

Supplementary Materials

Synthesis and Evaluation of Zwitterionic Surfactants Bearing Benzene Ring in the Hydrophobic Tail

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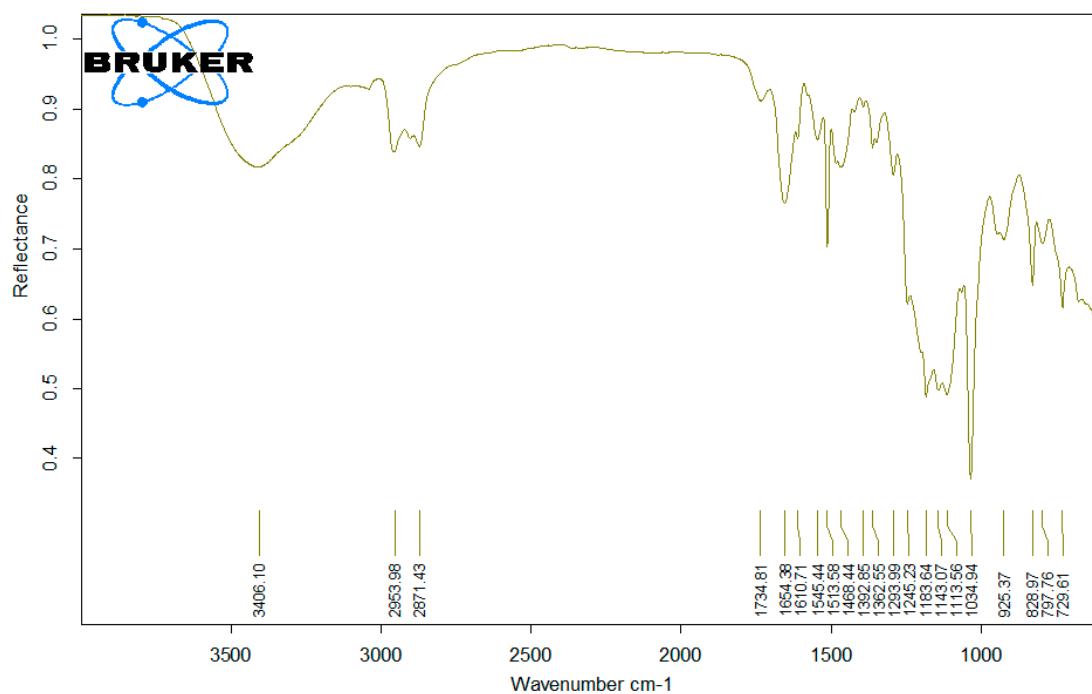
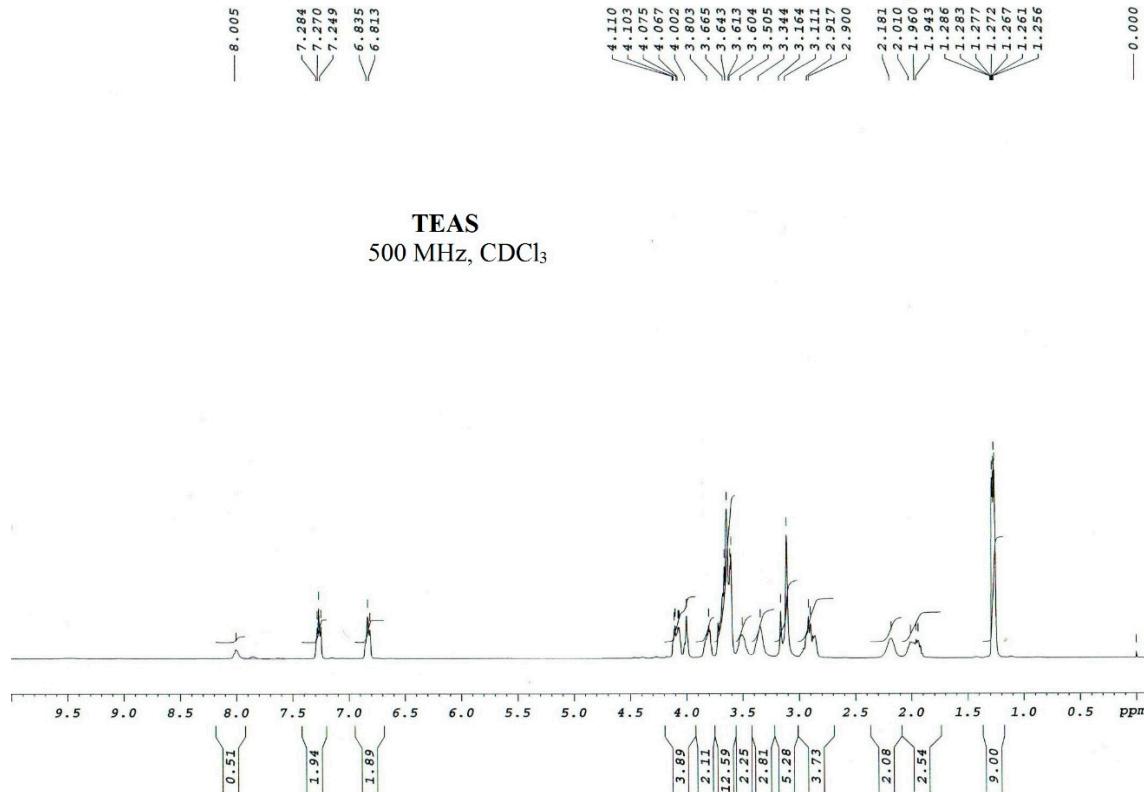
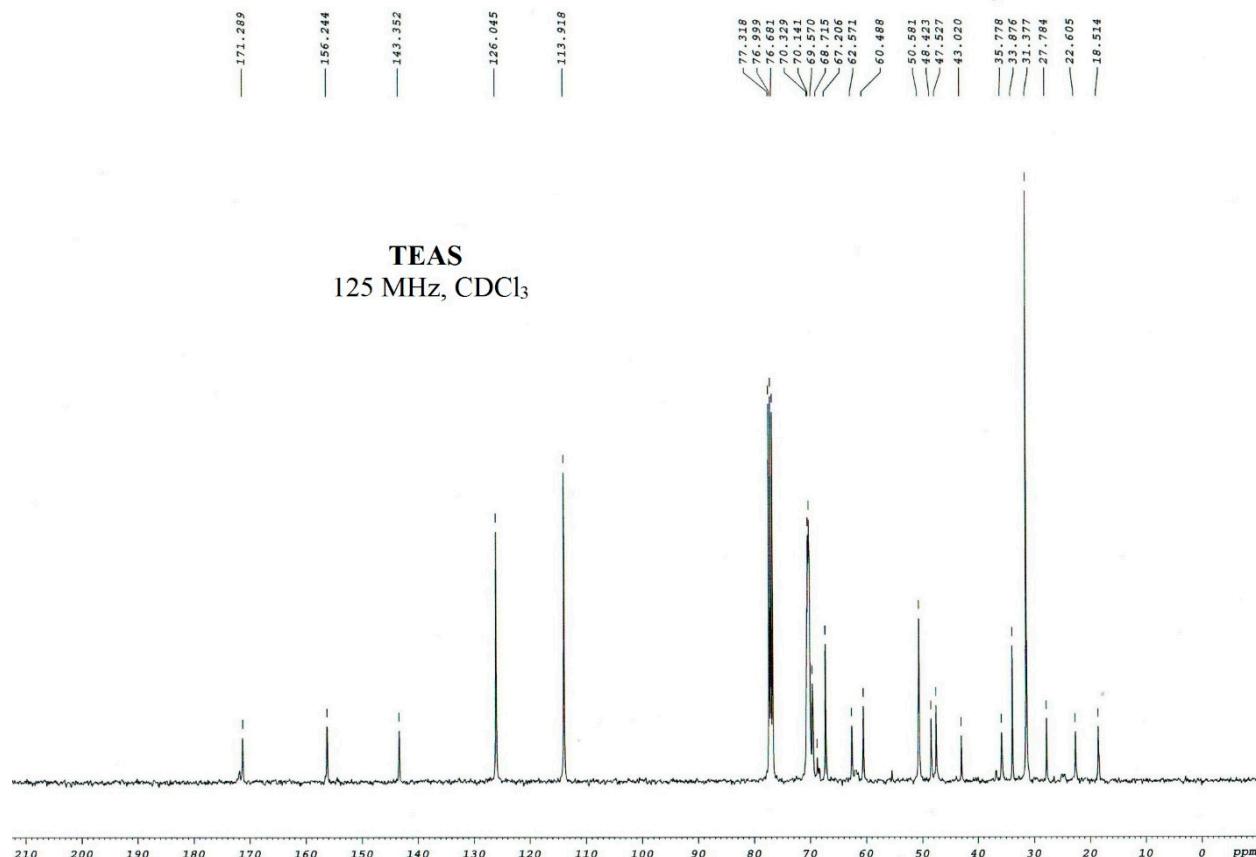


Figure S1. FT-IR spectrum of zwitterionic surfactants (TEAS).

