

Table 1S. Crystal data, data collection, structure solution and refinement parameters for **4a** and **4b**.

Data	4a	4b
Empirical formula	C ₄₈ H _{52.26} ClN ₃₂ O _{21.63}	C ₉₈ H ₁₂₃ Br _{1.53} Cl _{2.47} N ₅₂ O _{43.38}
Formula weight	1459.01	2933.39
Crystal size, mm	0.26 × 0.14 × 0.14	0.42 × 0.18 × 0.12
Crystal system	Tetragonal	Monoclinic
Space group	<i>P</i> 4 ₂ / <i>ncm</i>	<i>P</i> 2 ₁ / <i>n</i>
<i>a</i> , Å	26.2548(8)	15.5210(7)
<i>b</i> , Å	26.2548(8)	25.5665(11)
<i>c</i> , Å	12.7555(5)	32.4483(14)
β , deg		101.039(2)
<i>V</i> , Å ³	8792.6(5)	12637.8(10)
<i>Z</i>	4	4
Density (calc.), g/cm ³	1.102	1.542
μ (MoK α), mm ⁻¹	0.121	0.658
Temperature, K	120.0(2)	120.0(2)
θ range, deg	1.10 to 27.00	1.02 to 28.00
Index ranges	-33 ≤ <i>h</i> ≤ 30 -33 ≤ <i>k</i> ≤ 30 -16 ≤ <i>l</i> ≤ 16	-20 ≤ <i>h</i> ≤ 20 -33 ≤ <i>k</i> ≤ 33 -42 ≤ <i>l</i> ≤ 42
Refl. collected	60288	150412
Independent refl.	4966 [<i>R</i> (int) = 0.0964]	30519 [<i>R</i> (int) = 0.2618]
Data/parameters	4966 / 266	30519 / 1679
Goodness-of-fit on F ²	1.941	0.921
Final <i>R</i> s [<i>I</i> > 2 σ (<i>I</i>)]	<i>R</i> ₁ = 0.1903, <i>wR</i> ₂ = 0.4958	<i>R</i> ₁ = 0.1253, <i>wR</i> ₂ = 0.3255
<i>R</i> s (all data)	<i>R</i> ₁ = 0.2546, <i>wR</i> ₂ = 0.5266	<i>R</i> ₁ = 0.3045, <i>wR</i> ₂ = 0.3702
Largest diff. peak and hole, e·Å ⁻³	2.063 and -0.589	1.773 and -1.773

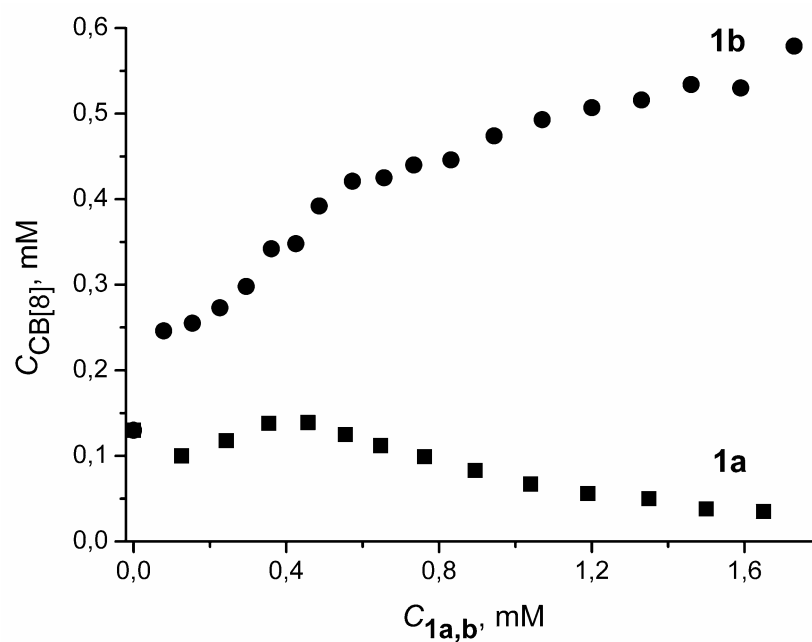


Fig. 1S. Dependence of the CB[8] solubility on **1a,b** concentration in D_2O/CD_3CN (10 : 1) at 30°C.

