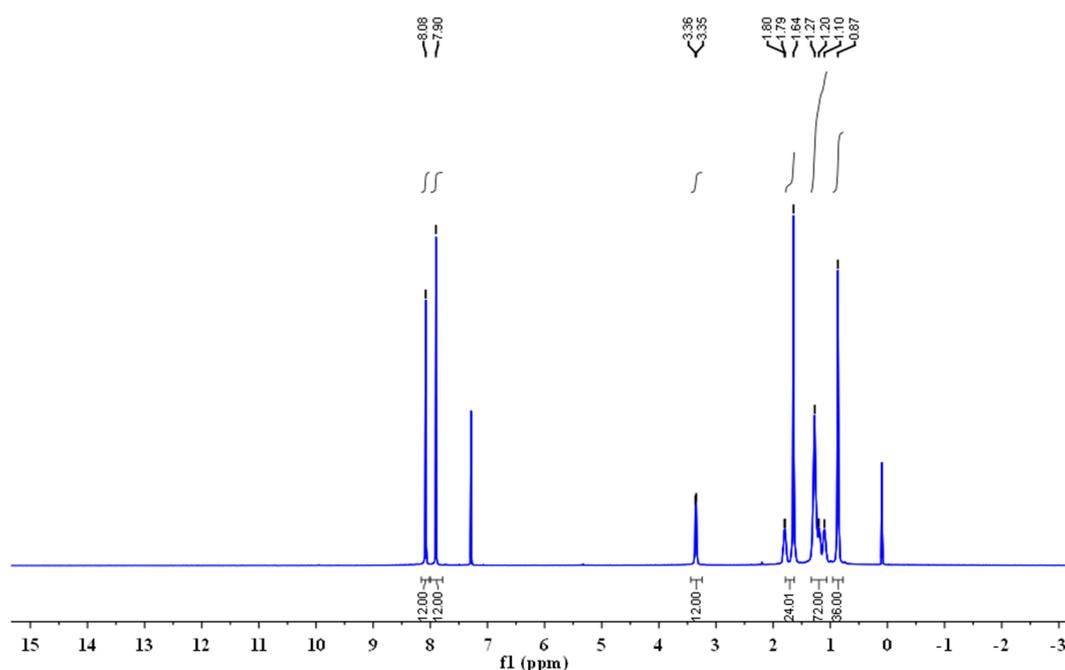
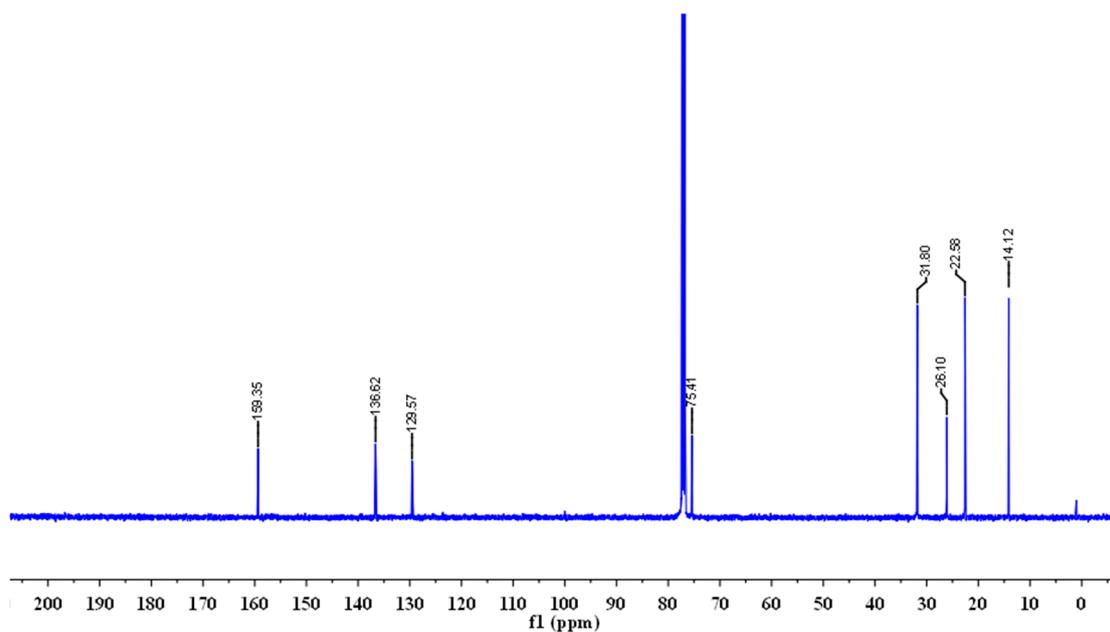