**Figure S2.** ¹H-NMR of zwitterionic surfactant (TEAS).**Figure S3.** ¹³C-NMR of zwitterionic surfactant (TEAS).

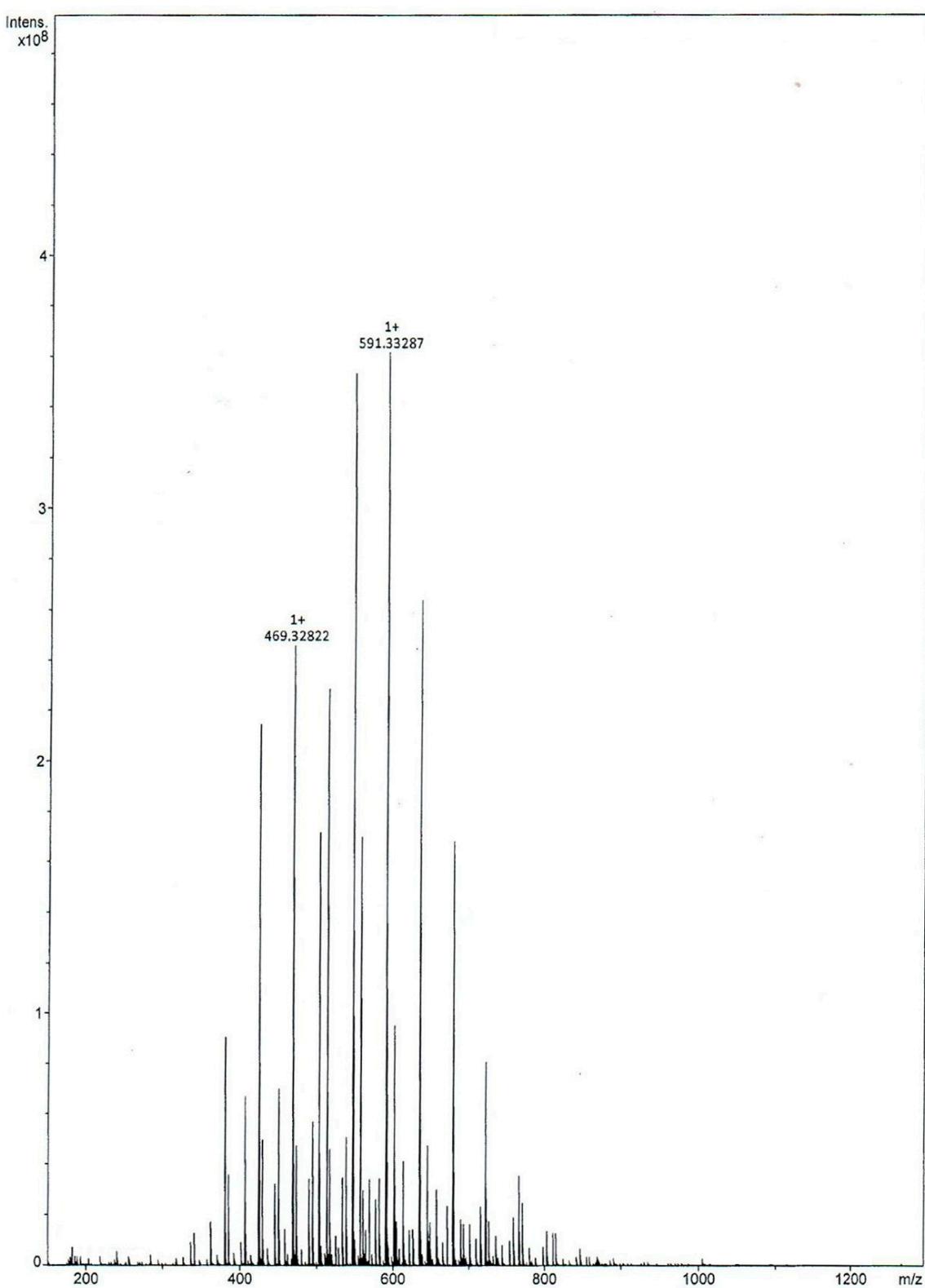


Figure S4. MALDI-TOF-MS spectra of zwitterionic surfactant (TEAS).

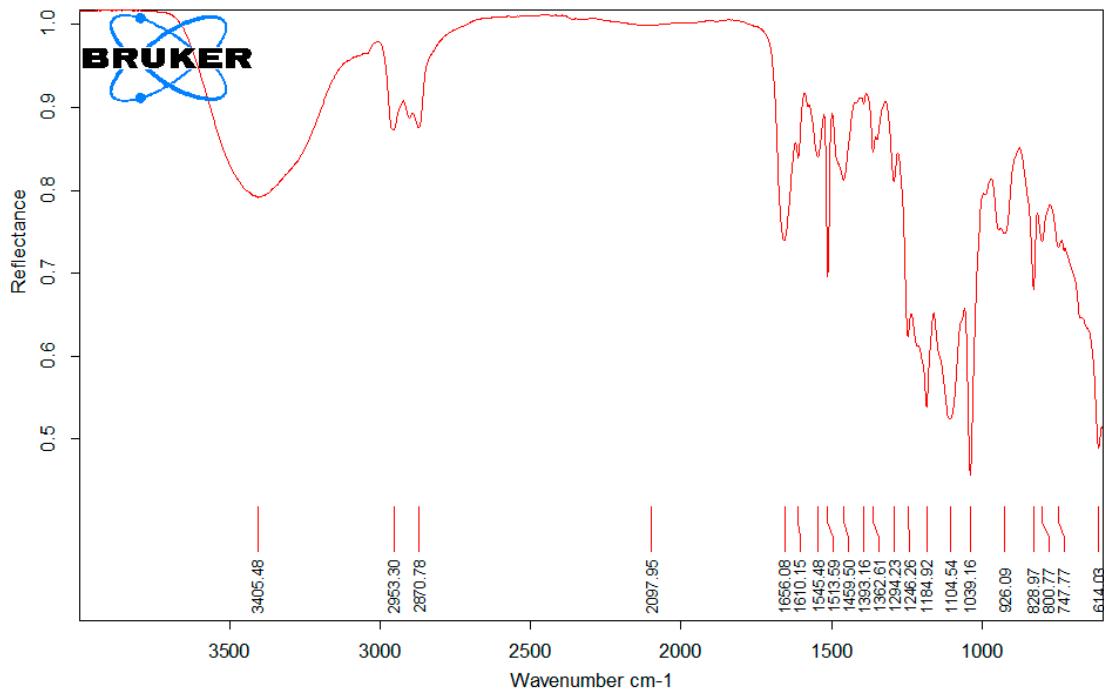


Figure S5. FT-IR spectrum of zwitterionic surfactants (TEAH).

