

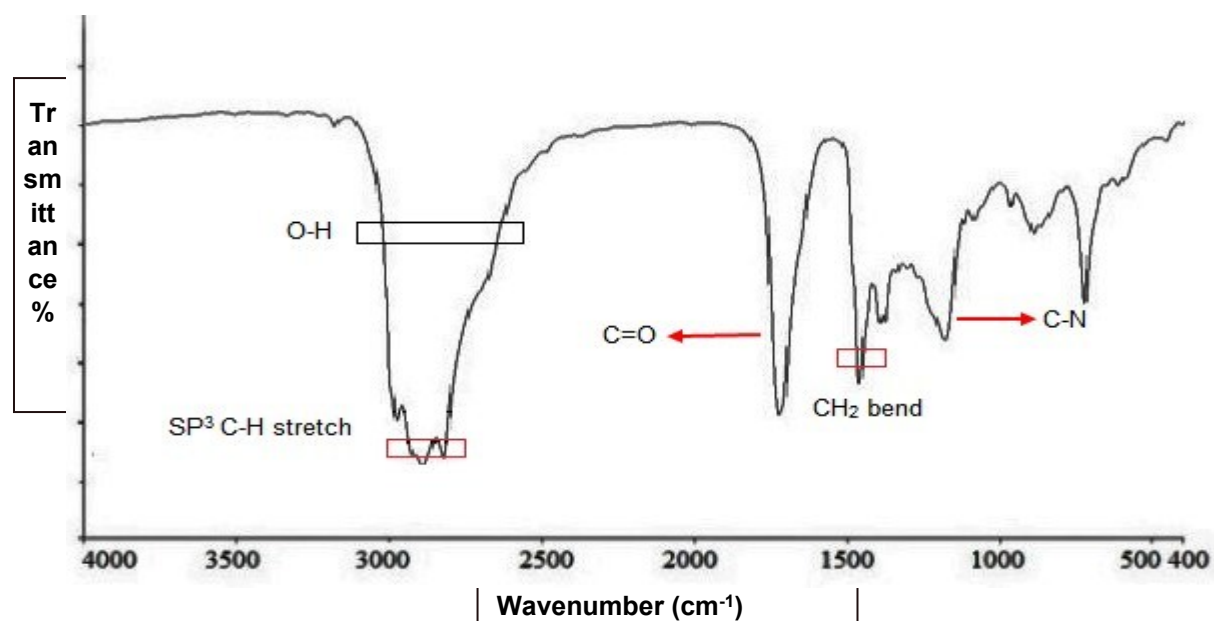


Fig .S1. FTIR spectrum of DES2

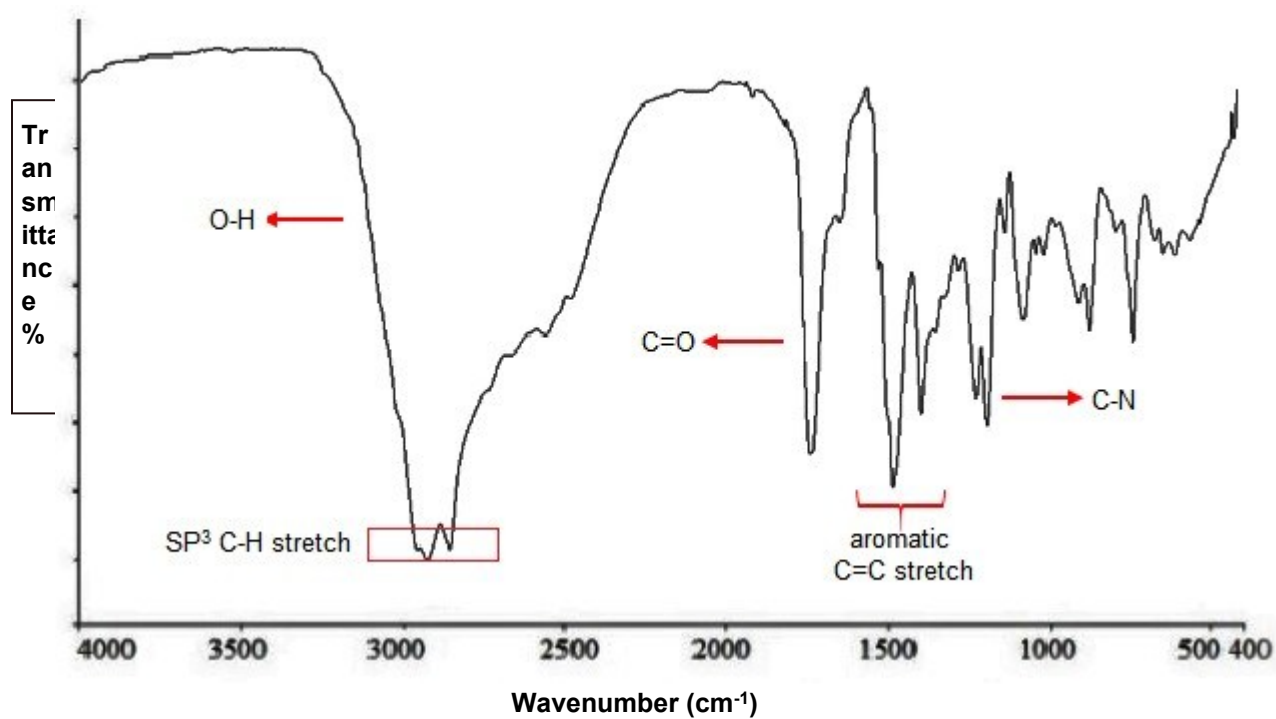


Fig.S2. FTIR spectrum of DES3

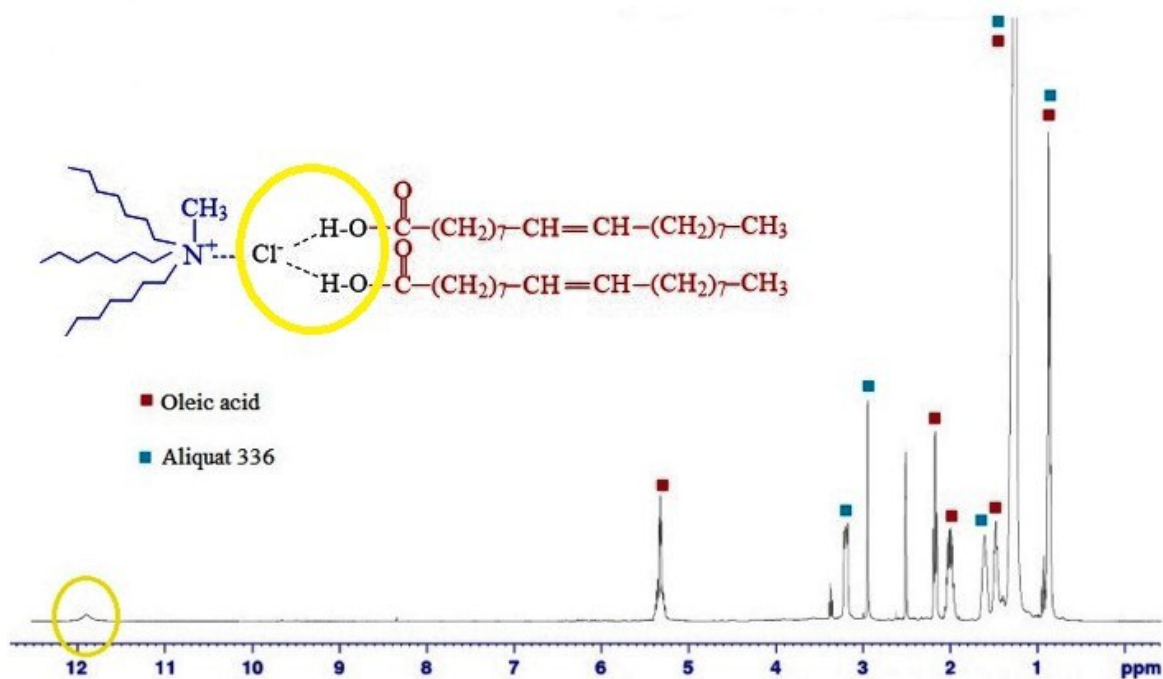


Fig. S3. ¹H NMR spectra of DES2

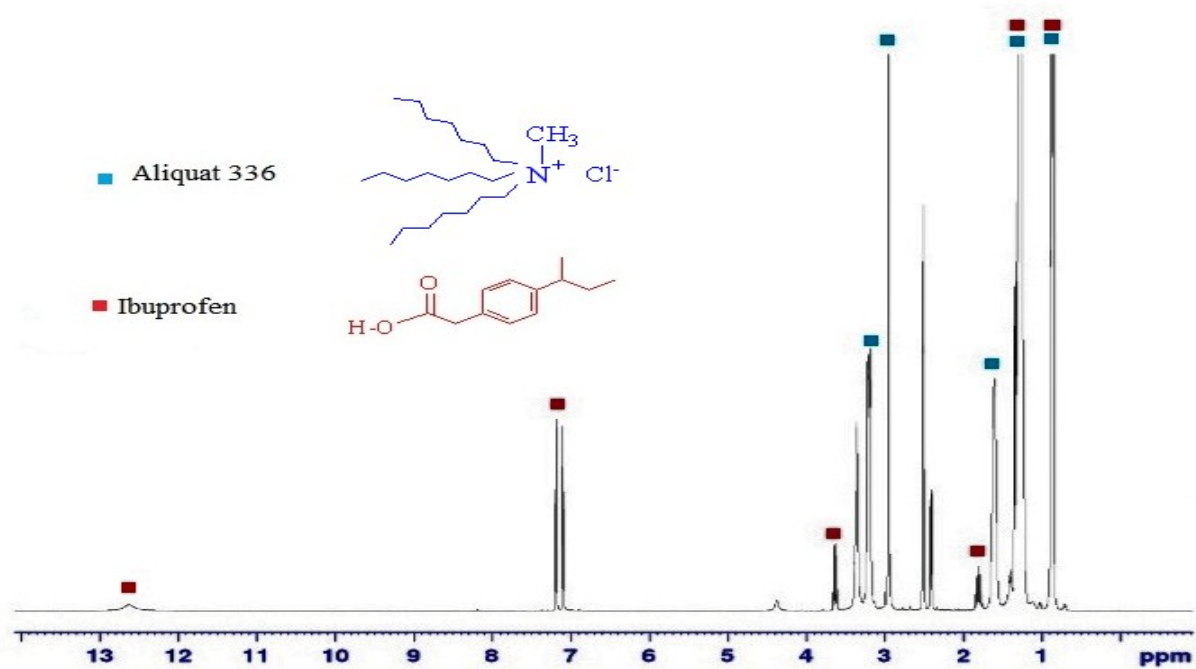


Fig. S4. ¹H NMR spectra of DES3

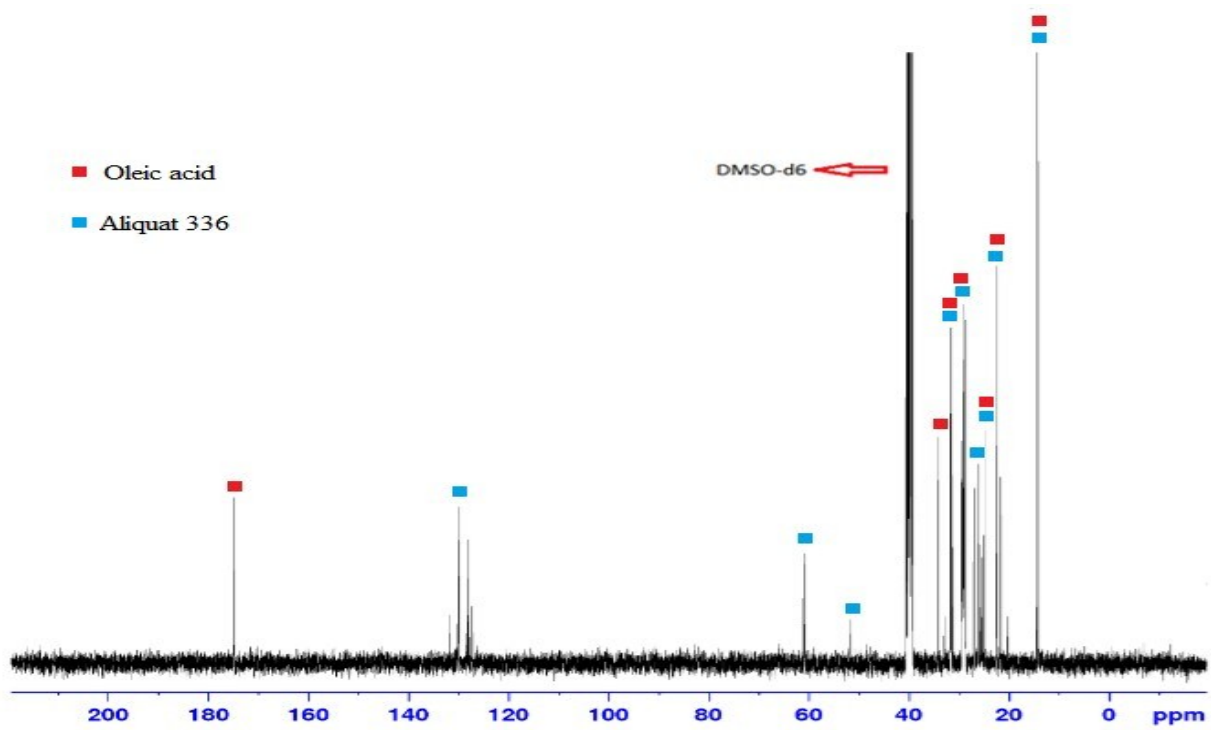


Fig. S5. ^{13}C NMR spectra of DES2

Table S1. Peak assignments of the ¹H-NMR spectrum of DES2.

Oleic acid										Aliquat336					δ (ppm)
