

Supporting Information

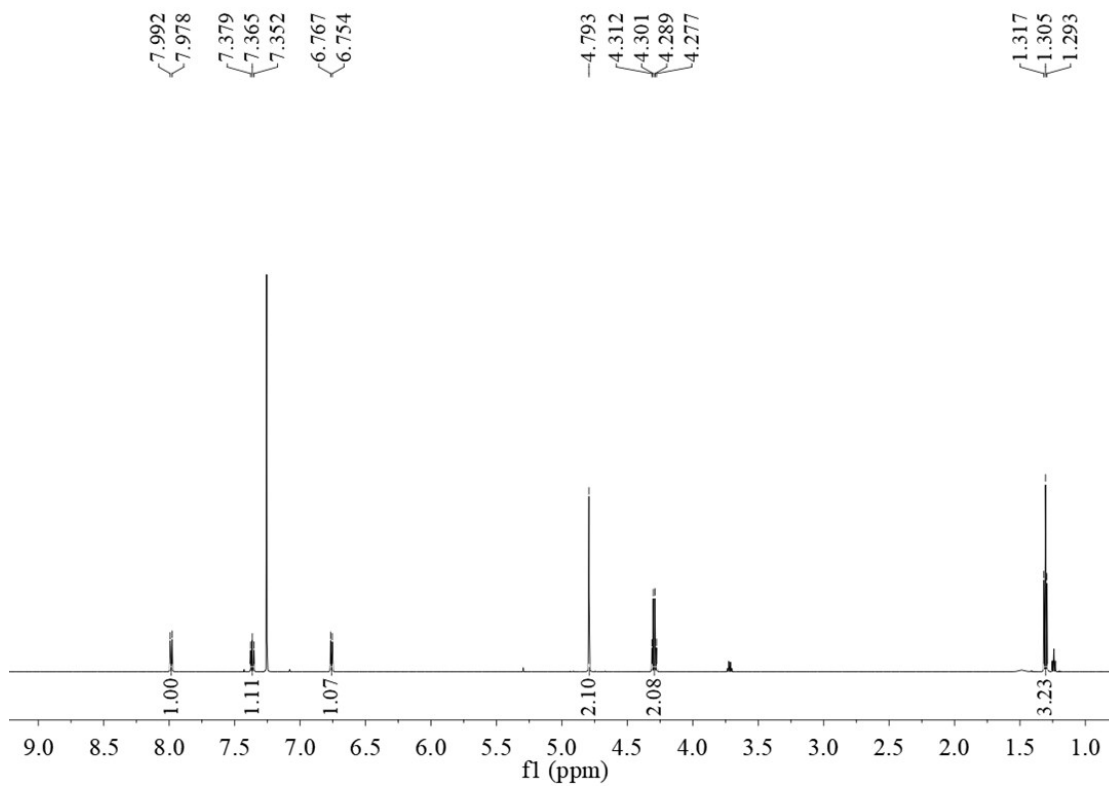


Fig. S1 ¹H NMR spectrum of Compound 1

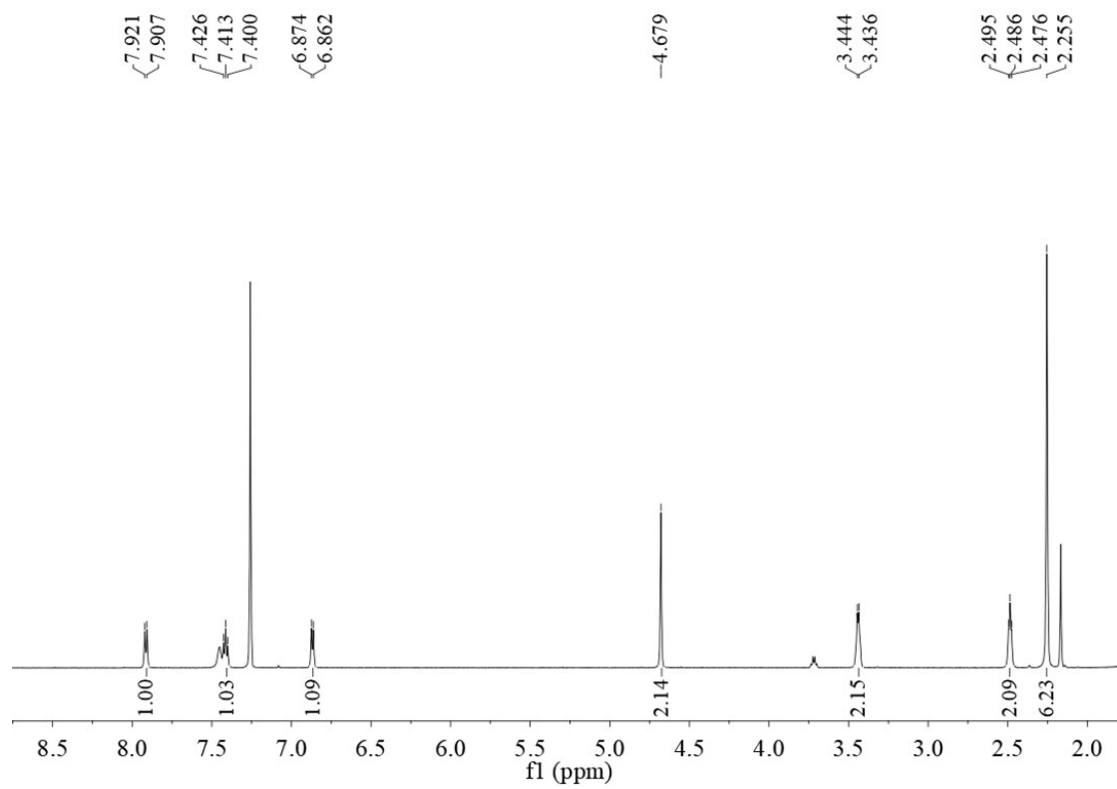


Fig. S2 ¹H NMR spectrum of Compound 2

