Electronic Supplementary Material (ESI) for Dalton Transactions

Molecular tectonics: *p-H*-thiacalix[4]arene pyridyl appended positional isomers as tectons for the formation of 1D and 2D mercury coordination networks

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ESI: NMR Spectra of compounds 2-4

25,26,27,28-tetra[(2-pyridylmethyl)oxy]-2,8,14,20-tetrathiacalix[4]arene (2)

^{1}H-NMR (300 MHz, $CDCl_3$): δ(ppm) = 5.30 (8H, s, ArOCH_2), 6.37 (4H, t, Ar-*H*), 6.69 (4H, d, Py-*H*),7.09 (8H, d, Ar-*H*), 7.22 (4H, m, Py-*H*),7.43 (4H, m, Py-*H*), 8.59 (4H, d, Py-*H*).

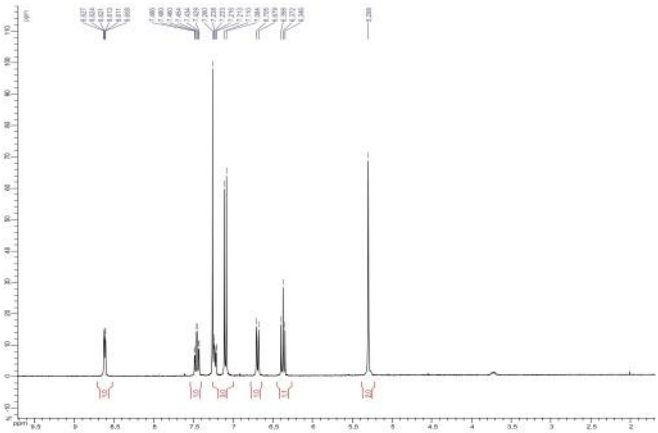

Figure S1: ^{1}H-NMR spectrum of **2**

^{13}C-NMR (75 MHz, $CDCl_3$): δ(ppm) = 72.1, 122.1, 122.4, 123.9, 129.8, 134.7, 136.1, 149.0, 157.8, 159.7.

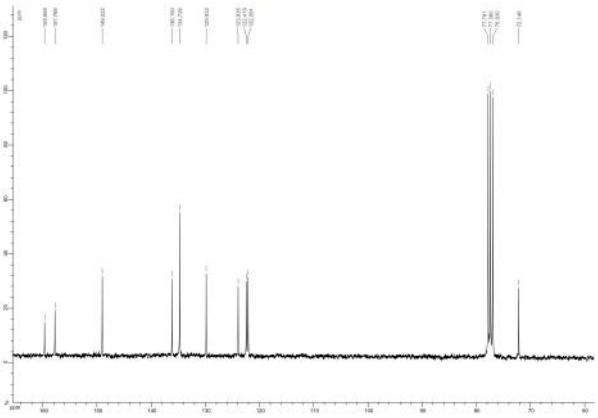

Figure S2: ^{13}C-NMR spectrum of **2**

25,26,27,28-tetra[(3-pyridylmethyl)oxy]-2,8,14,20-tetrathiacalix[4]arene (3)

^{1}H-NMR (300 MHz, $CDCl_3$): δ(ppm) = 55.28 (8H, s, ArO*CH_2*), 6.42 (4H, t, Ar-*H*), 6.98 (8H, d, Ar-*H*), 7.38 (4H, d, Py-*H*), 7.48 (4H, m, Py-*H*), 8.27 (4H, s, Py-*H*), 8.79 (4H, d, Py-*H*).

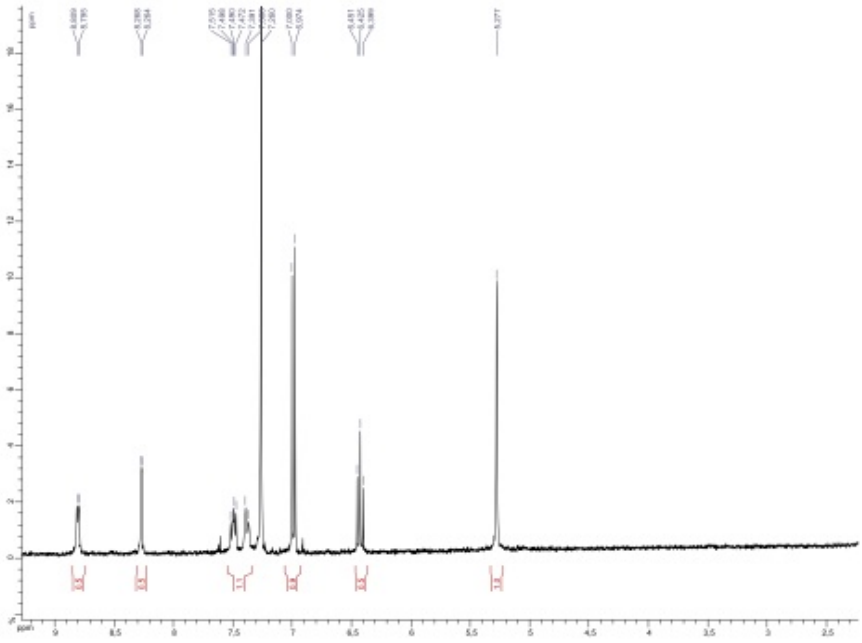

Figure S3 : ^{1}H-NMR spectrum of **3**

^{13}C-NMR (75 MHz, $CDCl_3$): δ(ppm) = 69.2, 123.5, 124.3, 129.7, 133.3, 134.4, 135.1, 148.7, 149.0, 159.8.