$\text{CH}_3\text{-(CH}_2\text{)}_6\text{-CH}_2\text{-}\overset{\text{H}}{\underset{\text{H}}{\text{C}}}=\overset{\text{H}}{\underset{\text{H}}{\text{C}}}\text{-CH}_2\text{-(CH}_2\text{)}_4\text{-CH}_2\text{-CH}_2\text{-COOH}$										$(\text{CH}_3\text{-(CH}_2\text{)}_5\text{-CH}_2\text{-CH}_2\text{-})_3\text{N}^+\text{-CH}_3$					
(46)	(40-45)	(39)	(38)	(37)	(36)	(31-35)	(30)	(29)	(28)	(9,25,17)	((4-8), (12-16), (20-24))	(3,11,19)	(2,10,18)	Cl ⁻ (26)	
C(37)H ₃										C(9,17,25)H ₃					0.93-0.95
C(31-35, 40-45)H ₂										C(4-8,12-16,20-24)H ₂					1.25-1.29
C(30)H ₂										C(3,11, 19)H ₂					1.46-1.60
C(36, 39)H ₂										-					1.96-2.04
C(29)H ₂										-					2.15-2.19
DMSO-d ₆										-					2.50-2.51
-										C(26)H ₃					2.94
-										C(2,10,18)H ₂					3.17-3.38
C(37-38)H										-					5.27-5.38
C(28)OOH															11.78-
										-					12.05

Table S2. Peak assignments of the ¹H-NMR spectrum of DES3.

Ibuprofen						Aliquat336			δ (ppm)
CH3-CH(CH3)-CH2-C6H4-CH(CH3)-COOH						(CH3-(CH2)5-CH2-CH2-)3 N ⁺ ·CH3			
(38)	(36,37)	(35)	(31-34)	(29,30)	(28)	(9,25,17)	((4-8), (12-16), (20-24))	(3,11,19) (2,10,18) Cl⁻ (26)	
C(38)H3						C(9,17,25)H3			0.85-0.89
C(30)H2						C(4-8,12-16,20-24)H2			1.26-1.35
-						C(3,11, 19)H2			1.60
C(36)H2						-			1.78-1.85
C(35)H2						-			2.40-2.42
DMSO-d6						-			2.50-2.51
-						C(26)H3			2.94
-						C(2,10,18)H2			3.17-3.38
C(29)H						-			3.60-3.66
C(31-34)H						-			7.09-7.20
C(28)OOH						-			12.48-12.78