# Supplementary Materials: Application of Homochiral Alkylated Organic Cage as Chiral Stationary Phase for Molecular Separations by Capillary Gas Chromatography

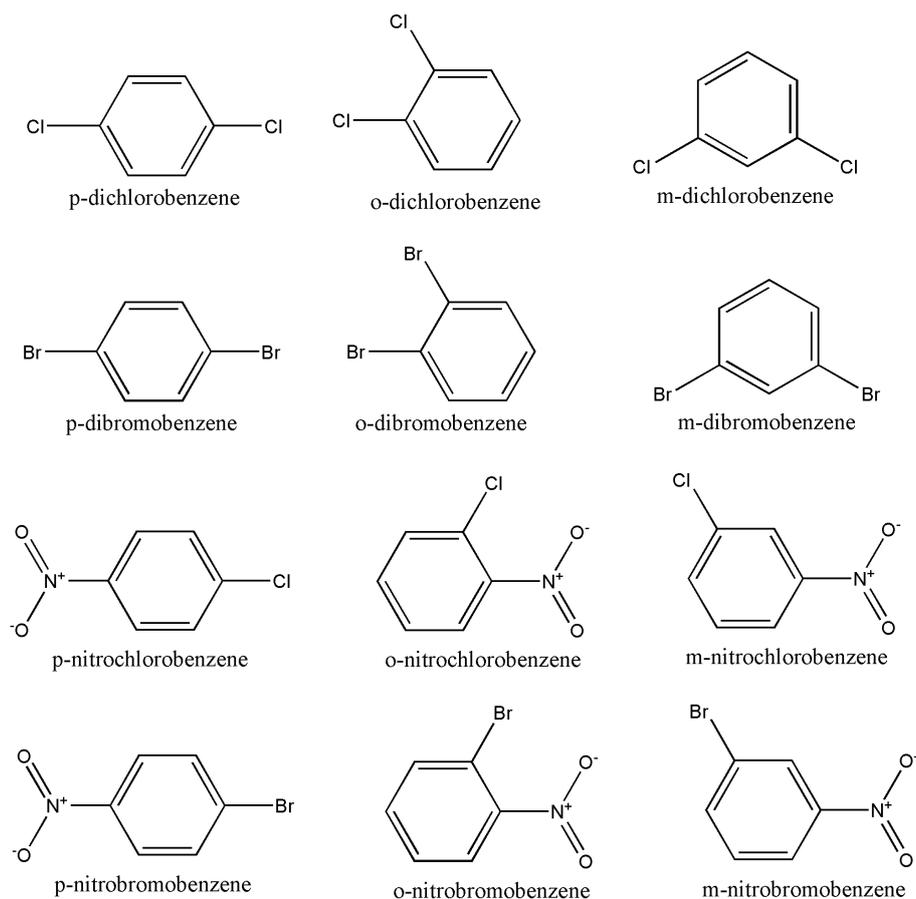
Shengming Xie, Junhui Zhang, Nan Fu, Bangjin Wang, Cong Hu and Liming Yuan