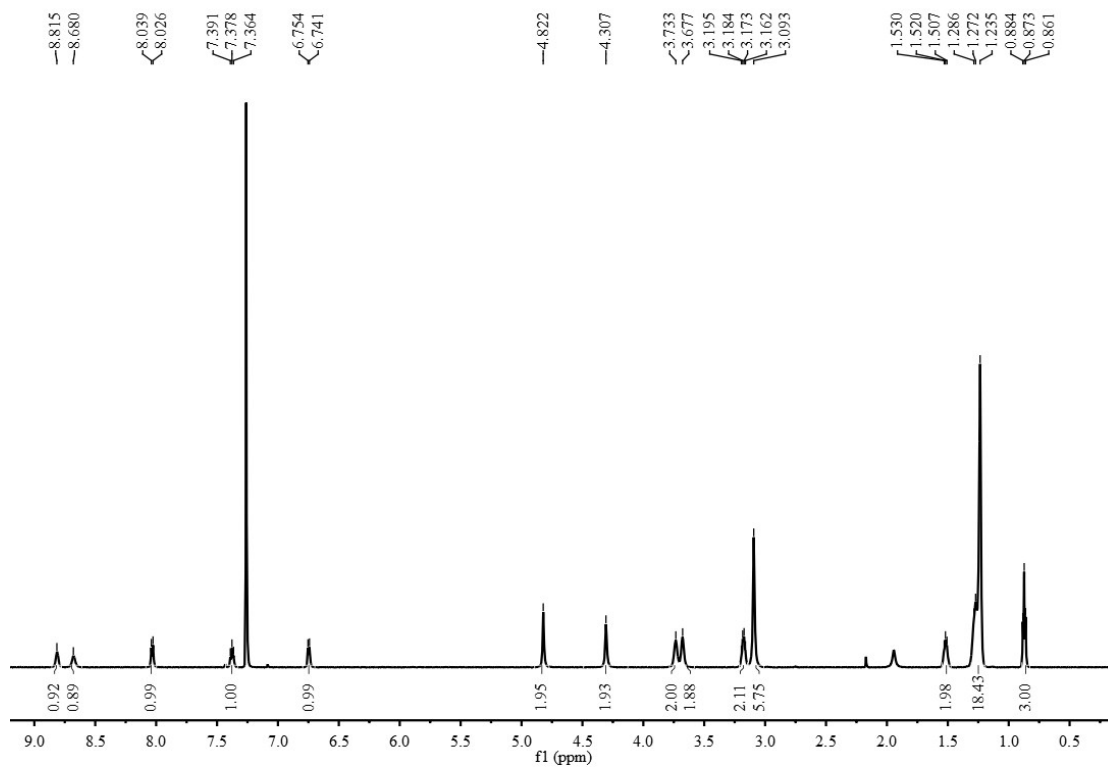


Fig. S3 ¹H NMR spectrum of C₁₂NDDA

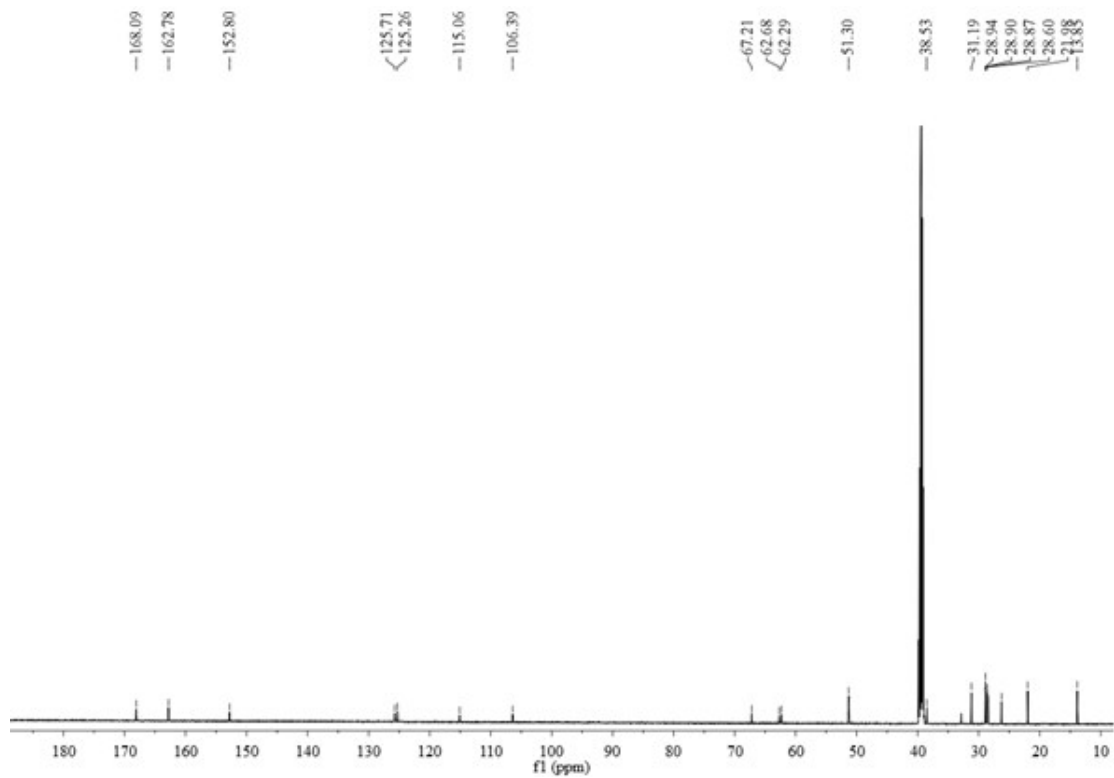


Fig. S4 ^{13}C NMR spectrum of C_{12}NDDA

20160602_ZB_21_2 12 (0.140) Cm (8:36)

