Electronic Supplementary Material (ESI) for ChemComm.

Supporting Information For:

Helicity of a polyacetylene directed by molecular recognition of biscalixarene and fullerene

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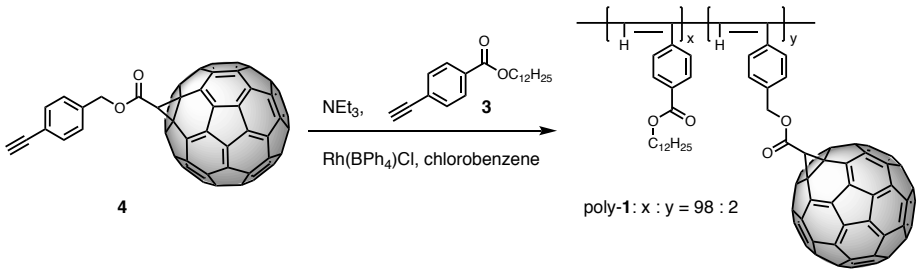
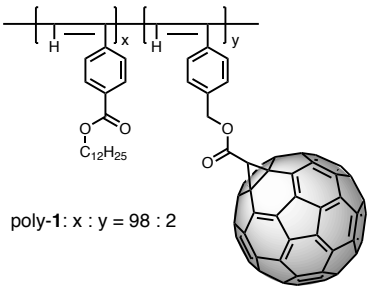
Contents

General: All reagents and solvents were commercial reagent grade and were used without further purification unless otherwise noted. ^{1}H and ^{13}C NMR spectra were recorded on a Varian mercury-300 spectrometer and JEOL JNM-ECA600 spectrometer, and chemical shifts were reported on the delta scale in ppm relative to residual chloroform (δ = 7.26 and 77.0 for ^{1}H and ^{13}C, respectively). UV/vis absorption spectra were recorded on a JASCO V-560 spectrometer. High resolution mass spectra (HRMS) were recorded on a Thermo Scientific LTQ Orbitrap XL hybrid FTMS by electron splay ionization (ESI) methods. Melting points (M.p.) were measured with a Yanagimoto micro melting point apparatus. Infrared (IR) spectra were recorded on a JASCO FT/IR-4600 spectrometer with ZeSe ATR accessory. Preparative separations were performed by silica gel gravity column chromatography (Silica Gel 60 N (spherical, neutral)). Recycling preparative GPC-HPLC separations were carried out on JAI LC-908s using preparative JAIGEL-2H, 2H, 1H columns in series. Size exclusion chromatogram was recorded on Shimadzu LC-20AC with CTO-20AC accessory and TOSOH UV-8011 detector using preparative Shodex GPC-K-804, K-803, K-802.5 columns in series. The number-average molecular weights (M_n) of the poly-**1** were determined by the size exclusion chromatography (SEC) based on polystyrene standards in chloroform. **4**[1], **5**[2], **6**[3], and (*R*)-,(*S*)-**11**[4] were synthesized according to reported methods.



Scheme S1. Synthesis of poly-**1**.

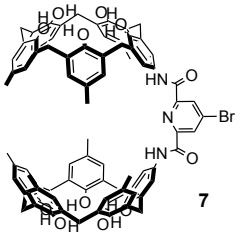


Synthesis of ***fullerene-pendant polyphenylacetylene*** poly-**1**:

3 (63 mg, 200 μmol), **4** (10 mg, 11 μmol), NEt_3 (300 μL, 2.2 mmol), and dry monochlorobenzene (3 mL) were placed in Schlenk-type tube. The mixture was subjected to three cycles of freeze-pump-thaw, and then $Rh(BPh_4)Cl$ (1.1 mg, 2.1 μmol) in dry monochlorobenzene (1 ml) was added to the resultant solution. After being stirred for 24 h at 30 °C under an argon atmosphere in the dark, the reaction mixture was diluted with chloroform, and passed through celite (chloroform, eluent). The organic layer was concentrated *in vacuo*. The crude product was passed through GPC column to remove unreacted starting materials to afford desired product poly-**1** (38 mg, 52 %) as a brown solid.

Compound data for poly-**1**:

^{1}H NMR (300 MHz, $CDCl_3$): δ 7.61 (m, 4H × (x + y)), 6.66 (m, 4H × (x + y)), 5.75 (m, 2H × (x + y)), 1.69 (m, 2H × x), 1.25 (m, 18H × x), 0.86 (m, 3H × x) ppm; $M_{n,SEC}$ = 830,000 g mol^{-1}, PDI = 1.39.

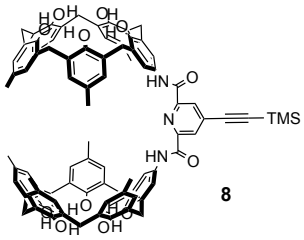


Synthesis of biscalix[5]arene monobromide **7**:

To a solution of 4-bromo-2,6,-pyridinedicarbonyl dichloride **5** (138 mg, 0.488 mmol) in dry THF (4.9 mL) was added amino calix[5]arene **6** (701 mg, 1.17 mmol) in dry THF (4.9 mL). After being stirred for 22 h at room temperature under an argon atmosphere, the reaction mixture was concentrated *in vacuo*. The crude product was purified by column chromatography on silica gel (0%–5% THF in benzene, eluent) to afford desired product **7** (498 mg, 71%) as a white solid.

Compound data for **7**:

M.p. >280 °C (decomp.); ^{1}H NMR (600 MHz, $CDCl_3$): δ 9.28 (s, 2H), 9.09 (s, 2H), 8.78 (s, 4H), 8.76 (*s*, 4H), 8.60 (s, 2H), 7.60 (s, 4H), 6.95–7.00 (m, 16H), 3.80 (br, 20H), 2.23 (s, 12H), 2.14 (s, 12H) ppm; ^{13}C NMR (150 MHz, $CDCl_3$): δ 160.3, 150.3, 148.0, 147.8, 147.8, 130.8, 130.7, 130.2, 129.9, 129.7, 129.7, 129.6, 128.9, 127.6, 126.6, 126.5, 126.4, 125.8, 122.2, 31.5, 31.3, 20.4 ppm; FTIR-ATR (neat): *v* 3290, 3009, 2919, 2867, 1677, 1542, 1480, 1453, 1380, 1290, 1222, 1167, 1143, 1037, 910 cm^{-1}; HRMS (ESI^{+}): calcd for $C_{85}H_{78}O_{12}N_3BrNa$ *m*/*z* 1434.46611 $[M+Na]^{+}$, found *m*/*z* 1434.46727.



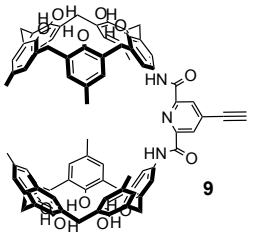
8

Synthesis of TMSacetyl biscalix[5]arene **8**:

To a solution of **7** (140 mg, 98 μmol) and CuI (1.9 mg, 1.0 μmol) in dry DMF (1.0 mL) was added dry $(i\text{-Pr})_2NH$ (1.0 mL, 7.2 mmol). After being stirred for 15 min at room temperature under an argon atmosphere, TMSA (0.30 mL, 1.2 mmol) was added to the solution. The resulting mixture was further stirred for 15 min, and then $Pd(PPh_3)_2Cl_2$ (14 mg, 20 μmol) was added in the dark. After being stirred for 1.5 h at room temperature under an argon atmosphere in the dark, the reaction mixture was diluted with CH_2Cl_2. The organic layer was passed through florisil, washed with saturated aqueous NH_4Cl and saturated aqueous NaCl, dried over Na_2SO_4, and then concentrated *in vacuo*. The crude product was purified by GPC to give desired product **8** (124 mg, 87 %) as a yellow solid.