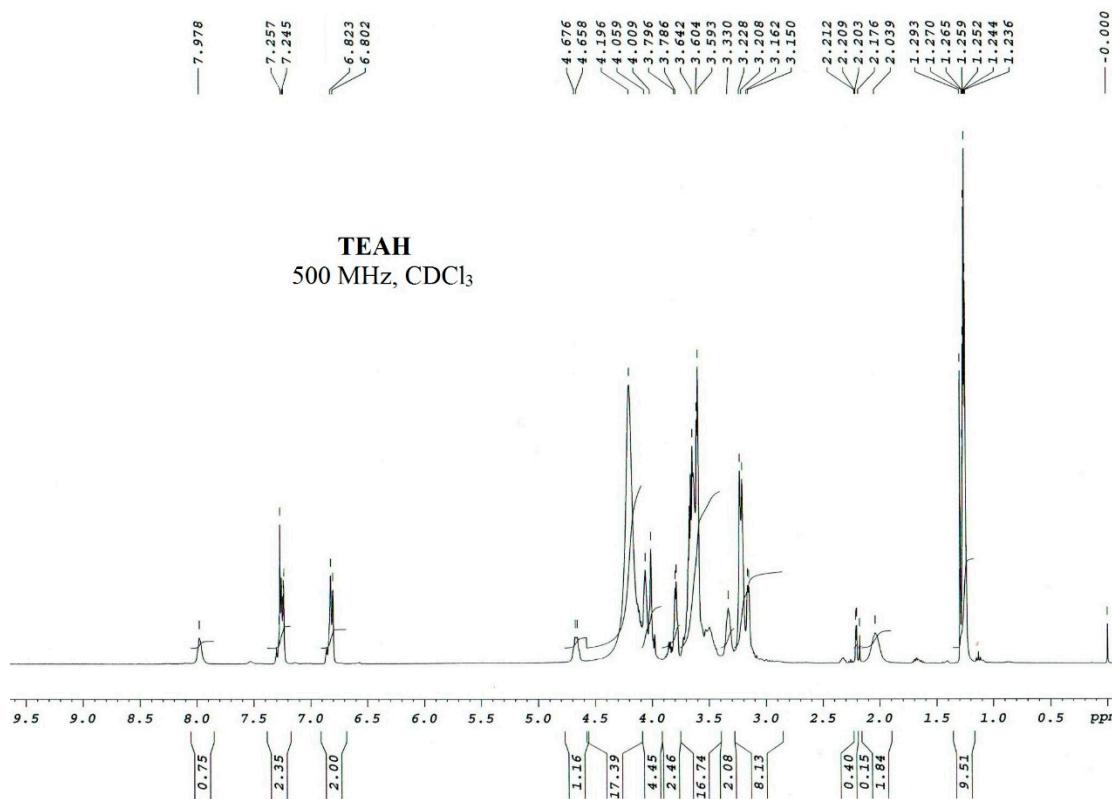


Figure S6. $^1\text{H-NMR}$ of zwitterionic surfactant (TEAH).

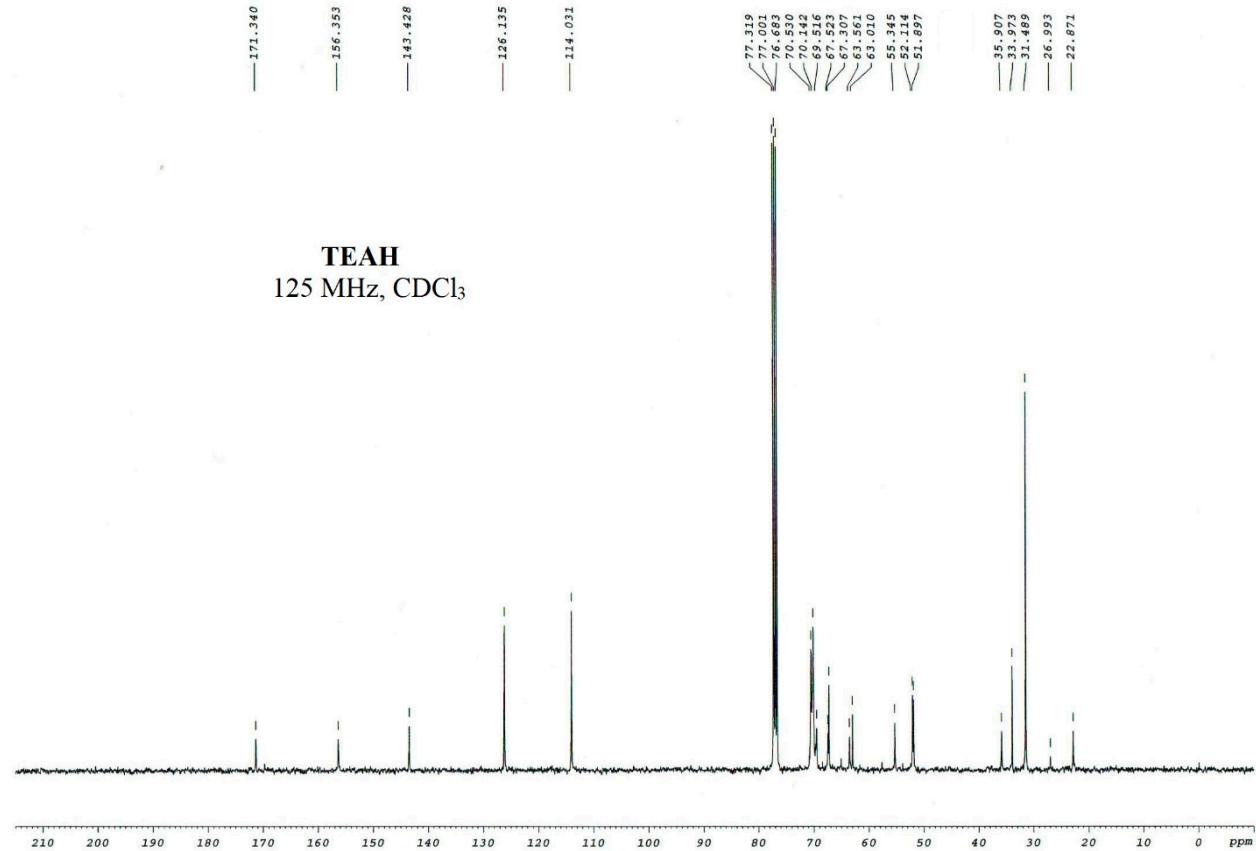


Figure S7. ¹³C-NMR of zwitterionic surfactant (TEAH).