1: TOF MS ES+
4.26e7

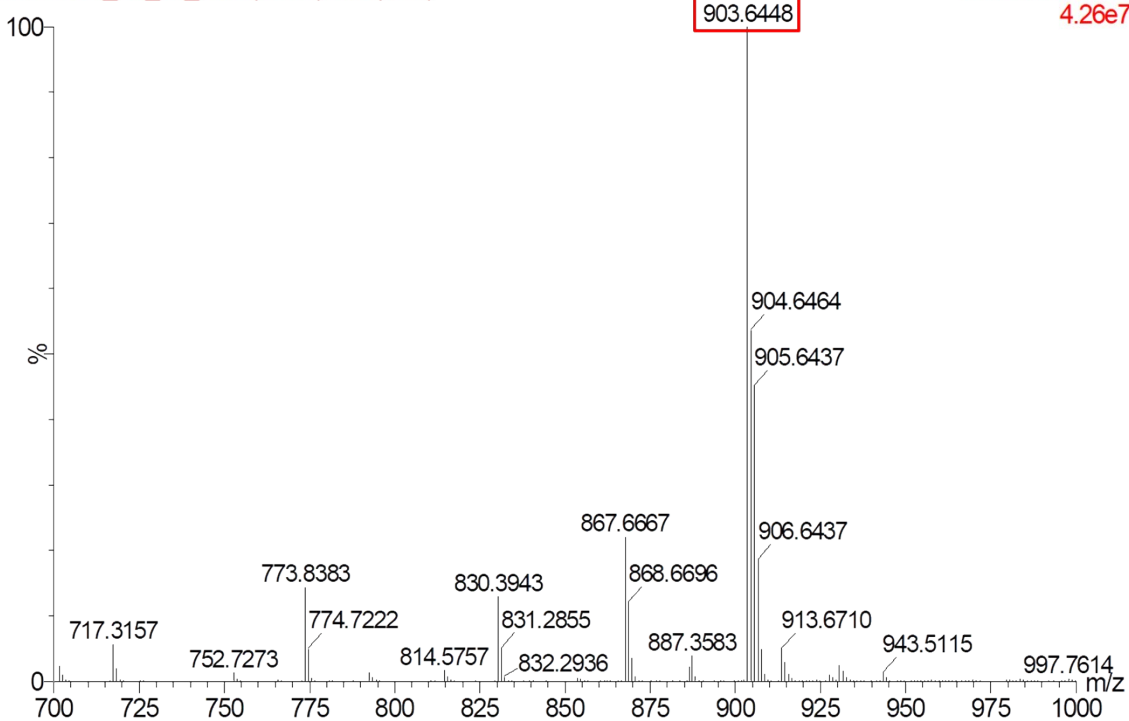


Fig. S5 ESI-MS spectra of C₁₂NDDA

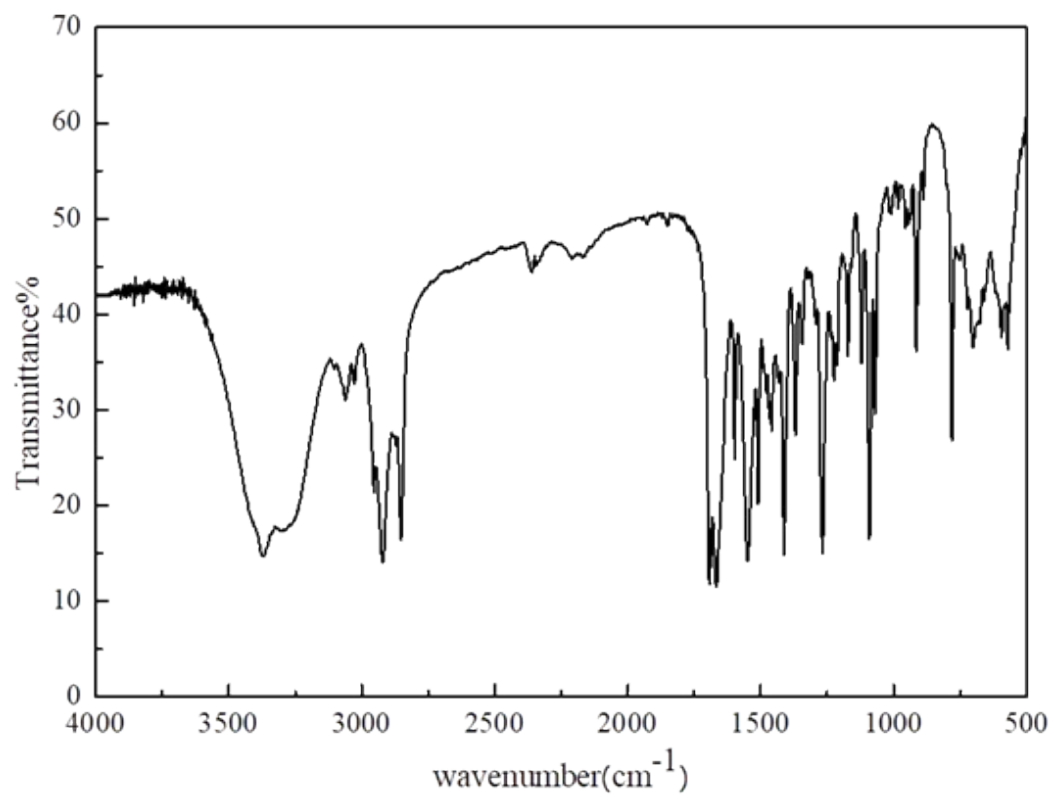