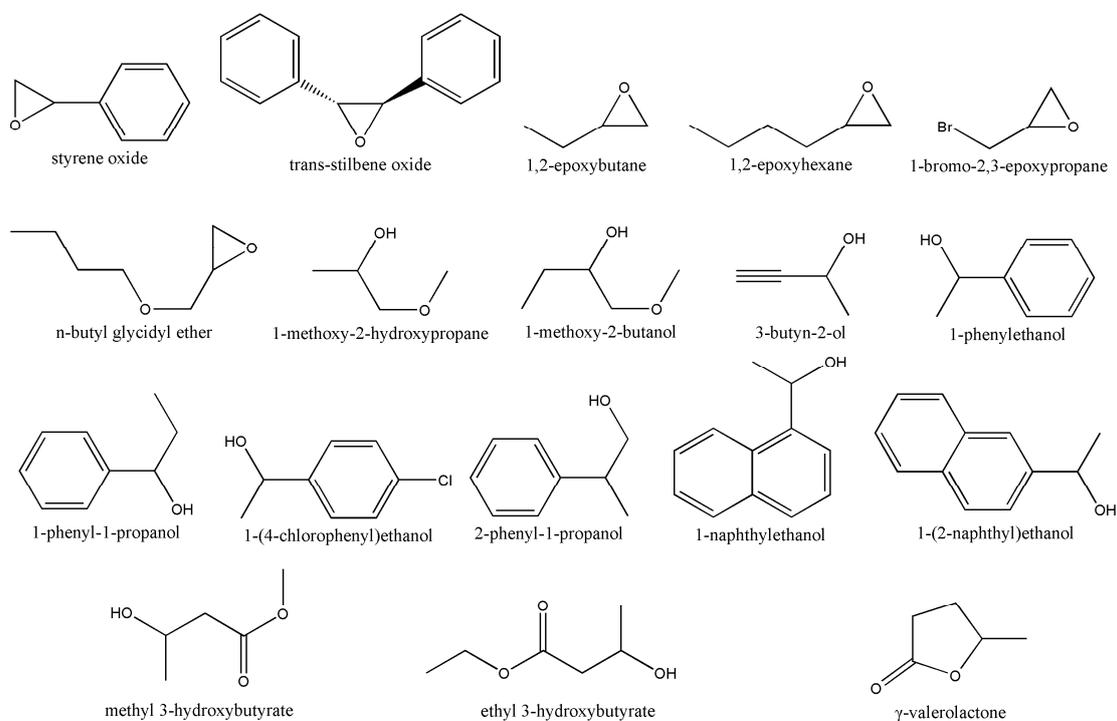
**Figure S1.**  $^1\text{H-NMR}$  spectrum ( $\text{CDCl}_3$ ) of the pentyl cage compound:  $\delta$  8.08 (s, 12H), 7.90 (s, 12H), 3.36–3.35 (d,  $^3J_{\text{HH}} = 8$  Hz, 12H), 1.80–1.64 (m, 24H), 1.27–1.10 (m, 72H), 0.87 (t,  $^3J_{\text{HH}} = 6$  Hz, 36H).



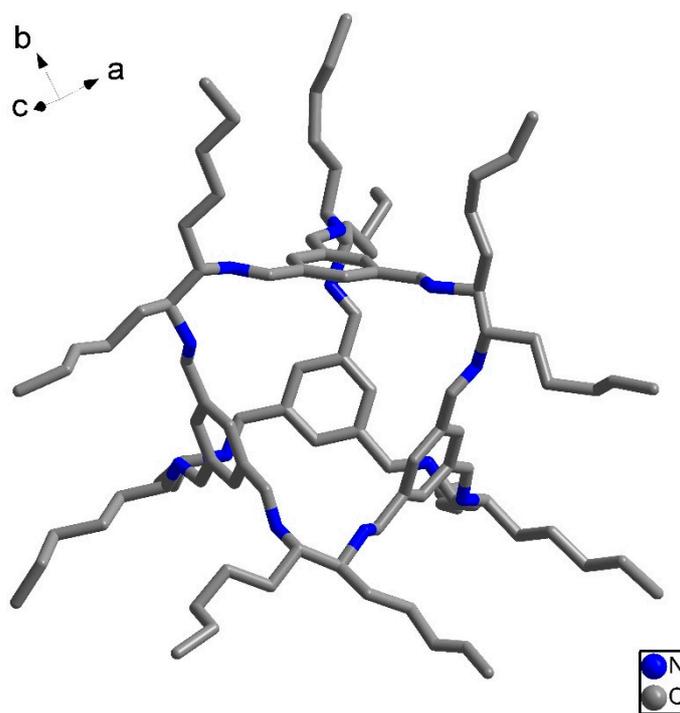
**Figure S2.**  $^{13}\text{C-NMR}$  spectrum ( $\text{CDCl}_3$ ) of the pentyl cage compound:  $\delta$  159.35, 136.62, 129.57, 75.41, 31.80, 26.10, 22.58, 14.12.



**Figure S3.** Structures of the positional isomers.



**Figure S4.** Structures of the racemates.



**Figure S5.** Structure of the pentyl cage with twelve *n*-pentyl tails. Hydrogens are omitted for clarity.