Compound data for **8**:

M.p. >270 °C (decomp.); ^{1}H NMR (300 MHz, $CDCl_3$): δ 9.27 (s, 2H), 9.08 (s, 2H), 8.79 (s, 4H), 8.76 (s, 4H), 8.38 (s, 2H), 7.59 (s, 4H), 6.99 (s, 4H), 6.97 (s, 4H), 6.93 (s, 4H), 6.91 (s, 4H), 3.79 (br, 20H), 2.23 (s, 12H), 2.10 (s, 12H), 0.29 (s, 9H) ppm; ^{13}C NMR (75 MHz, $CDCl_3$): δ 161.0, 149.6, 147.8, 147.7, 135.0, 130.8, 130.6,130.4, 129.8, 128.6, 129.6, 127.6, 127.3, 126.5, 126.4, 125.7, 121.7, 103.9, 100.7, 31.5, 31.3, 20.4, 20.3, –0.5 ppm; FTIR-ATR (neat): ν 3290, 3011, 2920, 2868, 1677, 1600, 1542, 1480, 1453, 1380, 1290, 1222, 1167, 1143, 1037, 999, 961 cm^{-1}; HRMS (ESI^+) calcd for $C_{90}H_{88}O_{12}N_3Si$ *m*/*z* 1430.61313 $[M+H]^+$, found *m*/*z* 1430.61511.



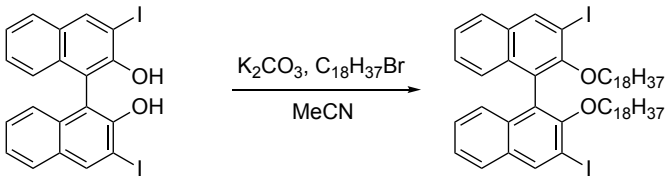
9

Synthesis of ethynyl biscalix[5]arene **9**:

TBAF (1.0 mL, 1.0 mol L^{-1} THF solution) was added to a solution of **8** (563 mg, 0.409 mmol) in DMF (4 mL). After being stirred for 15 min at room temperature under an open-air atmosphere, the resulting mixture was diluted with CH_2Cl_2. The organic layer was washed with saturated aqueous NaCl, dried over Na_2SO_4, and then concentrated in vacuo to yield desired product **9** (523 mg, 98%) as a yellow solid without further purification.

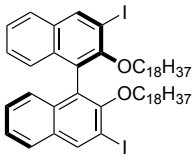
Compound data for **9**:

M.p. >260 °C (decomp.); ^{1}H NMR (300 MHz, $CDCl_3$): δ 9.24 (s, 2H), 9.09 (s, 2H), 8.79 (s, 4H), 8.76 (s, 4H,), 8.44 (s, 2H), 7.58 (s, 4H), 6.98 (s, 4H), 6.97 (s, 4H), 6.95 (s, 4H), 6.93 (s, 4H), 3.79 (br, 20H), 3.48 (s, 1H), 2.22 (s, 12H). 2.11 (s, 12H) ppm; ^{13}C NMR (75 MHz, $CDCl_3$): δ 160.8, 149.7, 147.9, 147.8, 147.7, 134.2, 130.8, 130.6, 130.3, 129.8, 129.7, 127.6, 126.5, 126.5, 126.4, 125.7, 121.8, 84.9, 79.8, 31.5, 31.3, 20.4, 20.4 ppm; FTIR-ATR (neat): ν 3287, 3009, 2917, 2865, 1680, 1601, 1540, 1480, 1454, 1379, 1288, 1222, 1034, 995, 909 cm^{-1}; HRMS (ESI^+) calcd for $C_{87}H_{79}O_{12}N_3Na$ m/z 1380.55560 $[M+Na]^+$, found m/z 1380.55614.

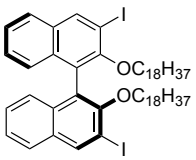


(*R*)-**11** or (*S*)-**11** (*R*)-**10** or (*S*)-**10**

Scheme S2. Synthesis of (*R*)- and (*S*)-**10**.



(*R*)-**10**



(*S*)-**10**

Synthesis of (R)-2,2'-Dioctadetoxy-3,3'-diiodo-1,1'-binaphthalene ((*R*)-**10**):

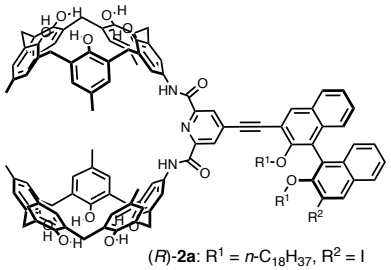
To a solution of (R)-3,3'-diiodo-2,2'-binaphthol (*R*)-**11** (430 mg, 0.80 mmol) and 1-bromooctadecane (1.0 mL, 2.4 mmol) in MeCN (17 mL) was added K_2CO_3 (1.1 g, 8.0 mmol). The reaction mixture was stirred for 10 h at 80 °C under an open-air atmosphere. The resulting solution was allowed for cooling to room temperature. The precipitation was filtered off and the filtrate was concentrated *in vacuo*. The crude product was purified by column chromatography on silica gel (0–20% benzene in *n*-hexane) to afford desired product (*R*)-**10** (710 mg, 87 %) as yellow oil. (*S*)-**10** (yellow oil, 96 %) was synthesized by the same procedure as that used for the synthesis of (*R*)-**10** using (*S*)-**11** (1.40 g, 2.61 mmol).

Compound data for (*R*)-**10**:

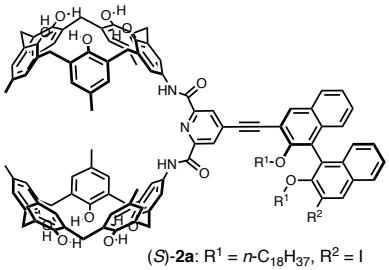
$[\alpha]^{25}_D$ = –43 $cm^3\ g^{-1}\ dm^{-1}$ (c 0.10 g dL^{-1}); ^1H NMR (300 MHz, $CDCl_3$): δ 8.50 (s, 2H), 7.78 (d, 2H, J = 8.1 Hz), 7.39 (t, 2H, J = 8.1 Hz), 7.26 (t, 2H, J = 8.1 Hz), 7.12 (d, 2H, J = 8.1 Hz), 3.82 (m, 2H), 3.30 (m, 2H), 0.80–1.33 (m, 64H), 0.89 (t, 6H, J = 7.2 Hz) ppm; ^{13}C NMR (75 MHz, $CDCl_3$): δ 154.1, 139.5, 133.9, 132.0, 126.9, 125.9, 125.7, 125.4, 93.0, 73.6, 31.9, 29.7, 29.7, 29.7, 29.7, 29.5, 29.5, 29.4, 29.0, 25.4, 22.7, 14.1 ppm; FTIR-ATR (neat): ν 2921, 2850, 1563, 1492, 1462, 1414, 1374, 1344, 1226, 1039, 1011, 965 cm^{-1}; HRMS (ESI^+) calcd for $C_{56}H_{88}I_2O_2N$ m/z 1060.48989 $[M+NH_4]^+$, found 1060.49146 m/z.

Compound data for (S)-2,2'-Dioctadetoxy-3,3'-diiodo-1,1'-binaphthalene ((*S*)-**10**):

$[\alpha]^{25}_D$ = +43 $cm^3\ g^{-1}\ dm^{-1}$ (c 0.10 g dL^{-1}); ^1H NMR (300 MHz, $CDCl_3$): δ 8.49 (s, 2H), 7.77 (d, 2H, J = 8.1 Hz), 7.39 (t, 2H, J = 8.1 Hz), 7.26 (t, 2H, J = 8.1 Hz), 7.11 (d, 2H, J = 8.1 Hz), 3.82 (m, 2H), 3.30 (m, 2H), 0.80–1.33 (m, 64H), 0.88 (t, 6H, J = 7.2 Hz) ppm; ^{13}C NMR (75 MHz, $CDCl_3$): δ 154.1, 139.5, 133.9, 132.0, 126.8, 125.9, 125.7, 125.4, 93.0, 73.6, 31.9, 29.7, 29.7, 29.7, 29.7, 29.5, 29.5, 29.4, 29.0, 25.4, 22.7, 14.1 ppm; FTIR-ATR (neat): ν 2920, 2851, 1562, 1496, 1462, 1414, 1374, 1343, 1226, 1039, 1012, 967 cm^{-1}; HRMS (ESI^+) calcd for $C_{56}H_{84}I_2O_2Na$ m/z 1065.44529 $[M+Na]^+$, found m/z 1065.44676.