Fig. S6 FTIR spectra of C₁₂NDDA

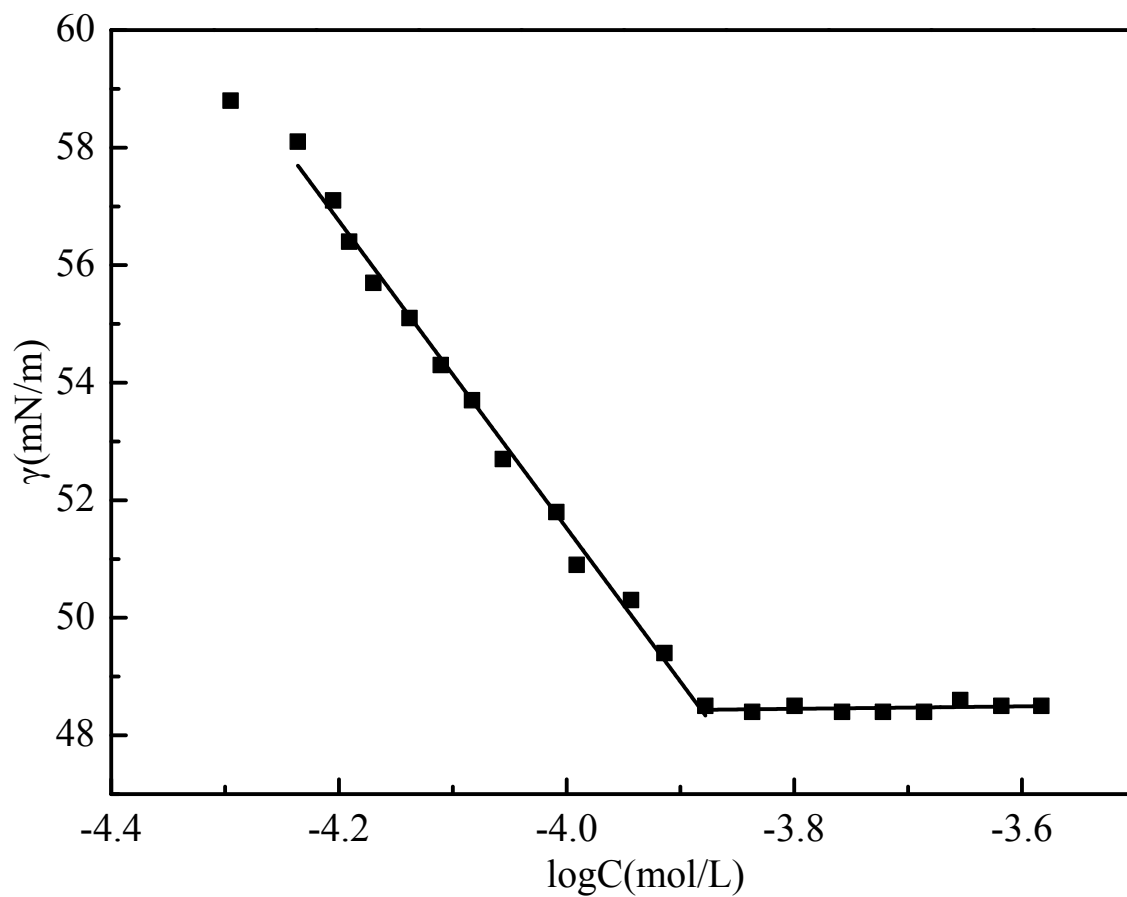


Fig. S7 Curves on surface tension versus log C of $C_{12}NDDA$ in aqueous solution at 298 K