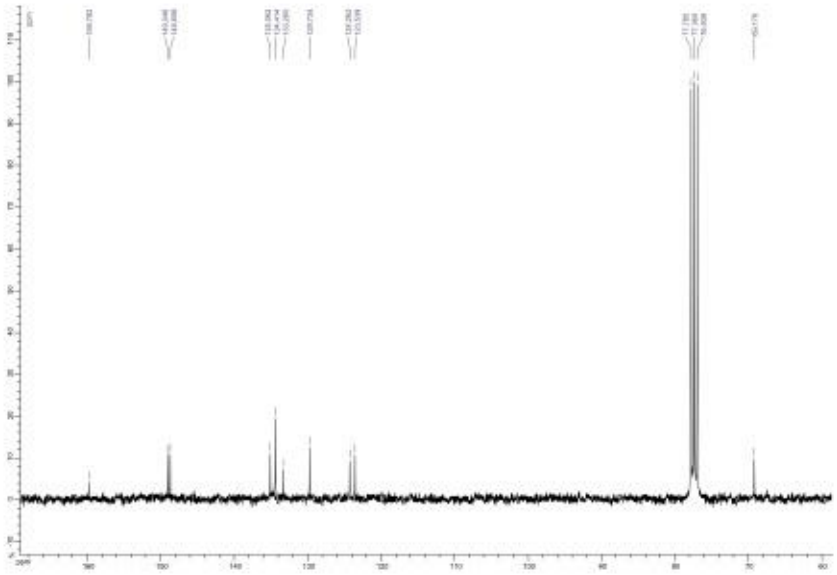

Figure S4 : ^{13}C-NMR spectrum of **3**

25,26,27,28-tetra[(4-pyridylmethyl)oxy]-2,8,14,20-tetrathiacalix[4]arene (4)

^{1}H-NMR (300 MHz, $CDCl_3$): δ(ppm) = 5.24 (8H, s, ArO*CH2*), 6.53 (4H, t, Ar-*H*), 6.98 (8H, d, Py-*H*), 7.06 (8H, d, Ar-*H*), 8.63 (8H, d, Py-*H*).

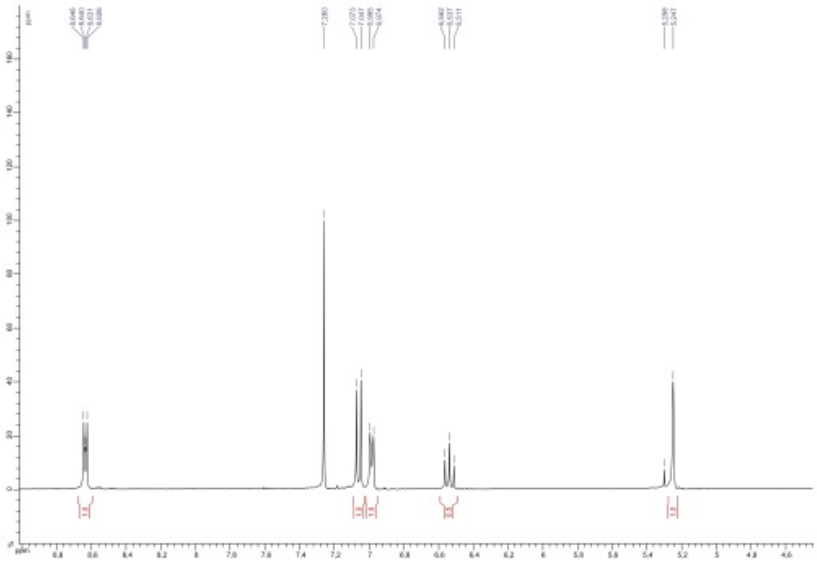

Figure S5: ^{1}H-NMR spectrum of **4**

^{13}C-NMR (75 MHz, $CDCl_3$): δ(ppm) = 70.0, 121.6, 124.4, 129.9, 135.7, 146.8, 149.8, 159.8.

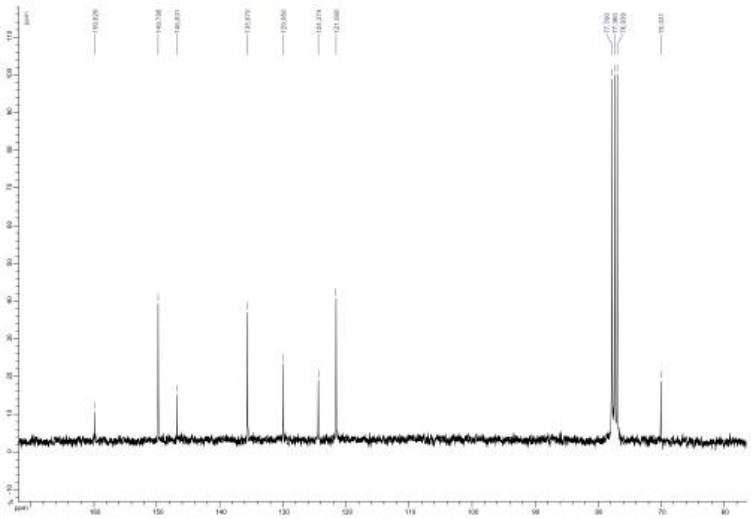

Figure S6: ^{13}C-NMR spectrum of **4**