(*R*)-**2a**: R^1 = *n*-$C_{18}H_{37}$, R^2 = I



(*S*)-**2a**: R^1 = *n*-$C_{18}H_{37}$, R^2 = I

Synthesis of **calix[5]arene mono iodide (*S*)-2a**:

To a solution of (*S*)-**10** (52 mg, 50 μmol) in DMF (0.5 ml) was added CuI (1.0 mg, 5.3 μmol) and dry diisopropylamine (0.50 ml, 3.6 mmol). After being stirred for 15 min at room temperature under an argon atmosphere, **9** (100 mg, 75 μmol) was added. After being stirred for 15 min at room temperature under argon atmosphere, $Pd(dppf)Cl_2$ (7.3 mg, 10 μmol) was added to the resultant solution. After being stirred at 60 °C for 3 h under as argon atmosphere in the dark, the reaction mixture was passed through celite and diluted with dichloromethane. The organic layer was washed with saturated aqueous NH_4Cl and saturated aqueous NaCl, dried over Na_2SO_4, and concentrated *in vacuo*. The crude product was purified by GPC and column chromatography on silica gel (3% THF in toluene, eluent) to give a desired product **2a** (18 mg, 15%) as a yellow solid.

(*R*)-**2a** (a yellow solid, 10 % yield) was synthesized by the same procedure as that used for synthesis of (*R*)-**2a**.

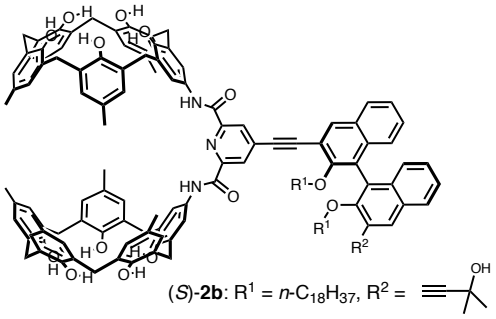
Compound data for (*S*)-**2a**:

M.p. >240 ºC (decomp.); $[\alpha]^{25}_D$ = +42 $cm^3\ g^{-1}\ dm^{-1}$ (c 0.10 g dL^{-1}); ^1H NMR (600 MHz, $CDCl_3$): δ 9.22 (s, 2H), 9.10 (s, 2H), 8.79 (s, 4H), 8.78 (s, 4H), 8.54 (s. 2H), 8.51 (s, 1H), 8.28 (s, 1H), 7.92 (d, *J* = 8.2 Hz, 1H), 7.79 (d, *J* = 8.2 Hz, 1H), 7.59 (s, 4H), 7.45 (t, *J* = 8.2 Hz, 1H), 7.40 (t, *J* = 8.2 Hz, 1H), 7.32 (t, *J* = 8.2 Hz, 1H), 7.27 (m, 1H), 7.16 (m, 2H), 6.91–7.03 (m, 16H), 4.10 (m, 1H), 3.81 (m, 1H), 3.78 (br, 20H), 3.75 (m, 1H), 3.40 (m, 1H), 2.23 (s, 12H), 2.14 (s, 12H), 0.91–1.41 (m, 64 H), 0.87 (t, *J* = 7.1 Hz, 3H), 0.84 (t, *J* = 7.1 Hz, 3H) ppm; ^{13}C NMR (150 MHz, $CDCl_3$): δ 160.9, 155.2, 154.1, 149.6, 147.9, 147.8, 147.8, 139.5, 135.6, 134.6, 134.0, 132.2, 130.8, 130.6, 130.4, 129.9, 129.7, 128.1, 128.1, 127.6, 127.1, 126.9, 126.8, 126.6, 126.5, 126.4, 125.8, 125.8, 125.7, 125.5, 125.4, 122.1, 116.1, 94.7, 93.0, 89.7, 74.3, 73.7, 31.9, 31.9, 31.6, 31.4, 30.0, 29.8, 29.7, 29.7, 29.5, 29.5, 29.5, 29.4, 29.3, 29.1, 29.0, 25.5, 25.4, 22.7, 22.7, 20.4, 14.1, 14.1 ppm; FTIR-ATR (neat): *v* 3255, 2917, 2850, 2210, 1678, 1599, 1536, 1480, 1453, 1374, 1288, 1220 cm^{-1}; HRMS (ESI^+) calcd for $C_{143}H_{163}N_3O_{14}I$ m/z 2273.11743 $[M+H]^+$, found m/z 2273.11877.

Compound data for (*R*)-**2a**:

M.p. >240 ºC (decomp.); $[\alpha]^{25}_D$ = –42 $cm^3\ g^{-1}\ dm^{-1}$ (c 0.10 g dL^{-1}); ^1H NMR (600 MHz, $CDCl_3$): δ 9.22 (s, 2H), 9.10 (s, 2H), 8.79 (s, 4H), 8.78 (s, 4H), 8.54 (s. 2H), 8.51 (s, 1H), 8.27 (s, 1H), 7.91 (d, *J* = 8.2 Hz, 1H), 7.79 (d, *J* = 8.2 Hz, 1H),

7.59 (s, 4H), 7.44 (t, J = 8.2 Hz, 1H), 7.40 (t, J = 8.2 Hz, 1H), 7.32 (t, J = 8.2 Hz, 1H), 7.27 (m, 1H), 7.16 (m, 2H), 6.95–7.01 (m, 16H), 4.10 (m, 1H), 3.82 (m, 1H), 3.78 (br, 20H), 3.75 (m, 1H), 3.40 (m, 1H), 2.23 (s, 12H), 2.14 (s, 12H), 0.91–1.40 (m, 64 H), 0.87 (t, J = 7.1 Hz, 3H), 0.84 (t, J = 7.1 Hz, 3H) ppm; FTIR-ATR (neat): ν 3252, 2917, 2849, 2210, 1679, 1599, 1536, 1480, 1453, 1375, 1288, 1221 cm^{-1}; HRMS (ESI^+) calcd for $C_{143}H_{163}N_3O_{14}I$ m/z 2273.11743 $[M+H]^+$, found m/z 2273.12009.



Synthesis of **calix[5]arene mono alcohol (*S*)-2b**:

To solution of **2a** (18 mg, 8.1 μmol) in DMF (0.1 ml) was added CuI (0.20 mg, 1.1 μmol) and dry diisopropylamine (0.10 ml, 0.71 mmol). After being stirred for 15 min at room temperature under an argon atmosphere, 2-methyl-3-butyn-2-ol (1.4 μl, 24 μmol) was added. After being stirred for 15 min at room temperature under argon atmosphere, $Pd(dppf)Cl_2$ (1.2 mg, 1.6 μmol) was added to the resultant solution. After being stirred for 1 h at 60 °C under an argon atmosphere in the dark, the reaction mixture was passed through celite (dichloromethane, eluent) and diluted with dichloromethane. The organic layer was washed with saturated aqueous NH_4Cl and saturated aqueous NaCl, dried over Na_2SO_4, and concentrated *in vacuo*. The crude product was purified by GPC and column chromatography on silica gel (5% THF in toluene, eluent) to yeild desired product **2b** (5.6 mg, 33 %) as a yellow solid.