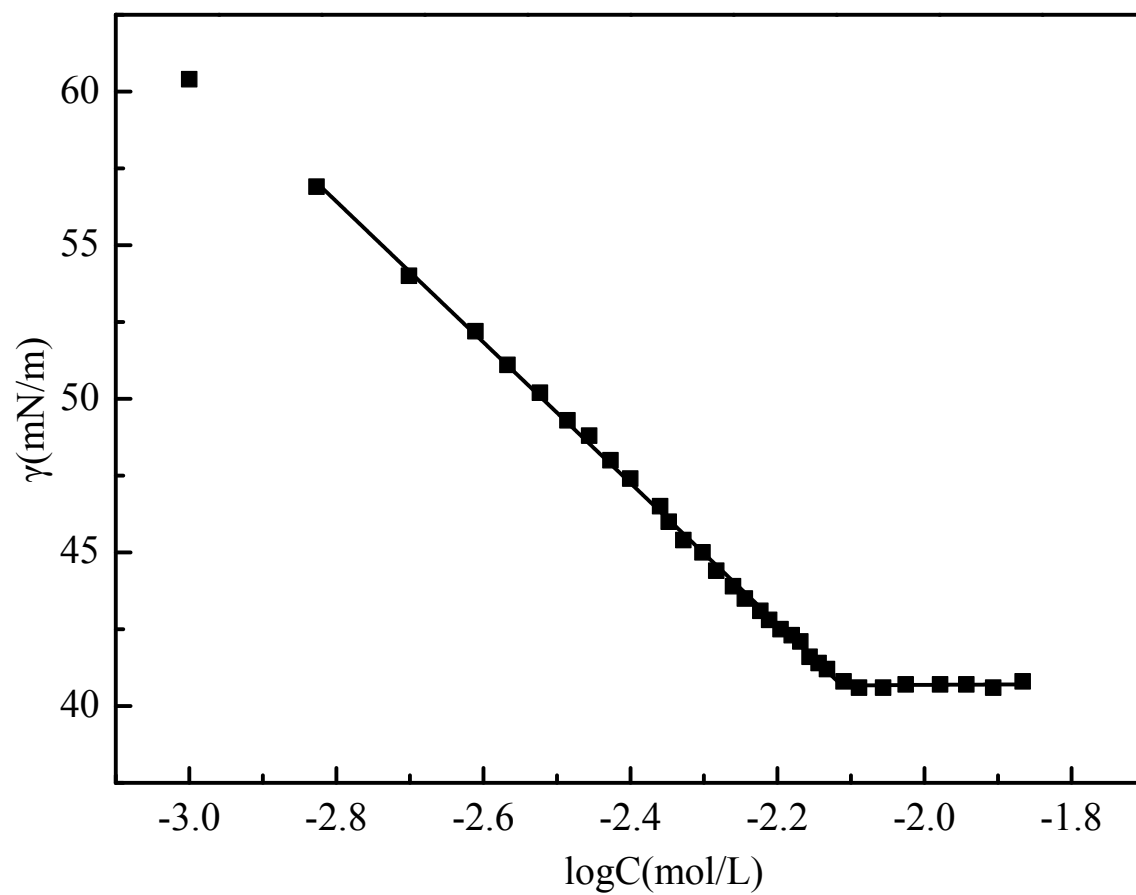


Fig. S8 Curves on surface tension versus log C of 1227 in aqueous solution at 298 K