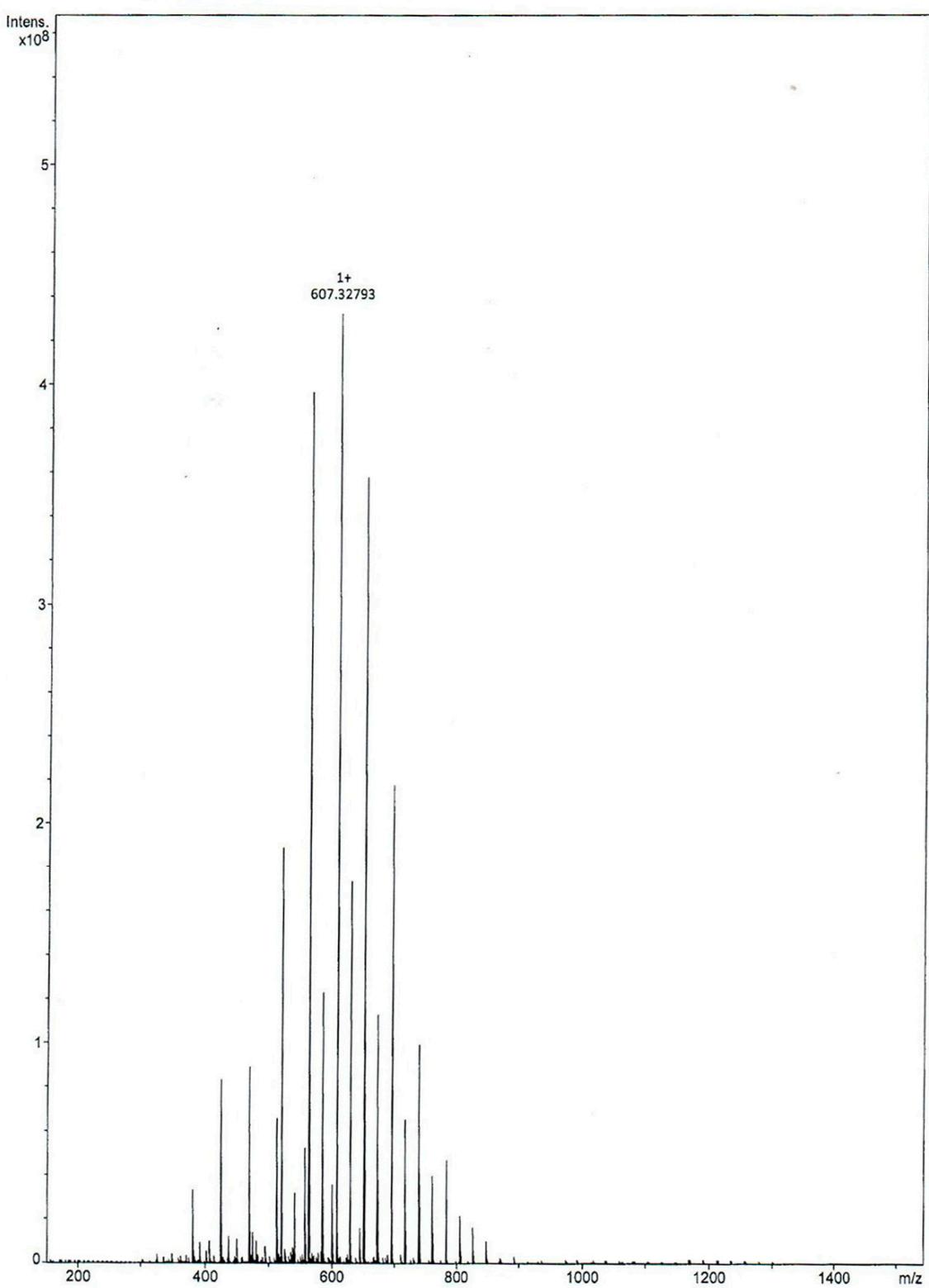


Figure S8. MALDI-TOF-MS spectra of zwitterionic surfactant (TEAH).

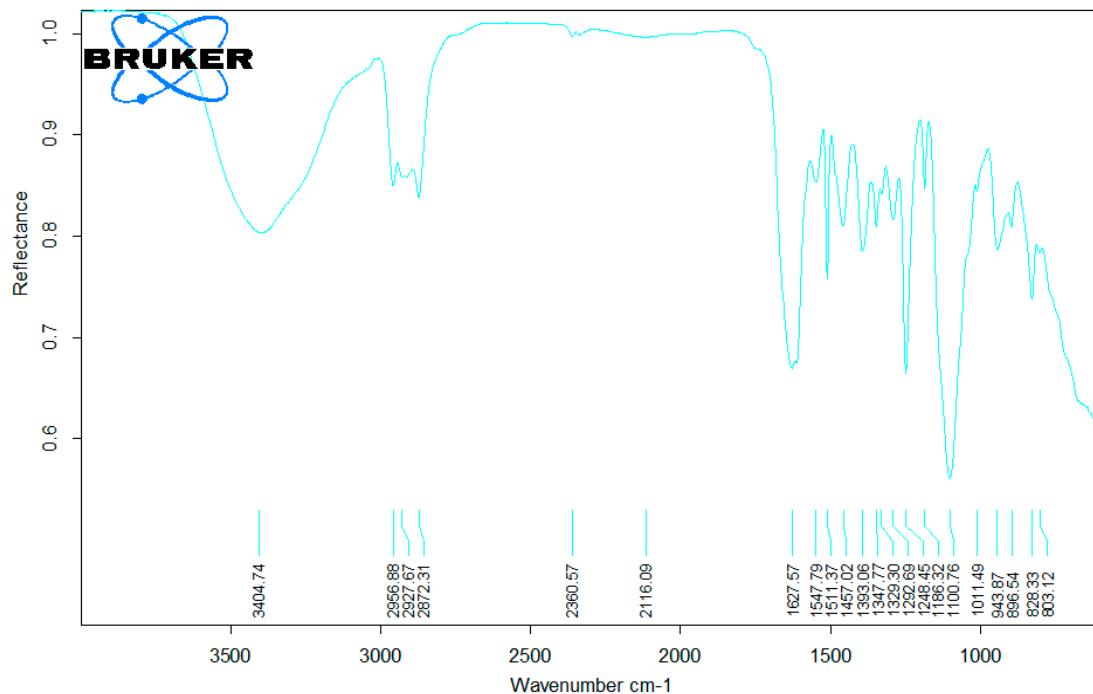


Figure S9. FT-IR spectrum of zwitterionic surfactants (NEAC).

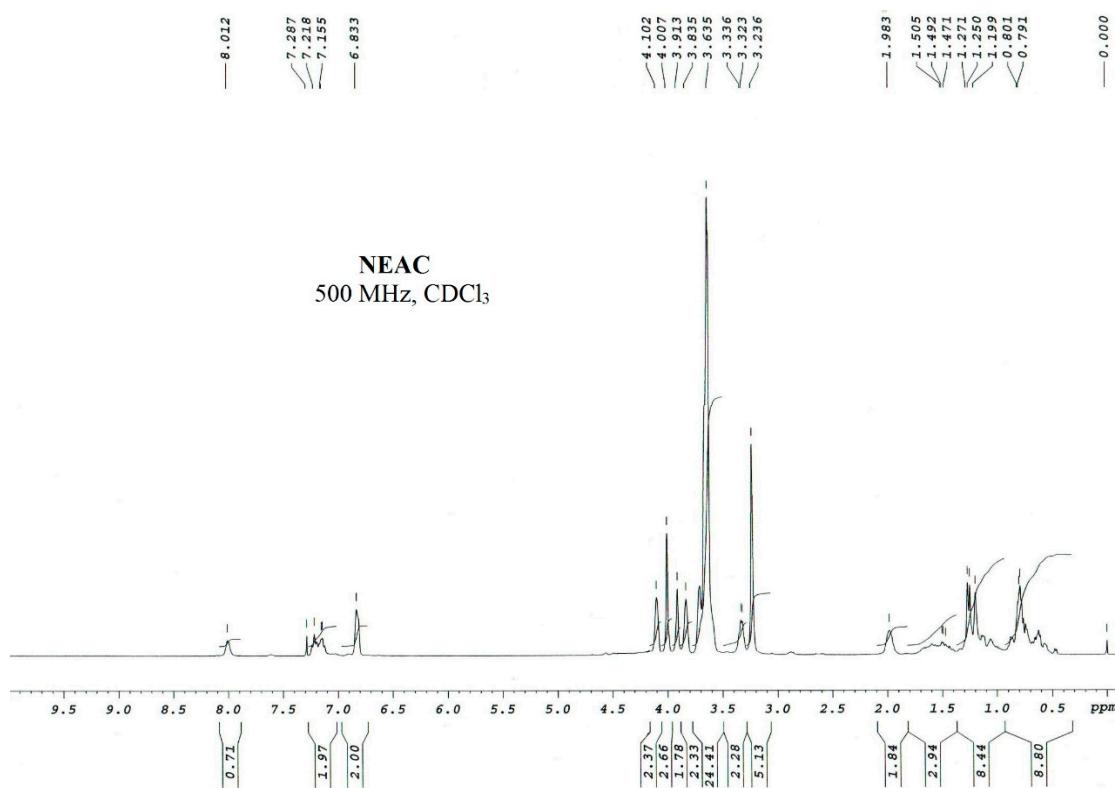


Figure S10. $^1\text{H-NMR}$ of zwitterionic surfactant (NEAC).

