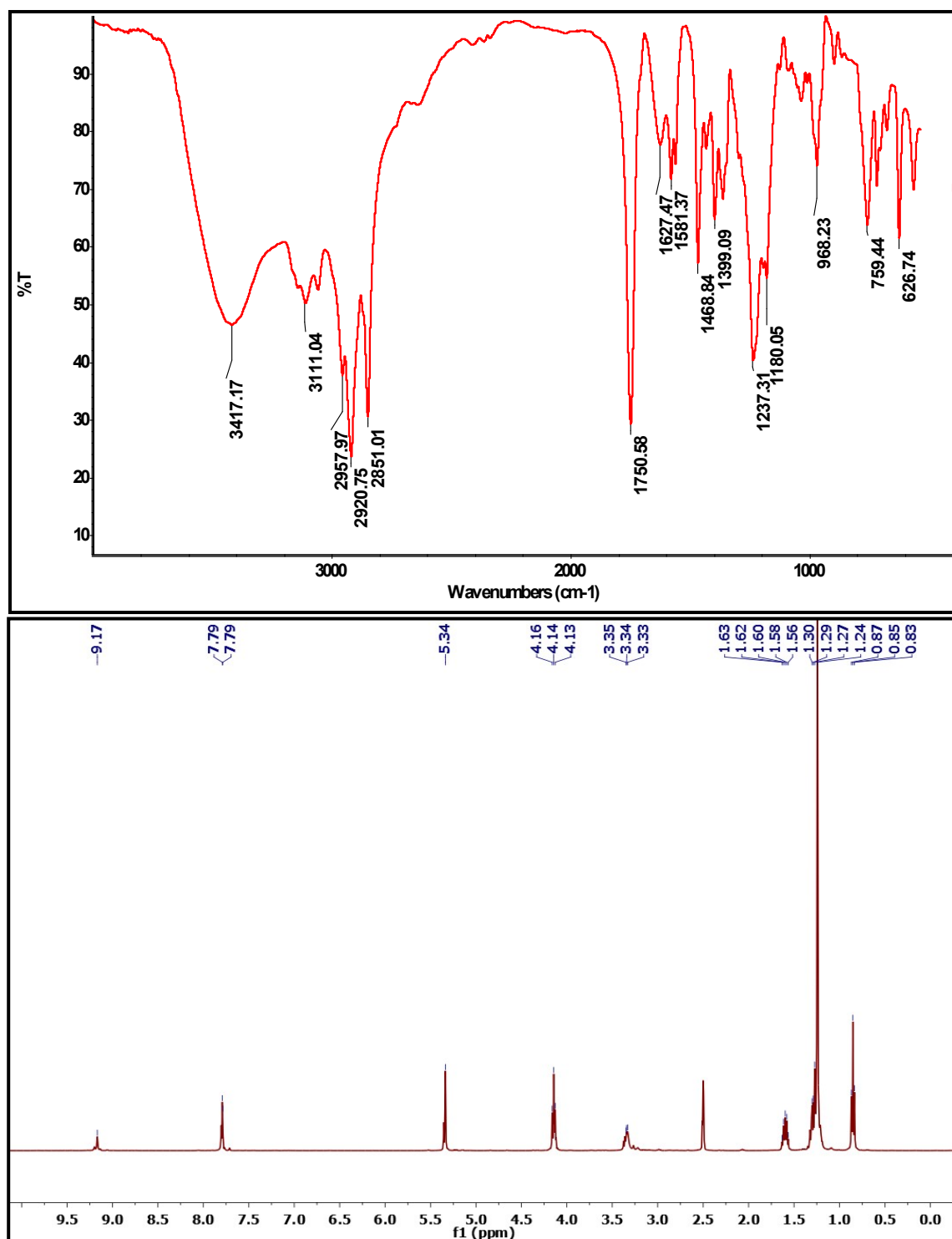


Figure S4. FT-IR and ¹H NMR (DMSO-*d*₆) spectra of the GILBS 4b.