Compound data for (*S*)-**2b**:

$[\alpha]^{25}_D$ = +43 $cm^3\ g^{-1}\ dm^{-1}$ (c 0.10 g dL^{-1}); ^1H NMR (600 MHz, $CDCl_3$): δ 9.23 (s, 2H), 9.10 (s, 2H), 8.80 (s, 4H), 8.79 (s, 4H), 8.55 (s. 2H), 8.26 (s, 1H), 8.09 (s, 1H), 7.90 (d, J = 8.2 Hz, 1H), 7.83 (d, J = 8.2 Hz, 1H), 7.60 (s, 4H), 7.43 (t, J = 8.2 Hz, 1H), 7.39 (t, J = 8.2 Hz, 1H), 7.30 (t, J = 8.2 Hz, 1H), 7.27 (m, 1H), 7.17 (m, 2H), 6.92–7.03 (m, 16H), 4.05 (m, 1H), 4.01 (m, 1H), 3.78 (br, 20H), 3.73 (m, 1H), 3.69 (m, 1H), 2.23 (s, 12H), 2.14 (s, 12H), 0.90–1.33 (m, 64 H), 0.86 (t, J = 7.1 Hz, 3H), 0.84 (t, J = 7.1 Hz, 3H) ppm; ^{13}C NMR (150 MHz, $CDCl_3$): δ 160.9, 155.2, 155.1, 149.6, 147.9, 147.8, 147.8, 139.5, 135.6, 135.3, 134.8, 134.2, 133.8, 130.8, 130.6, 130.4, 130.0, 130.0, 129.9, 129.7, 128.1, 127.6, 127.1, 126.6, 126.5, 126.4, 125.8, 125.7, 125.4, 125.1, 124.8, 122.1, 117.2, 116.0, 97.7, 94.9, 89.5, 79.4, 74.3, 73.6, 65.8, 31.9, 31.9, 31.6, 31.4, 31.4, 31.3, 30.0, 30.0, 29.8, 29.7, 29.7, 29.6, 29.6, 29.5, 29.5, 29.5, 29.4, 29.3, 29.1, 29.0, 25.5, 25.5, 22.7, 22.6, 20.4, 14.1, 14.1 ppm; HRMS (ESI^+) calcd for $C_{148}H_{170}N_3O_{15}$ m/z 2229.26265 $[M+H]^+$, found m/z 2229.26357.

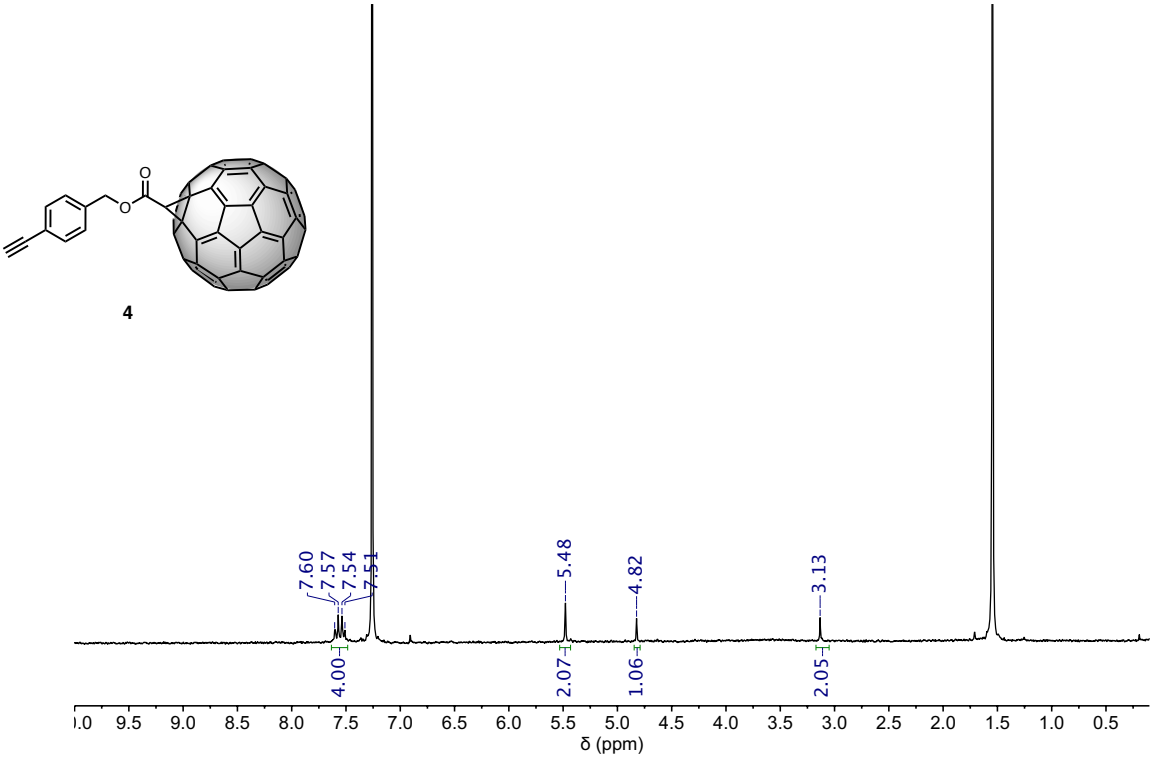


Figure S1. ^{1}H spectrum of **4** in chloroform-*d*.

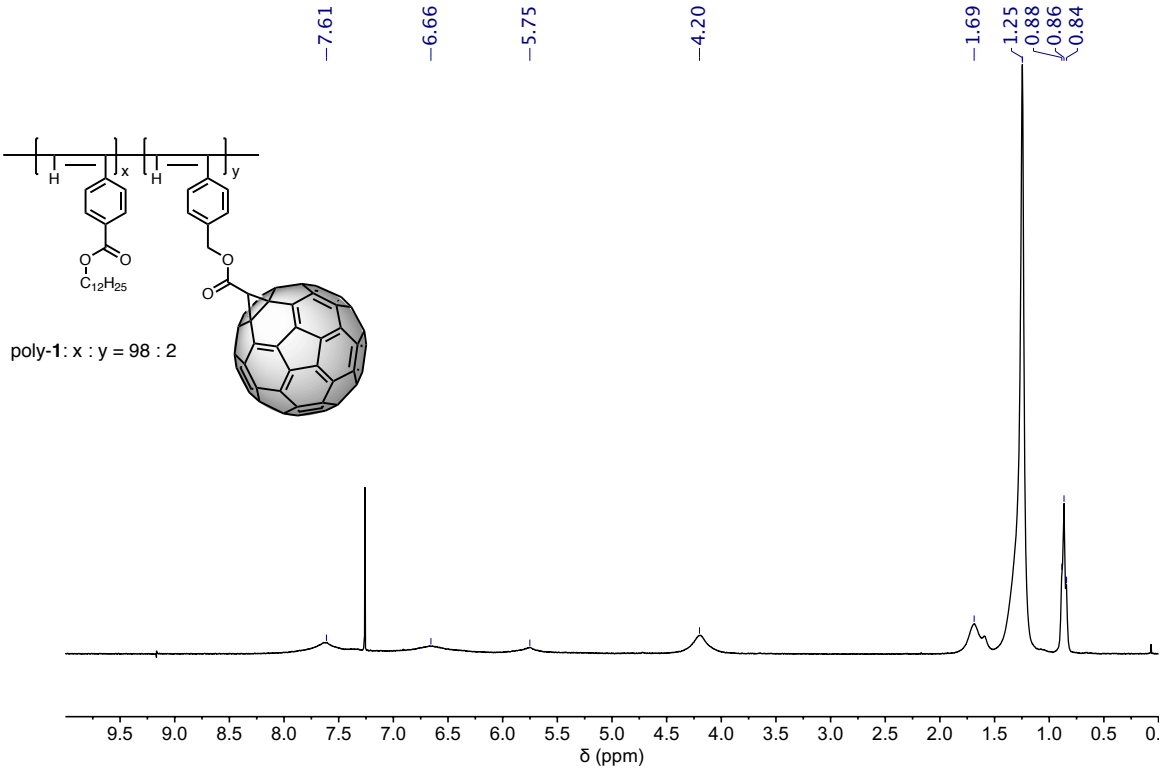


Figure S2. ^{1}H spectrum of poly-**1** in chloroform-*d*.