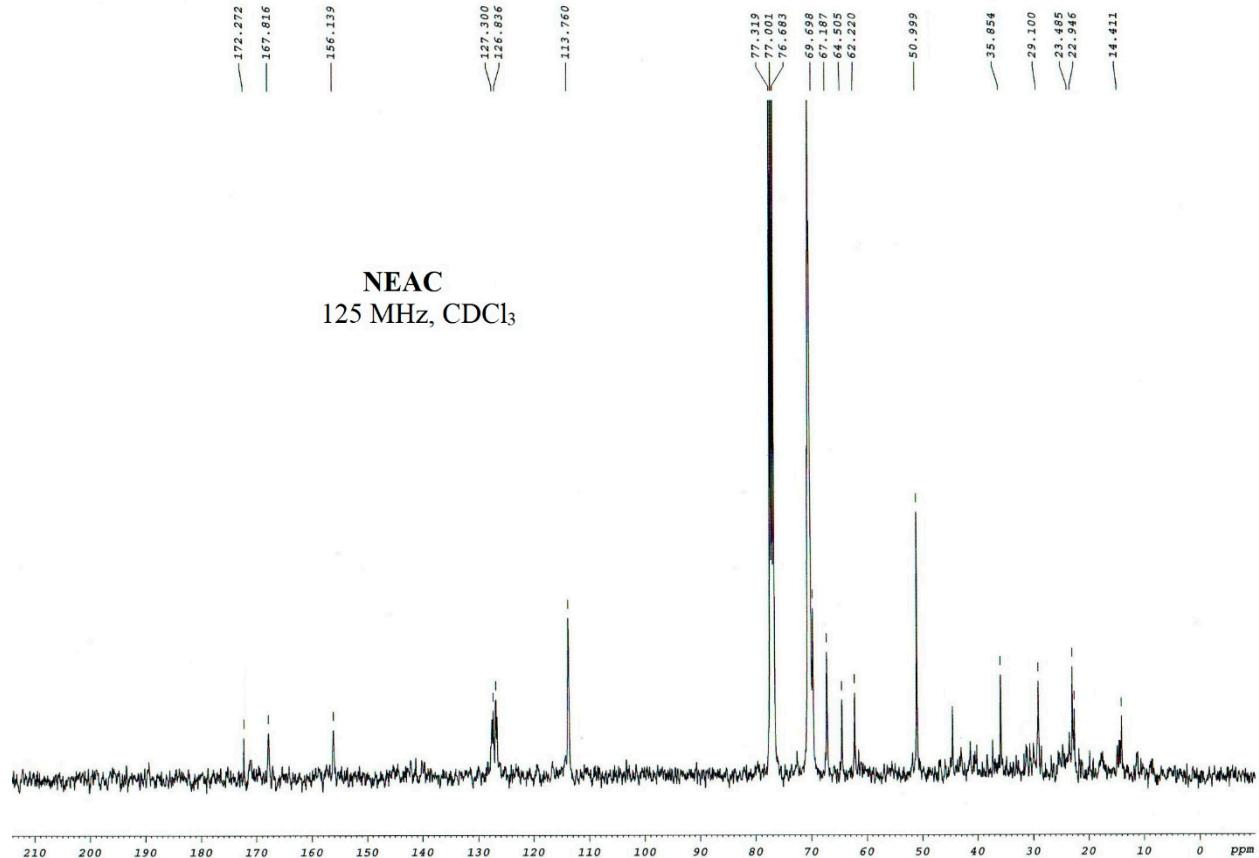


Figure S11. ^{13}C -NMR of zwitterionic surfactant (NEAC).

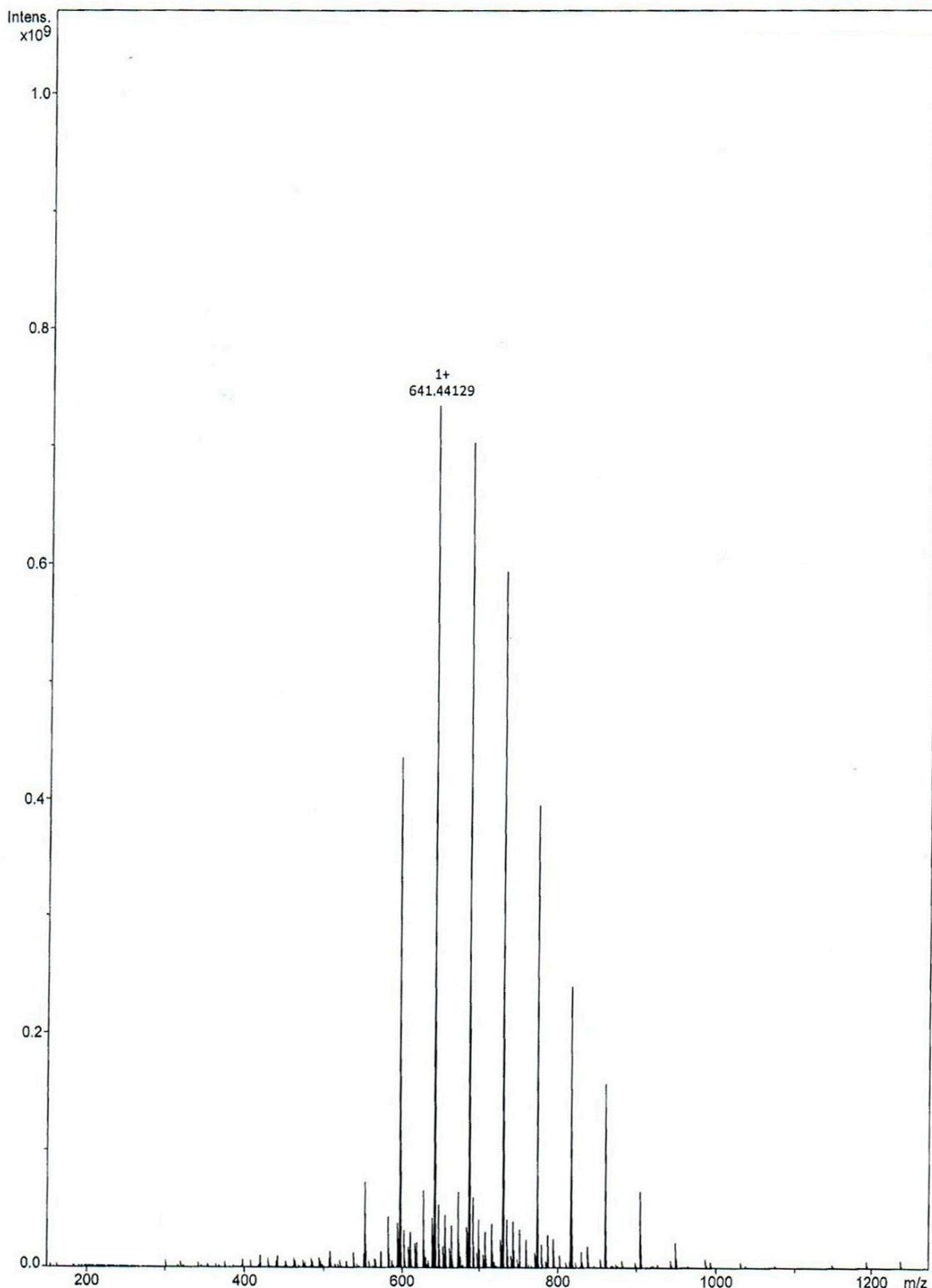


Figure S12. MALDI-TOF-MS spectra of zwitterionic surfactant (NEAC).

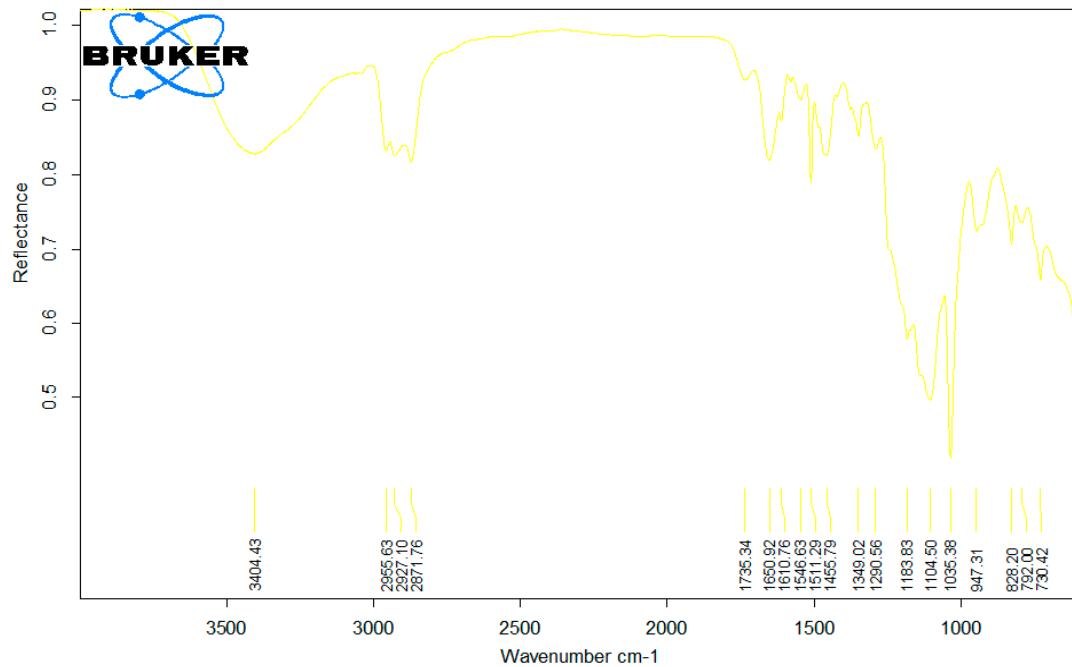


Figure S13. FT-IR spectrum of zwitterionic surfactants (NEAS).