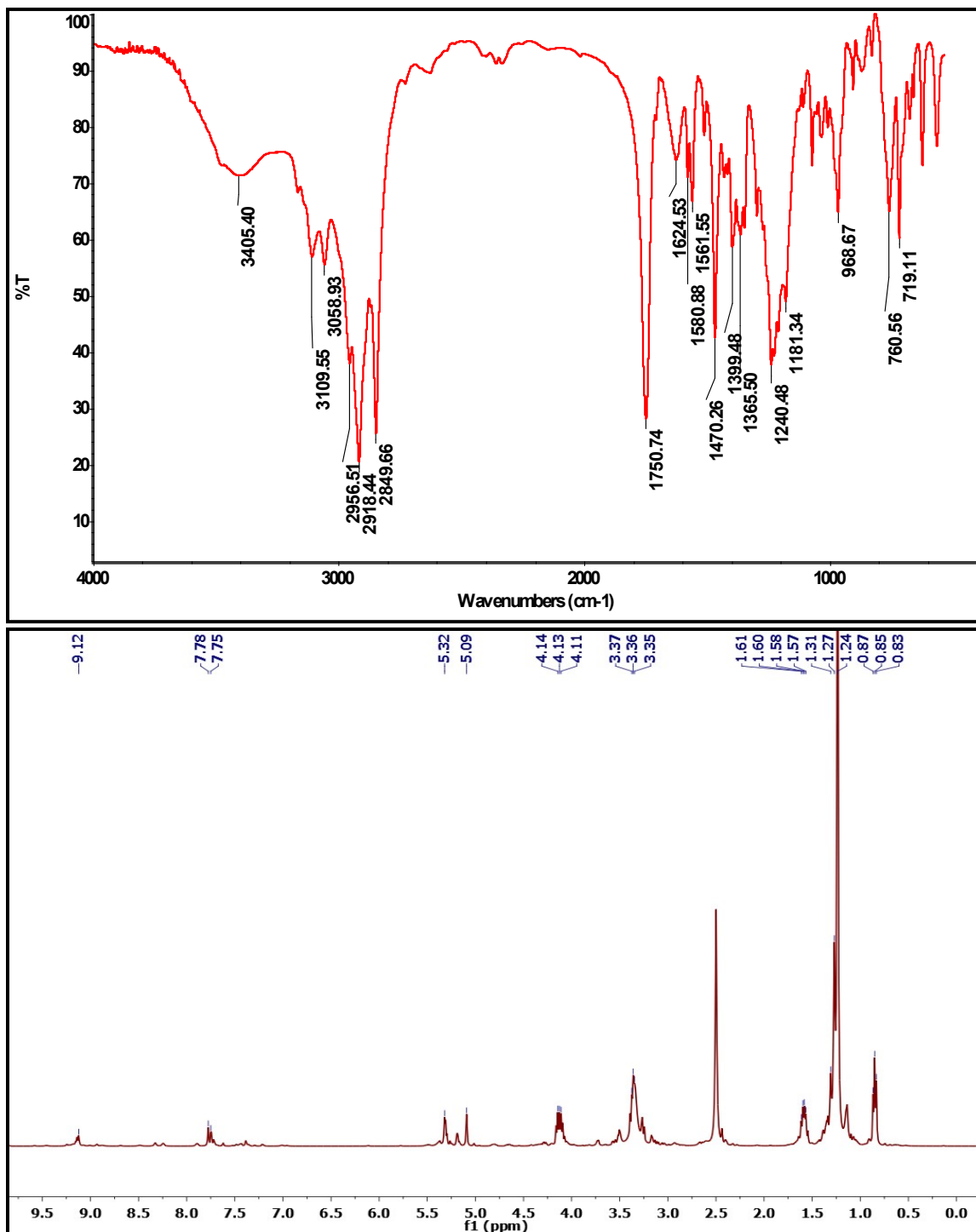


Figure S5. FT-IR and ¹H NMR (DMSO-*d*₆) spectra of the GILBS 4c.