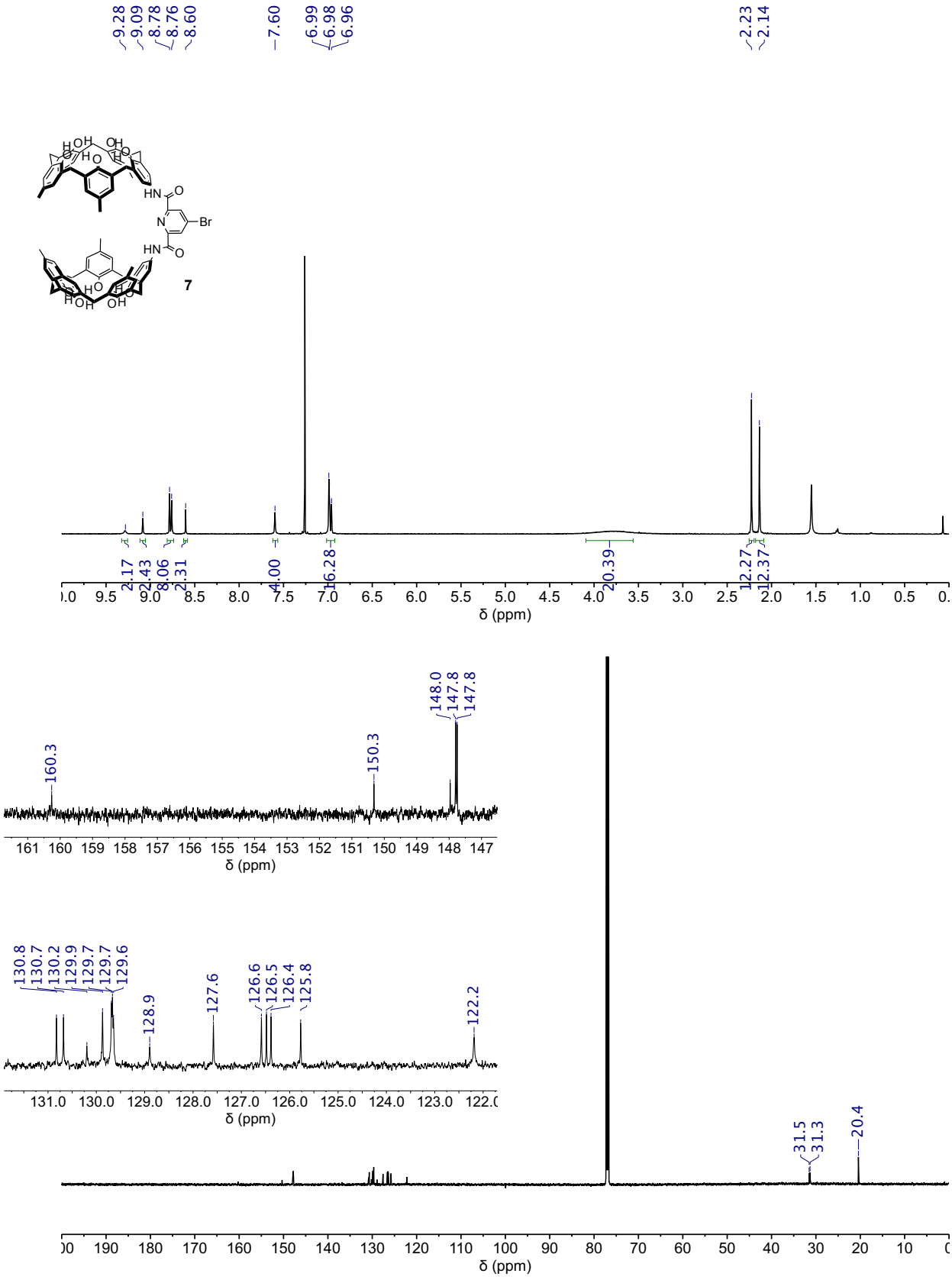


Figure S3. ^{1}H and ^{13}C NMR spectra of **7** in chloroform-*d*.

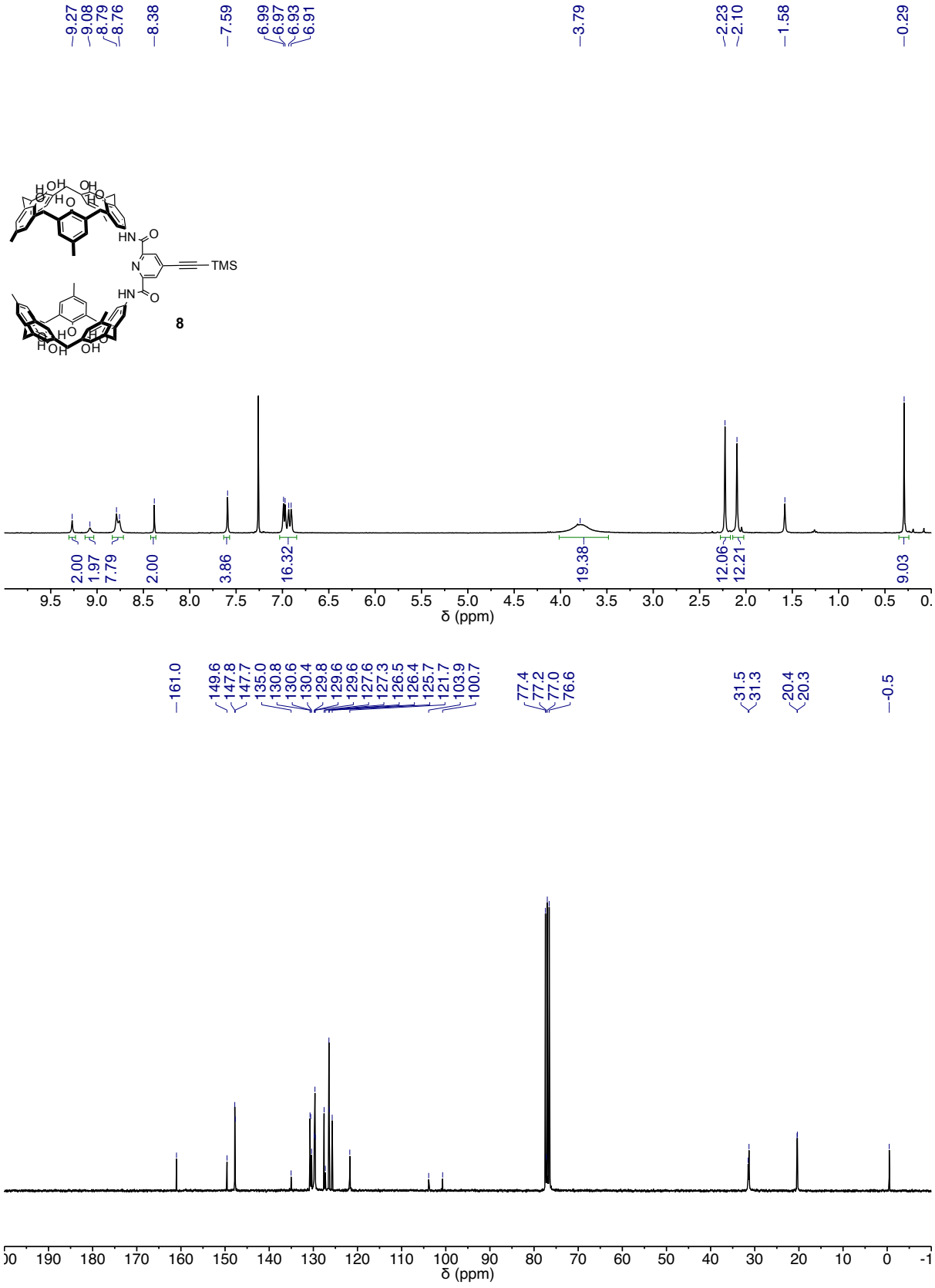


Figure S4. ^{1}H and ^{13}C NMR spectra of **8** in chloroform-*d*.