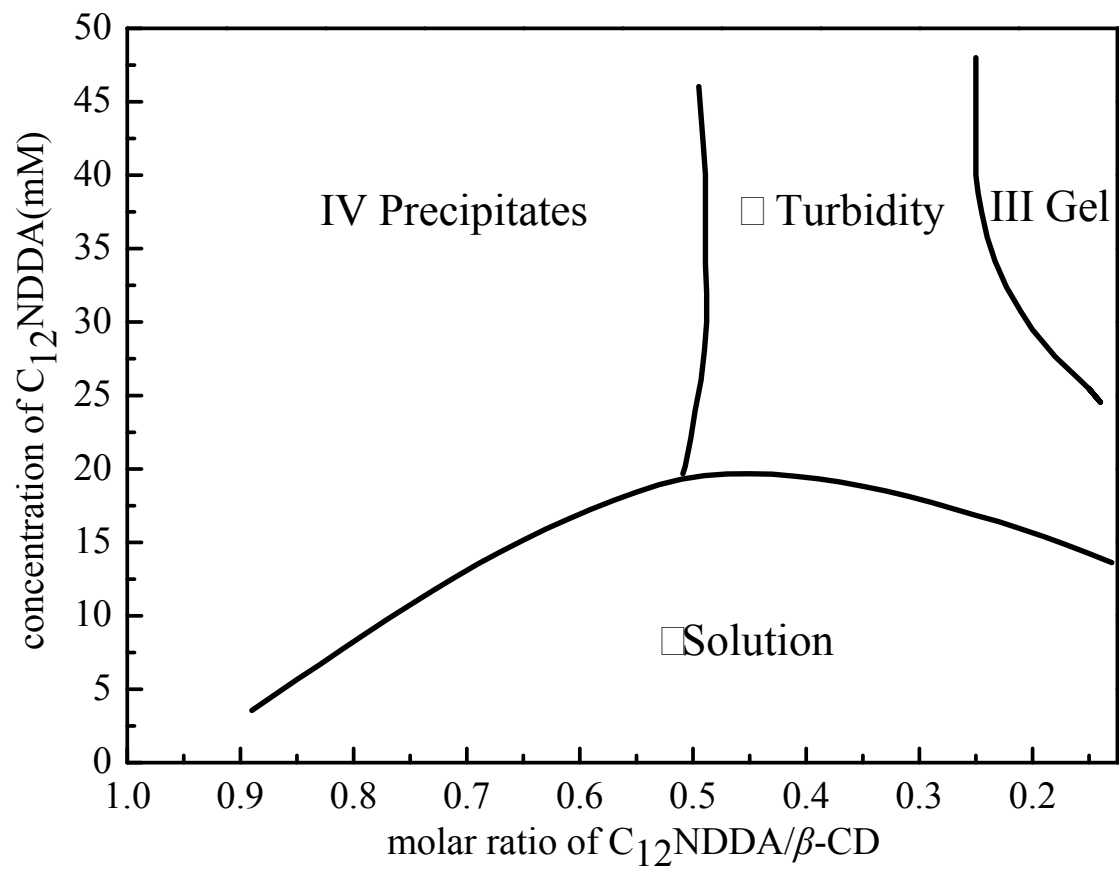


Fig. S9. Phase diagram of the C₁₂NDDA/β-CD/H₂O system at 25 °C.

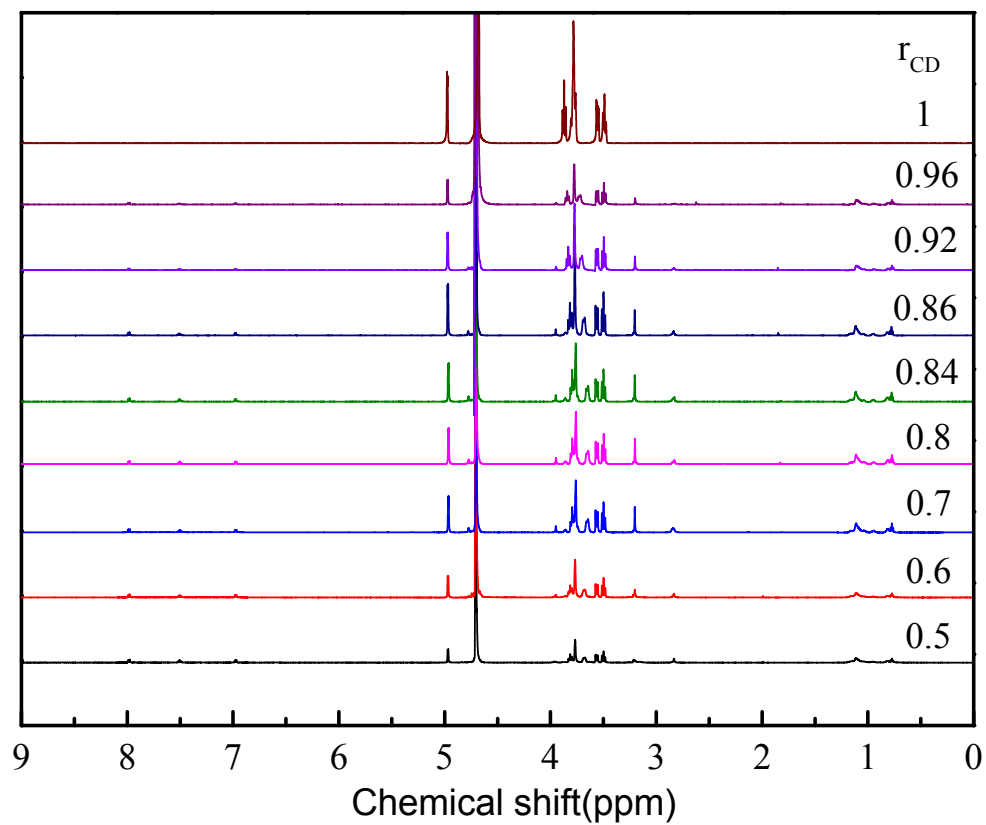


Fig. S10 ^1H NMR spectra and proton assignments of β -CD/ C_{12}NDDA mixtures in D_2O versus different molar ratio