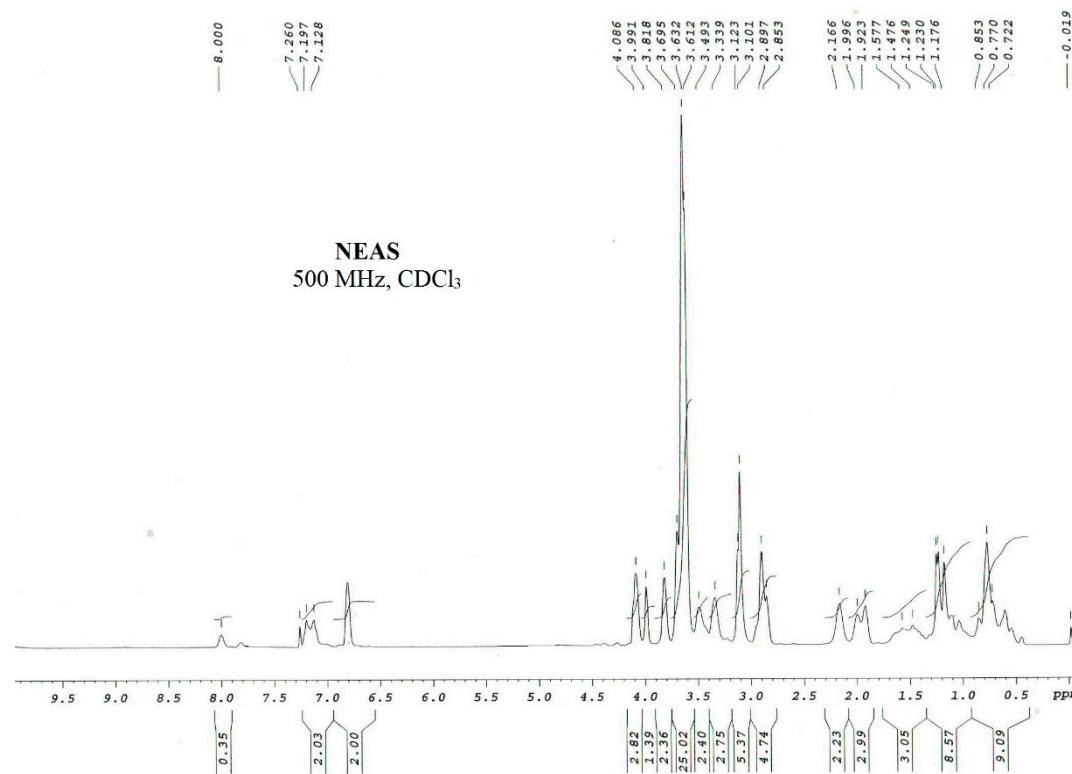


Figure S14. ^1H -NMR of zwitterionic surfactant (NEAS).

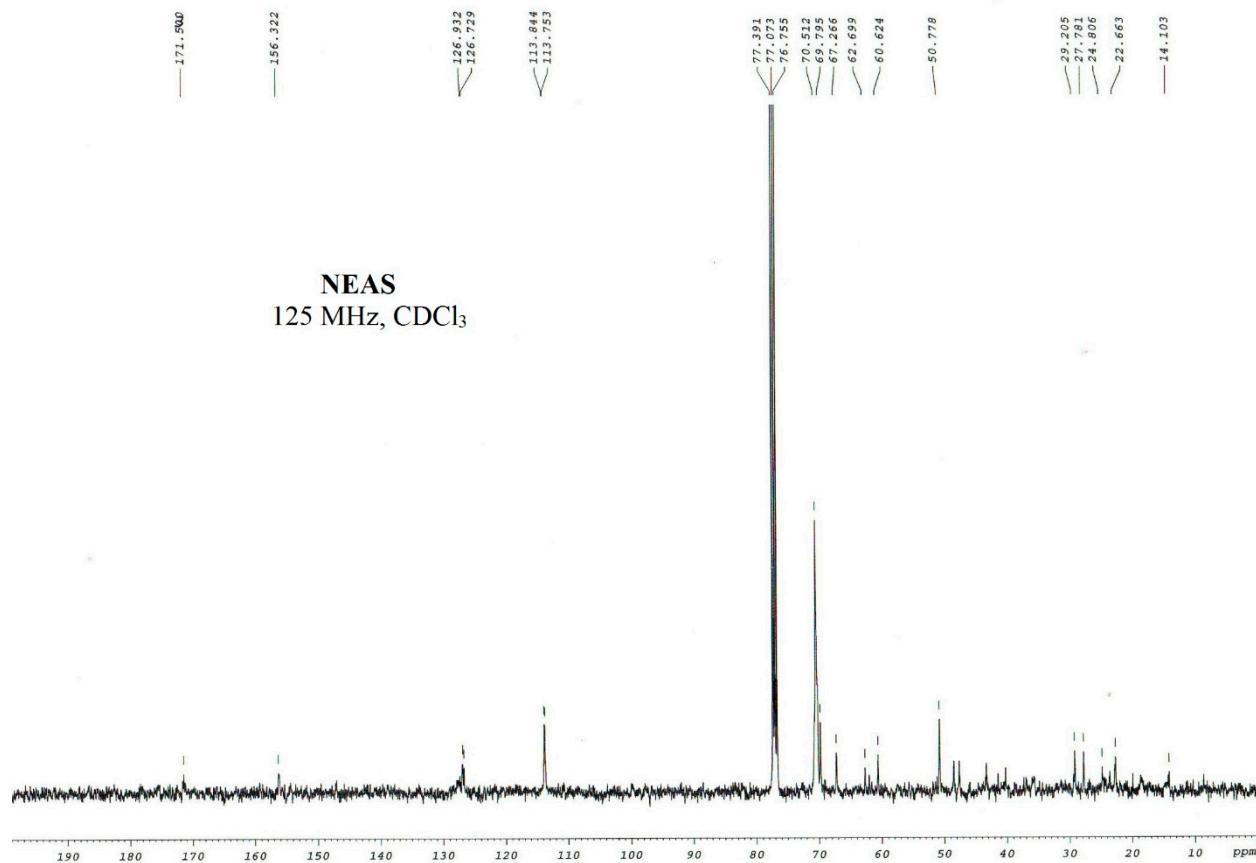


Figure S15. ^{13}C -NMR of zwitterionic surfactant (NEAS).