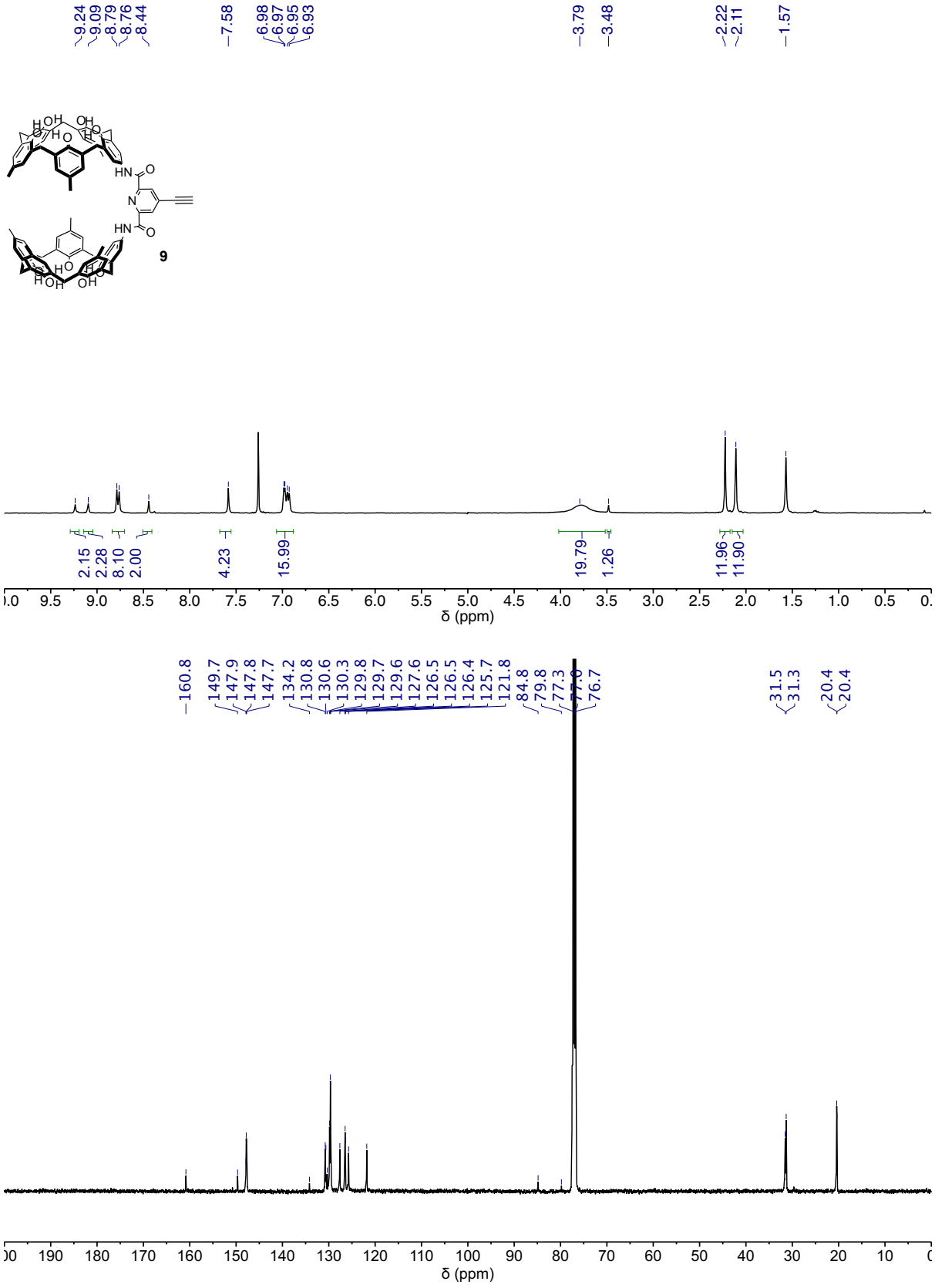


Figure S5. ^{1}H and ^{13}C NMR spectra of **9** in chloroform-*d*.

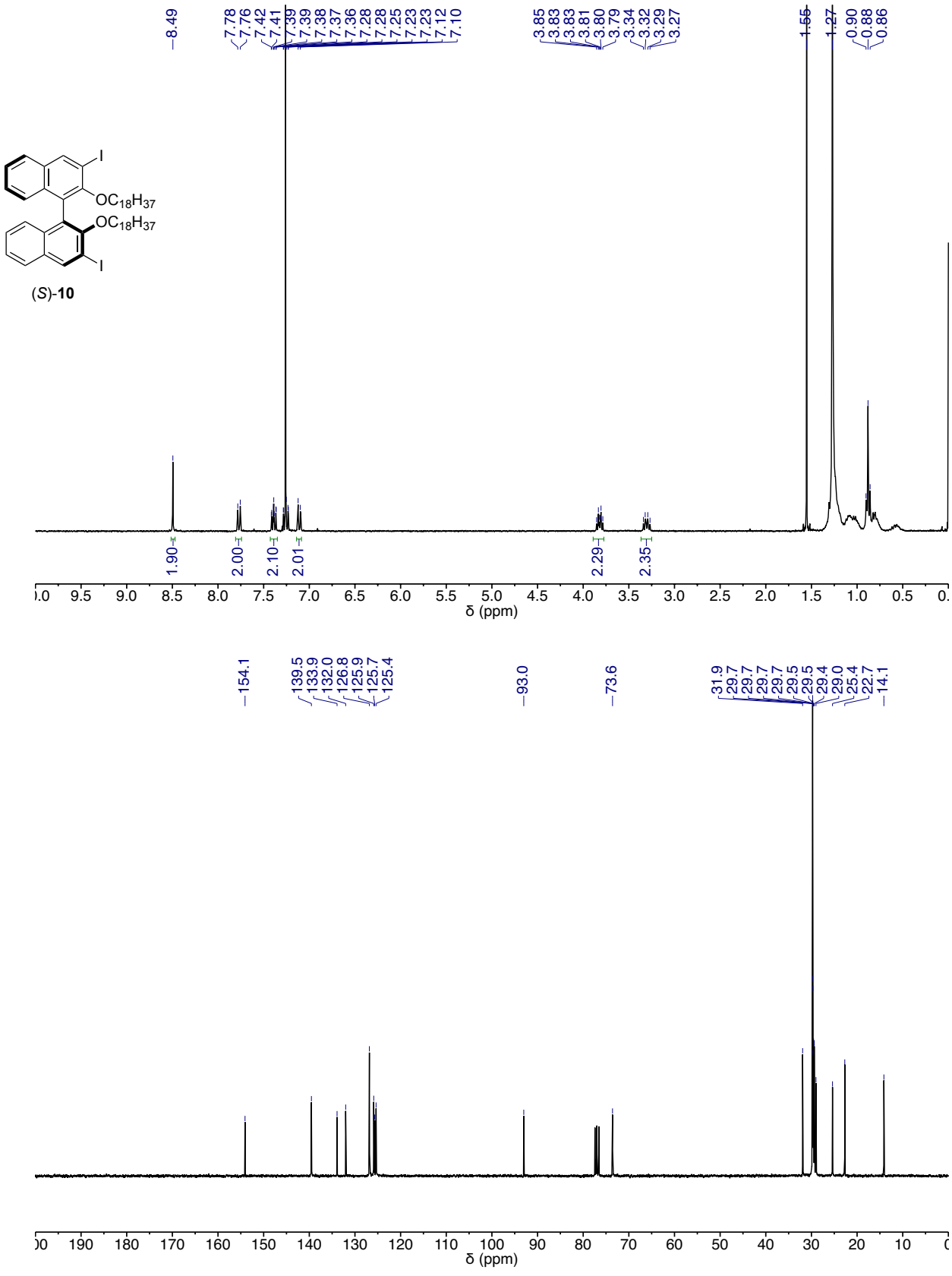


Figure S6. ^{1}H and ^{13}C NMR spectra of (*S*)-**10** in chloroform-*d*.