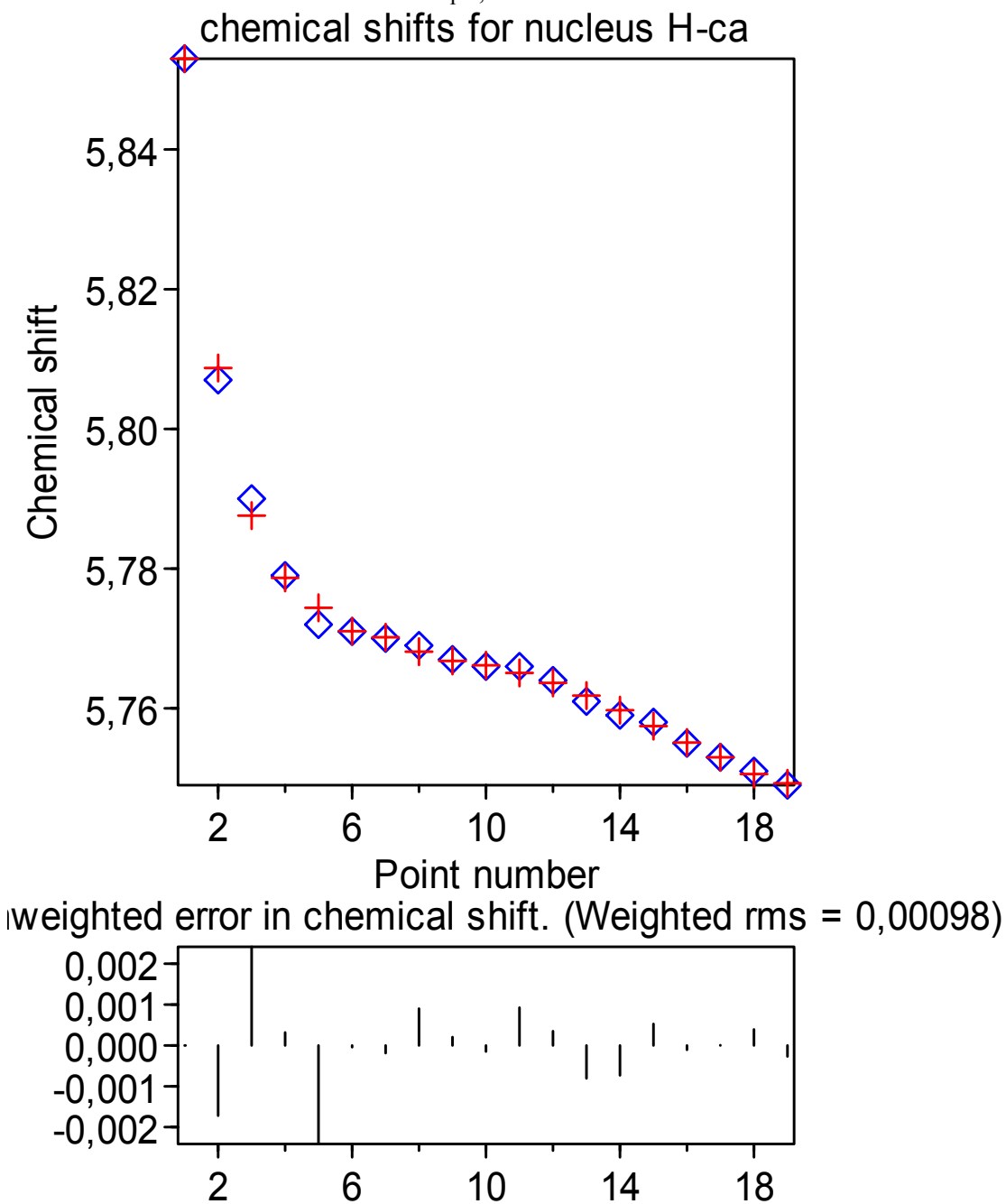


Fig. 2S. The HYPNMR plot of ^1H NMR titration in the $\text{CB}[8]/(E)\text{-1b}$ system. Blue rhombs show the dependence of δ_{H} of the low-field CH_2 signals of $\text{CB}[8]$ on amount of added **1b** and red crosses – the best fit to the system of three equilibria with stability constants $\lg K_{1:1} = 4.6$, $\lg K_{2:1} = 3.2$, and $\lg K_{1:2} = 3.0$.

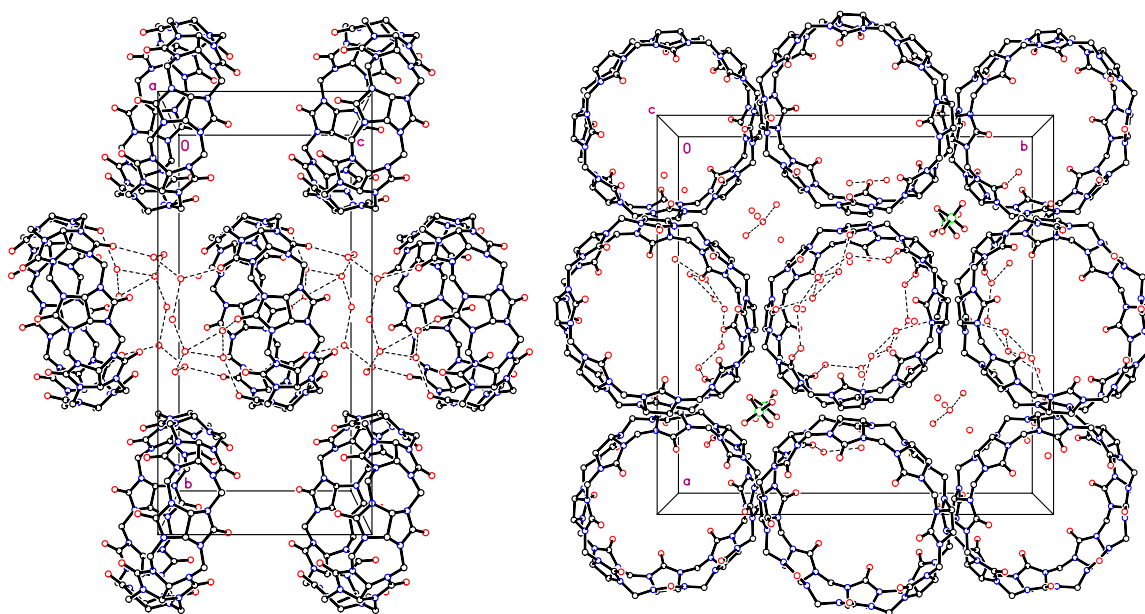


Fig. 3S. Two different projections of crystal packing of **4a**.