Supplementary Materials

Table. S1. Hydrogen bonding parameters in compounds **1** to **4**

D-H...A	d(H...A) (Å)	d(D...A) (Å)	<DHA (°)
Compound 1			
C(39)-H(39A)...O(4)[1]	2.42	3.119(8)	129
C(40)-H(40A)...O(6)[1]	2.36	2.957(13)	120
C(45)-H(45)....O(4)[2]	2.45	3.349(7)	162
C(66)-H(66)...O(16)[3]	2.60	3.513(9)	169
Symmetry code : [1] x, y, z; [2] 2-x,1/2+y,-z; [3]1-x,1/2+y,2-z.			
Compound 2			
C(45)-H(45B).…O(6) [1]	2.45	3.048(2)	120
C(98)-H(98A)...O(16) [1]	2.50	3.088(2)	119
C(25)-H(25)....O(9)[2]	2.58	3.399(3)	147
C(48)-H(48).. ..O(20)[3]	2.50	3.366(2)	155
C(101)-H(101)...O(10)[4]	2.53	3.393(2)	155
Symmetry code : [1] x, y, z; [2] 1+x,y,z; [3]x,-1+y,z; [4]x,1+y,z; .			
Compound 3			
C(56)-H(56B)...O(2) [1]	2.57	3.211(5)	123
C(58)-H(58A)....O(2) [1]	2.56	3.325(5)	136
C(11)-H(11)....O(7) [2]	2.54	3.433(4)	174
C(43)-H(43C)....O(1)[3]	2.49	3.425(5)	164
Symmetry code : [1] x, y, z; [2] 1+x,y,z; [3]x,-1+y,z; [4]x,1+y,z; .			
Compound 4			
C(25)-H(25)…..O(8)	2.40	3.248(7)	151
Symmetry code : 1.x, y, z;			

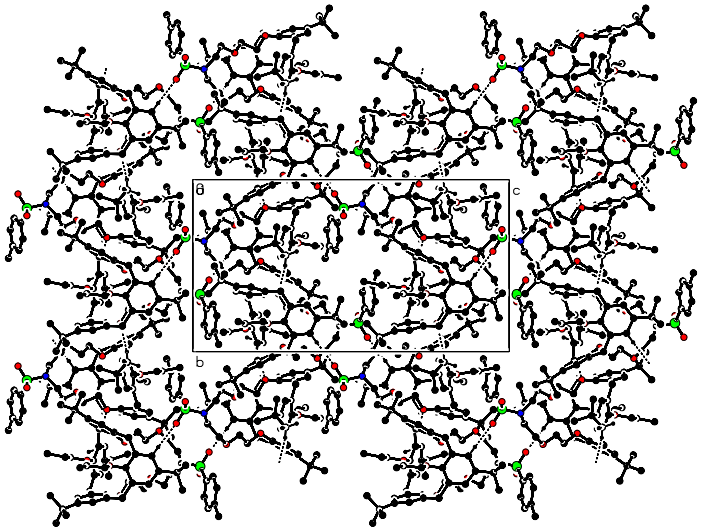


Figure S1. Packing diagram with hydrogen bonding interactions viewed down a-axis showing the two dimensional hydrogen networks in bc-plane for compound **3.**

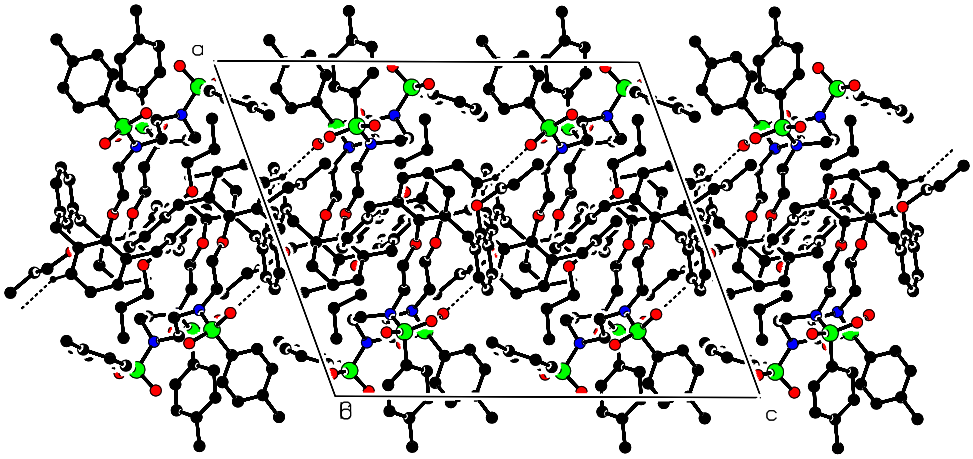
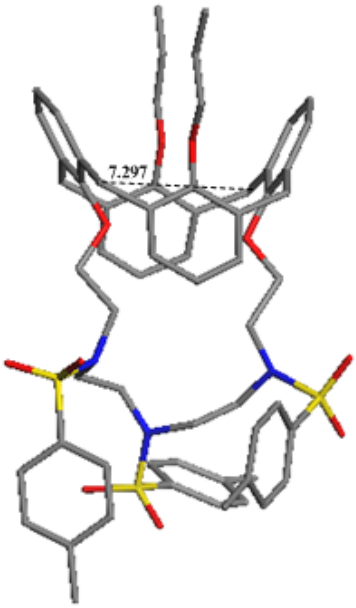
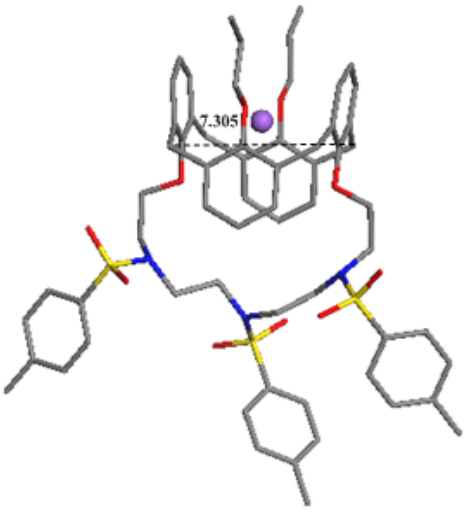


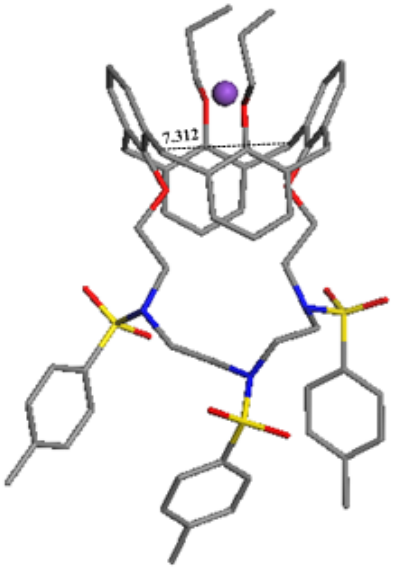
Figure S2. Packing diagram with hydrogen bonding interactions viewed down b-axis showing the orientation of the hydrogen bonded dimmer diagonal to ac-plane in compound **4.**



4



4: Na^+
ΔE (-28.16)



4: K^+
ΔE (-31.2)

Figure S3. Receptor **4** and its lowest energy conformer with Na^+ and K^+ ions and binding energy (ΔE) is given in kcal/mol. The distances between the $–CH_2-$ groups attached with phenyl rings on the upper side of azacrown are given in Å (black: carbon, red: oxygen, blue: nitrogen, yellow: sulfur).