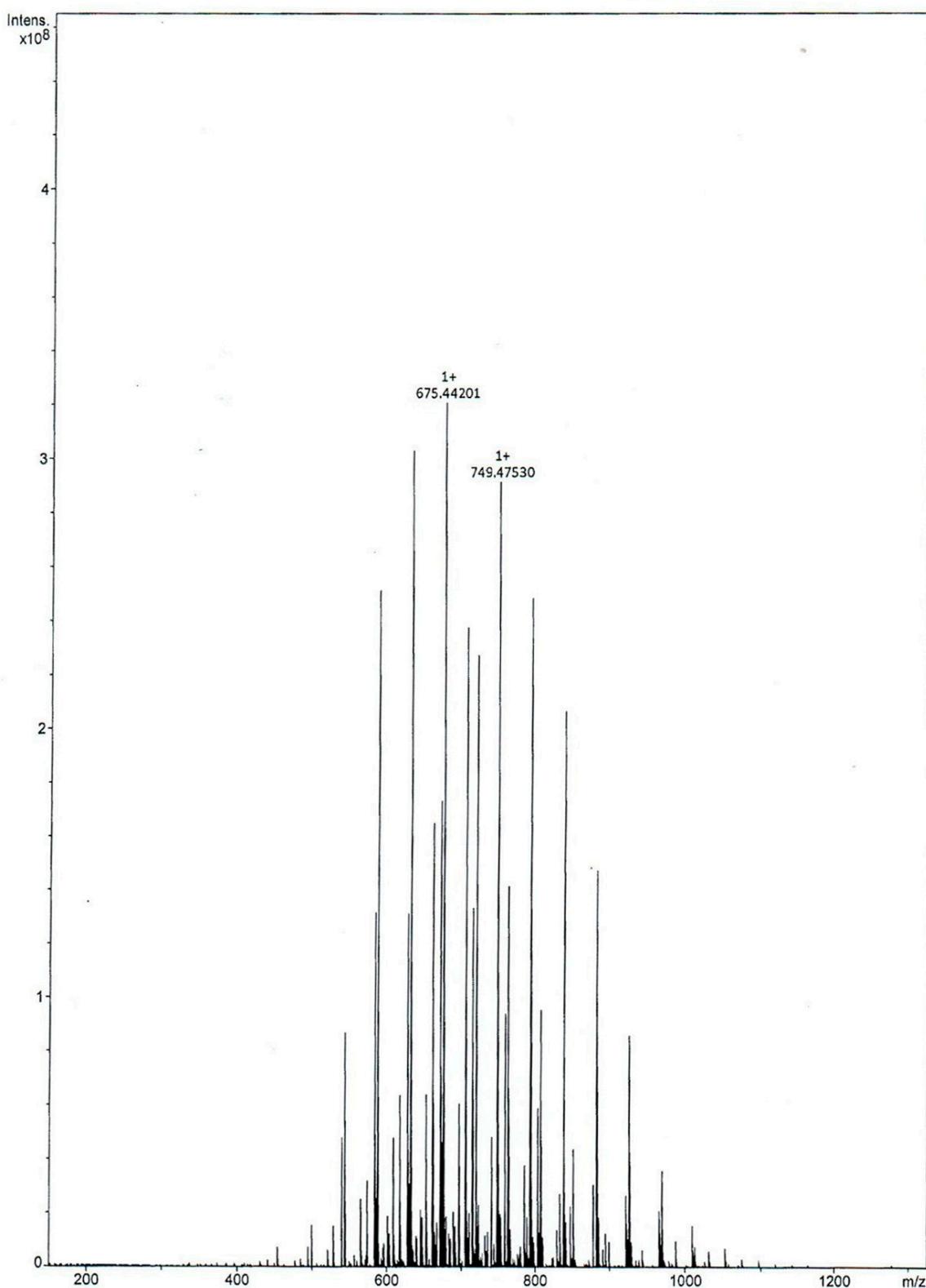


Figure S16. MALDI-TOF-MS spectra of zwitterionic surfactant (NEAS).

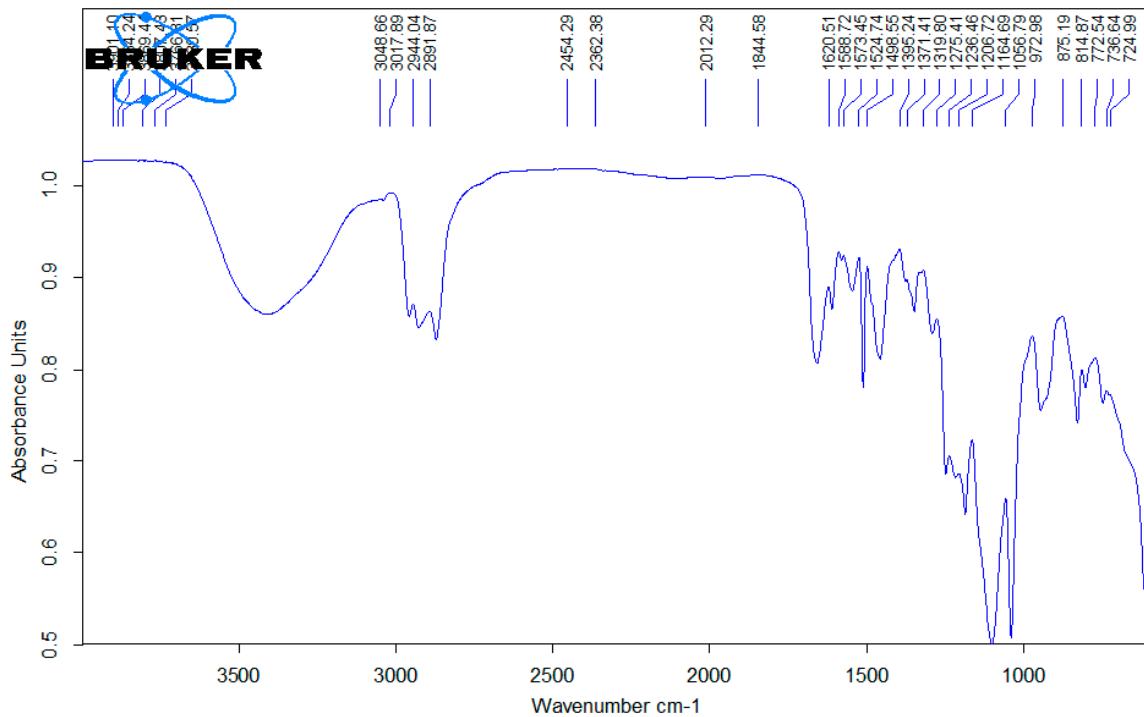


Figure S17. FT-IR spectrum of zwitterionic surfactants (NEAH).

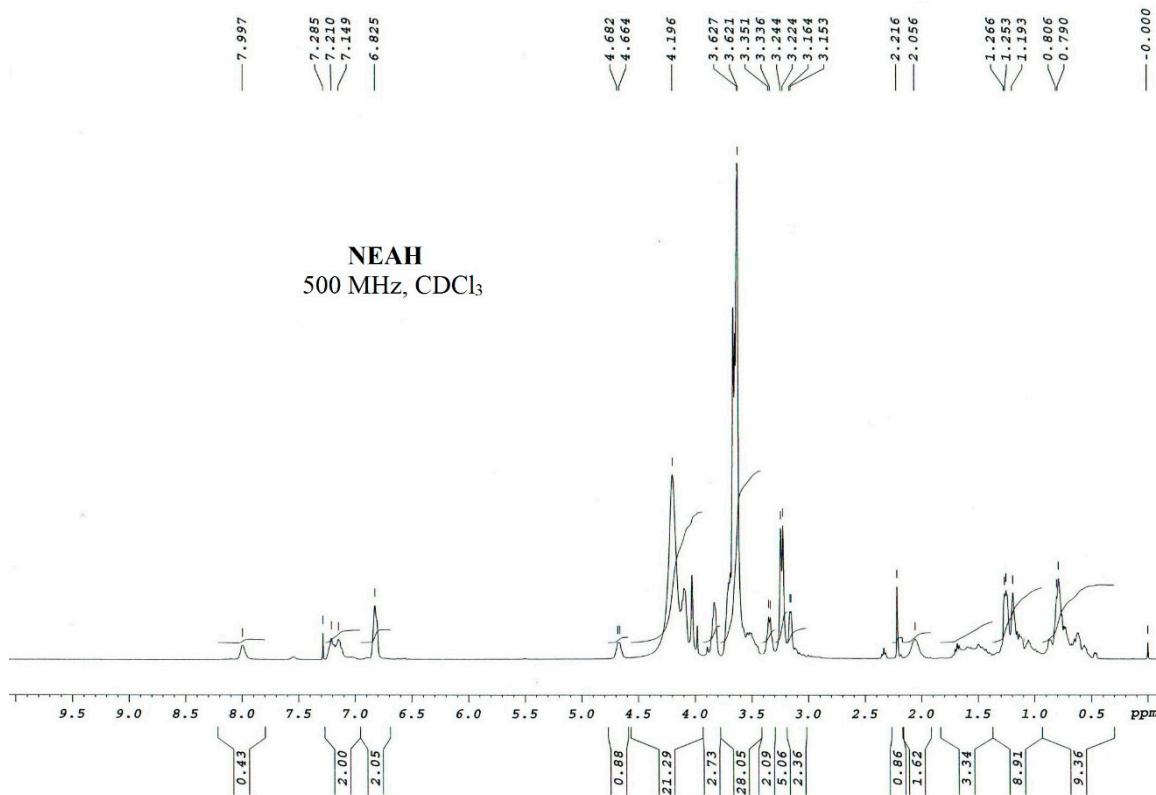


Figure S18. ^1H -NMR of zwitterionic surfactant (NEAH).