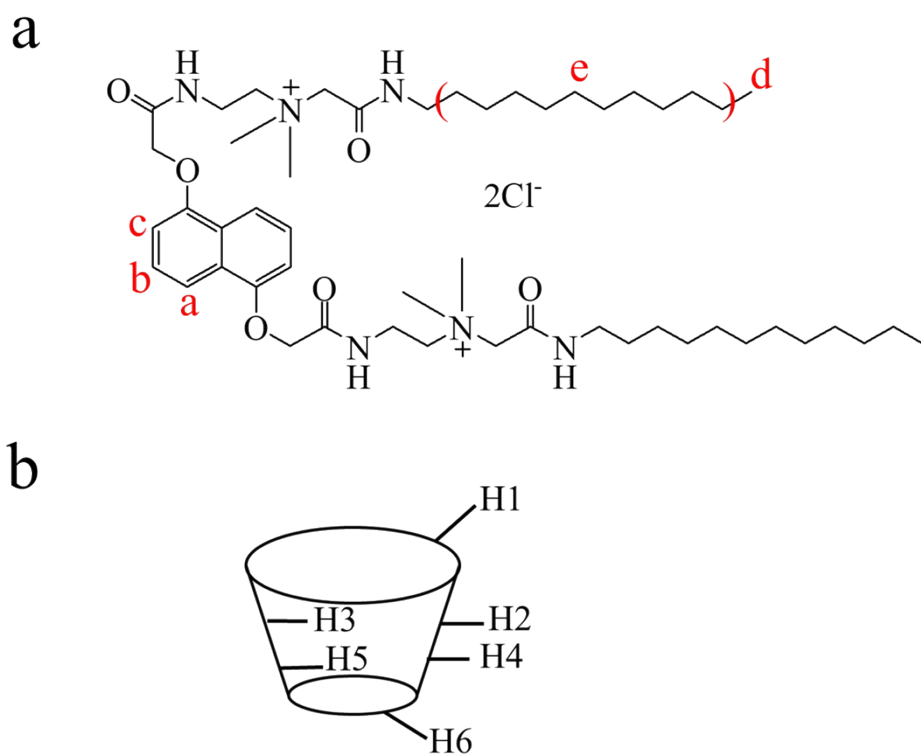


Fig. S11 Signal assignments of cationic Gemini surfactant $C_{12}NDDA$ (a) and β -CD (b)

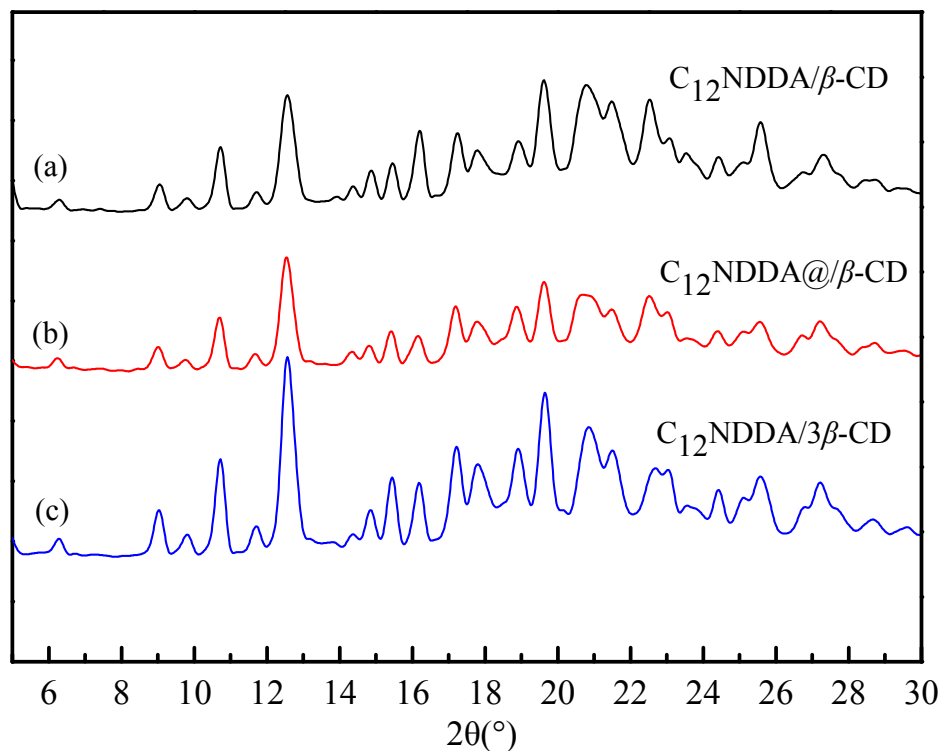


Fig. S12 XRD patterns of physical mixture at $C_{12}NDDA/\beta\text{-CD}$ molar ratio of (a) 1:1, (b) 1:2, (c) 1:3.

