

Electronic Supplementary Information

Spectroscopic data for conjugate **5Na**: HRMS MALDI-TOF m/z 2415.5407 (calc. 2415.5167). $^1\text{H-NMR}$ (acetone-d⁶, 300 MHz) δ 8.94 (s, 8H), 8.17 (d, 8H, J = 8.5 Hz), 7.43 (d, 8H, J = 8.5 Hz), 4.48 (s, 8H), 4.37 (s, 8H), 4.30 (s, 8H), 4.05 (s, 8H), 3.76 (d, 16H), 1.6-3.0 (br, 68H, BH), -2.70 (s, 2H, NH). $^{13}\text{C-NMR}$ (acetone-d⁶, 75 MHz) δ 160.5, 136.8, 135.7, 121.3, 114.4, 73.6, 71.0, 69.9, 69.3, 55.9, 47.9. UV-Vis (acetone) λ_{\max} (nm) 419 (ϵ 383,000), 516 (13,700), 552 (9,940), 595 (3,920), 651 (4,610). Anal. Calc. For C₇₆H₁₄₆N₄B₇₂O₁₂Co₄Cs₄: C 31.99, H 5.15, N 1.95. Found: C 32.03, H 5.42, N 1.84.

Spectroscopic data for conjugate **6**: HRMS MALDI-TOF m/z 2267.5351 (calc. 2267.5899). $^1\text{H-NMR}$ (acetone-d⁶, 300 MHz) δ 9.80 (d, 8H, J = 6.3 Hz), 9.26 (s, 8H), 9.15 (d, 8H, J = 6.3 Hz), 5.36 (s, 8H), 4.43 (s, 8H), 4.05 (s, 8H), 4.00 (s, 8H), 3.85 (d, 16H), 1.6-3.0 (br, 68H, BH), -2.89 (s, 2H). $^{13}\text{C-NMR}$ (acetone-d⁶, 75 MHz) δ 159.4, 145.9, 134.1, 117.4, 74.0, 70.6, 70.5, 62.9, 53.3, 47.9. UV-Vis (acetone) λ_{\max} (nm) 427 (ϵ 210,000), 517 (15,600), 553 (5,880), 590 (5,630), 645 (1,500).

Spectroscopic data for aldehyde **7**: MALDI-TOF m/z 532.9 (M-K⁺). $^1\text{H-NMR}$ (acetone-d⁶, 300 MHz) δ 9.91 (s, 1H), 7.88 (d, 2H, J = 8.7 Hz), 7.15 (d, 2H, J = 8.7 Hz), 4.27 (t, 6H), 3.86 (t, 2H), 3.60 (s, 4H), 1.6-3.0 (br, 18H, BH). $^{13}\text{C-NMR}$ (acetone-d⁶, 75 MHz) δ 191.3, 163.6, 132.8, 129.6, 114.9, 71.4, 68.8, 68.3, 67.9, 51.9, 46.1.