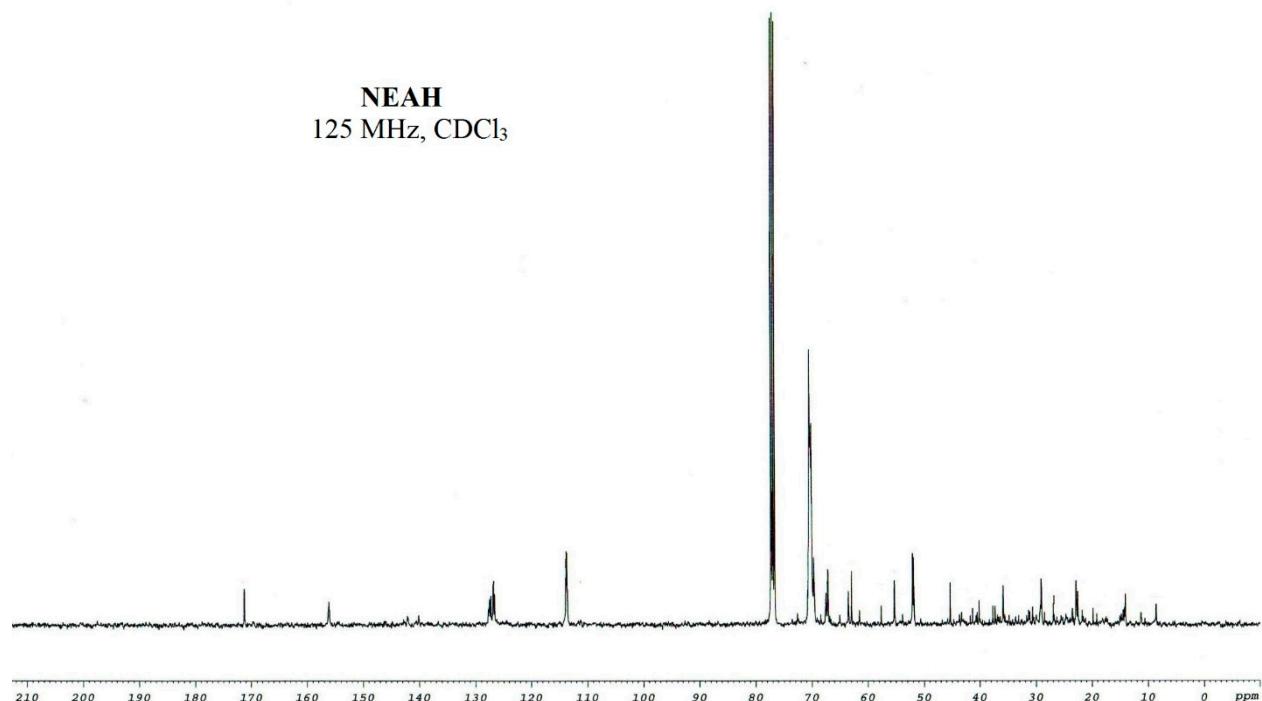


Figure S19. ^{13}C -NMR of zwitterionic surfactant (NEAH).

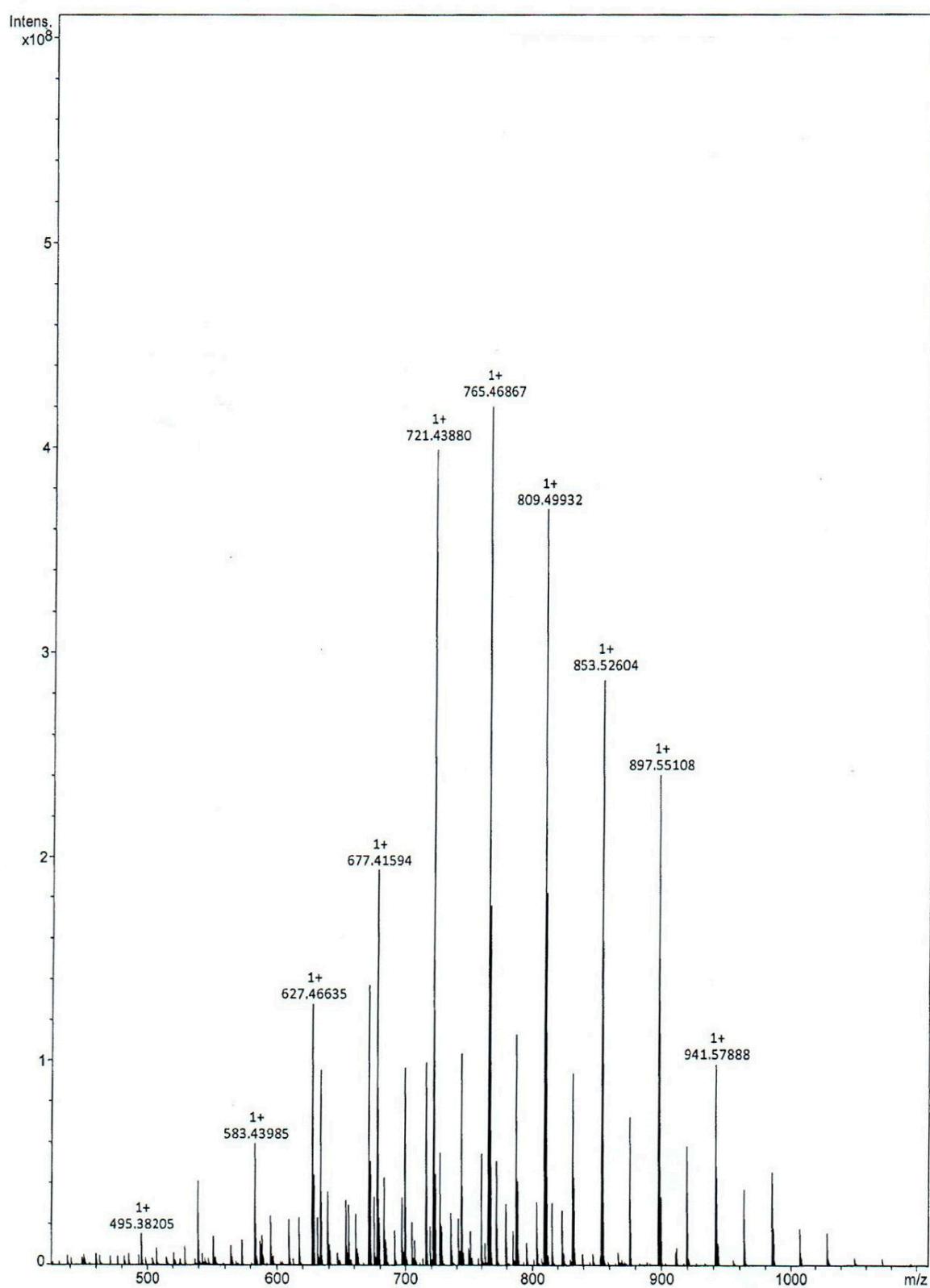


Figure S20. MALDI-TOF-MS spectra of zwitterionic surfactant (NEAH).