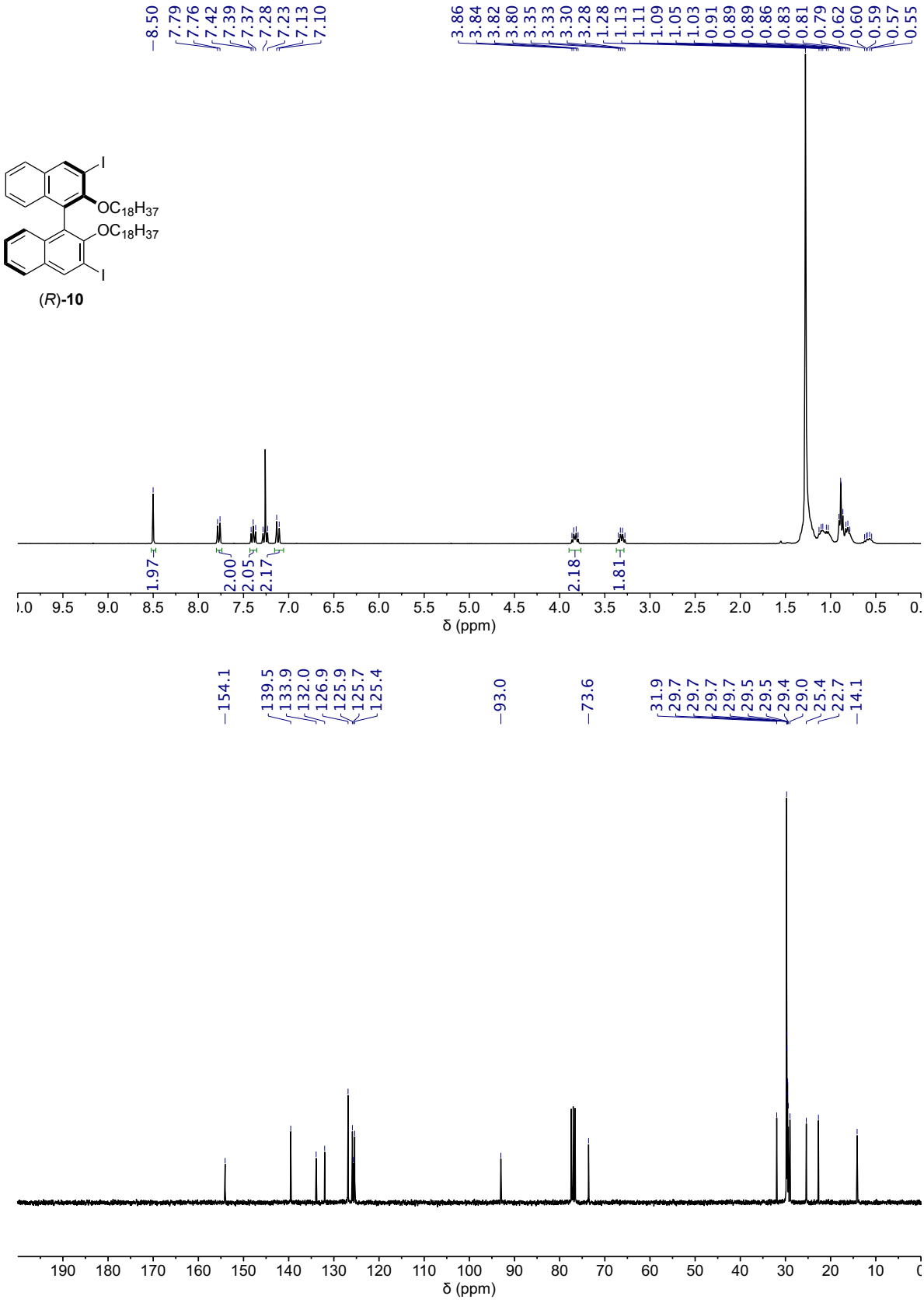


Figure S7. ^{1}H and ^{13}C NMR spectra of (*R*)-**10** in chloroform-*d*.

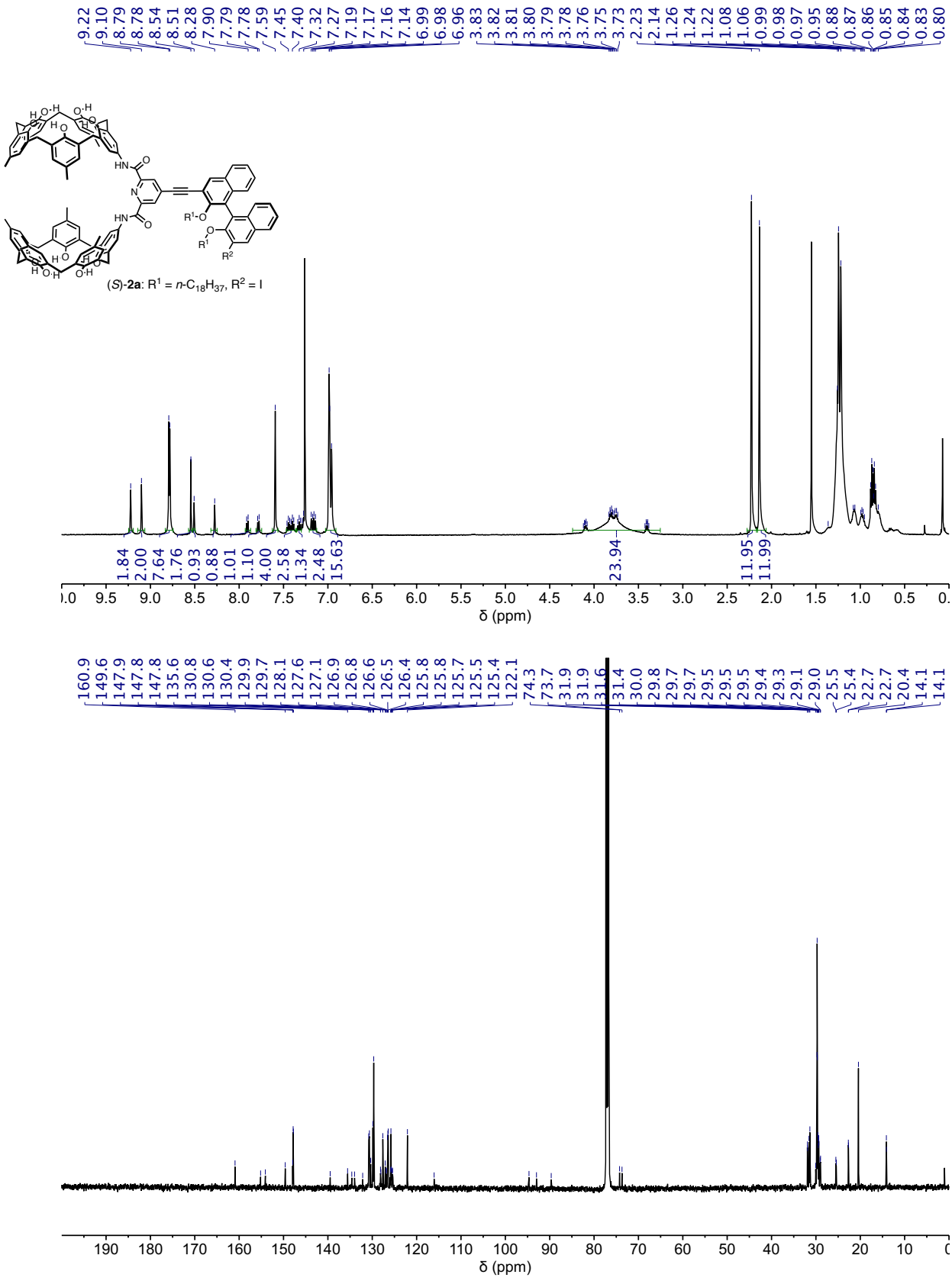


Figure S8. ^{1}H and ^{13}C NMR spectra of (*S*)-**2a** in chloroform-*d*.