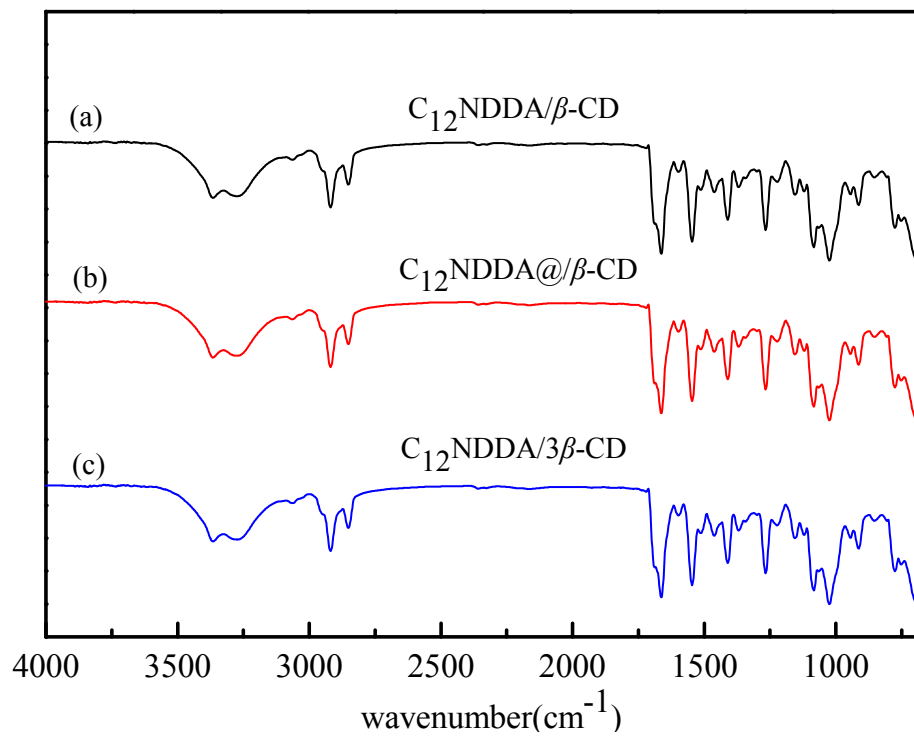


Fig. S13 FTIR spectra of physical mixture at $\text{C}_{12}\text{NDDA}/\beta\text{-CD}$ molar ratio of (a) 1:1, (b) 1:2, (c) 1:3.

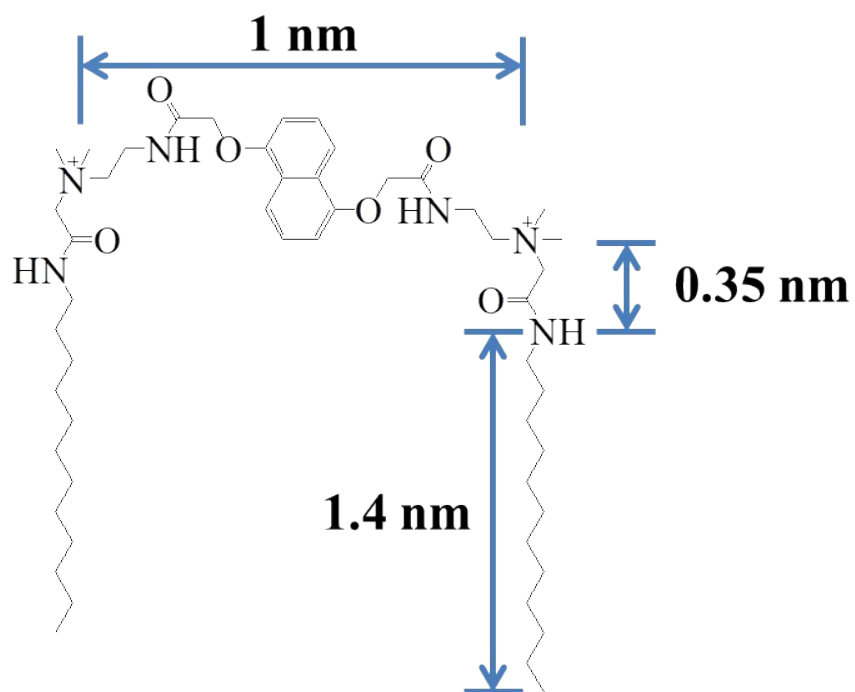


Fig. S14 Chemical structure of cationic trimeric surfactant DTAD with the extended lengths estimated with Chem3D