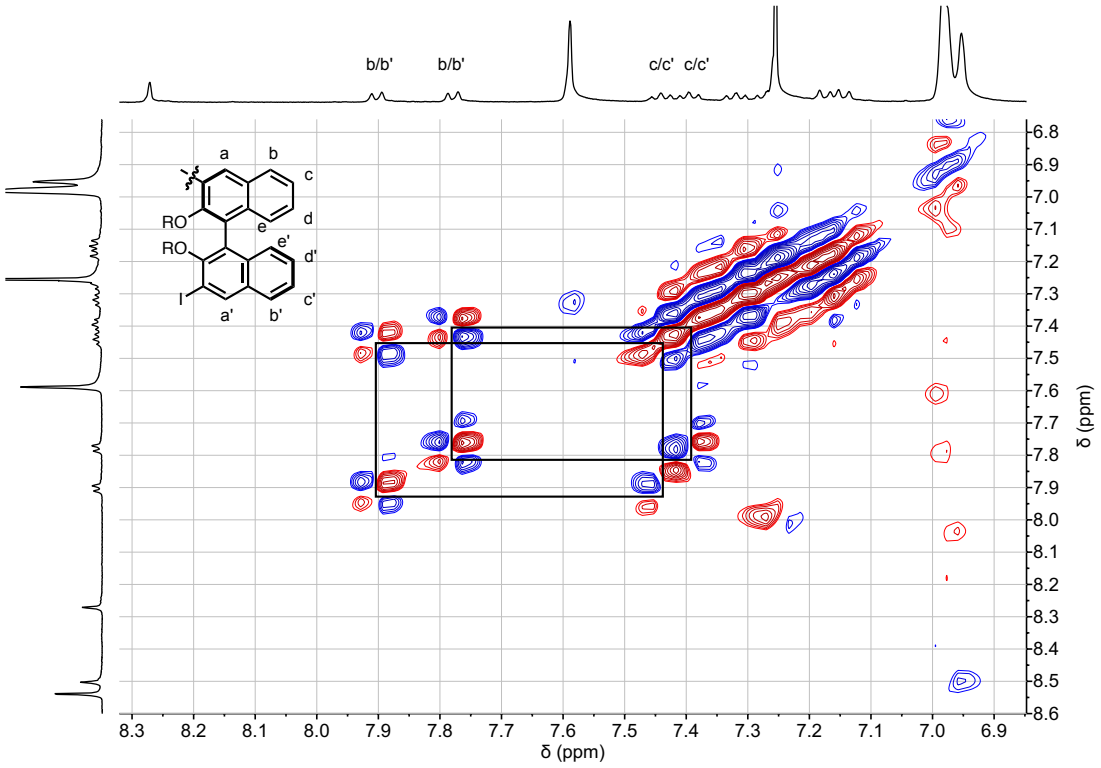


Figure S9. DQF-COSY spectrum of (*S*)-**2a** in chloroform-*d*.

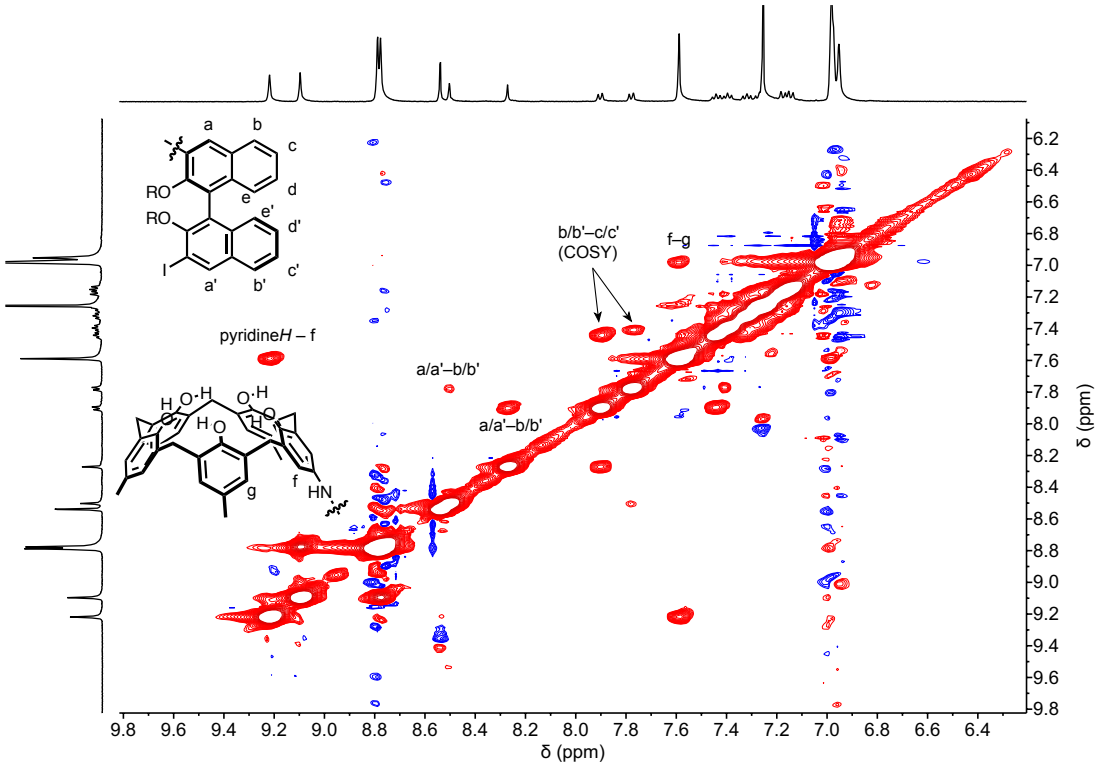


Figure S10. NOESY spectrum of (*S*)-**2a** in chloroform-*d*.

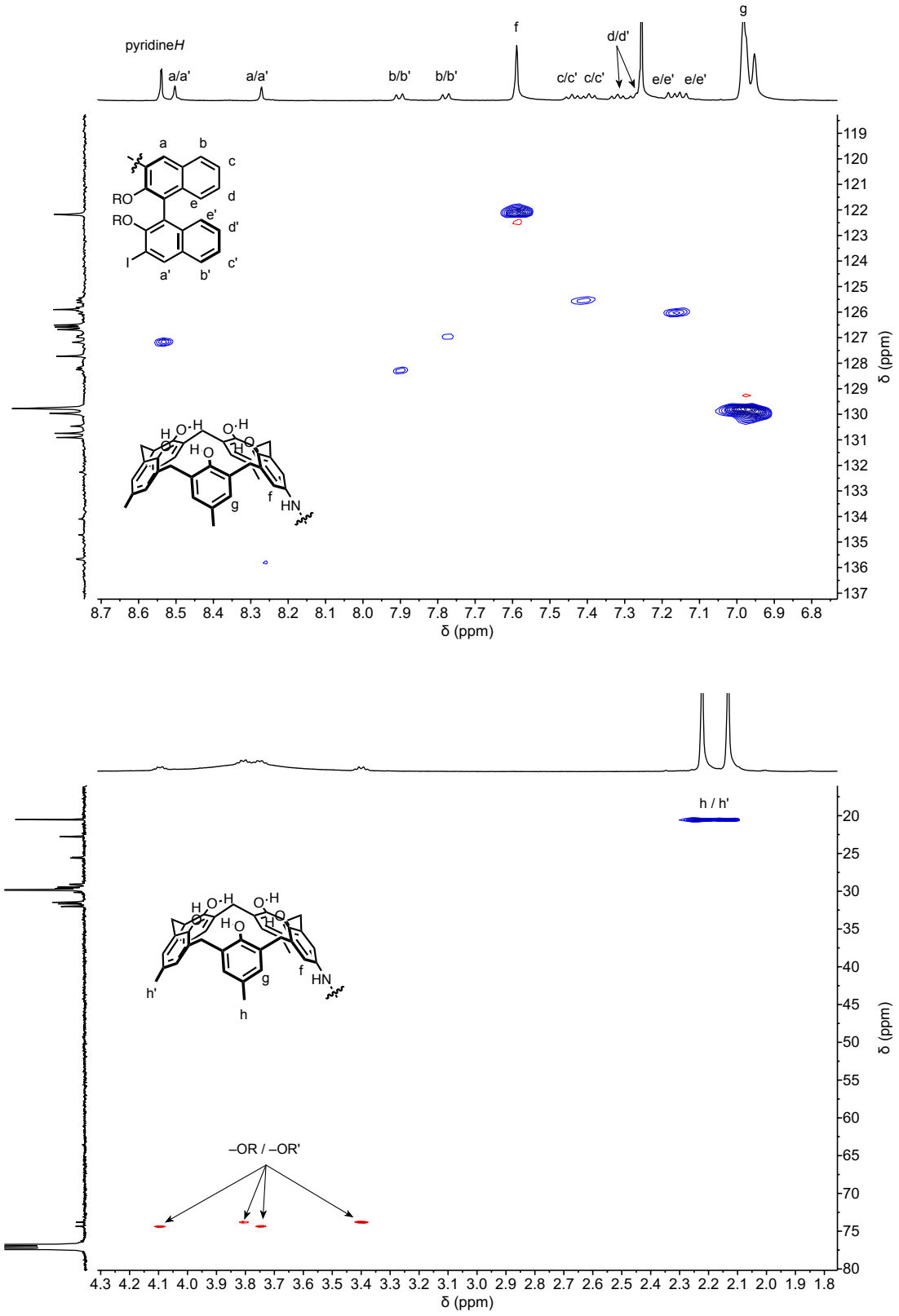


Figure S11. HSQC spectrum of (*S*)-**2a** in chloroform-*d*. CH_3 and CH carbons are phased down (blue), and CH_2 carbons are phased up (red).

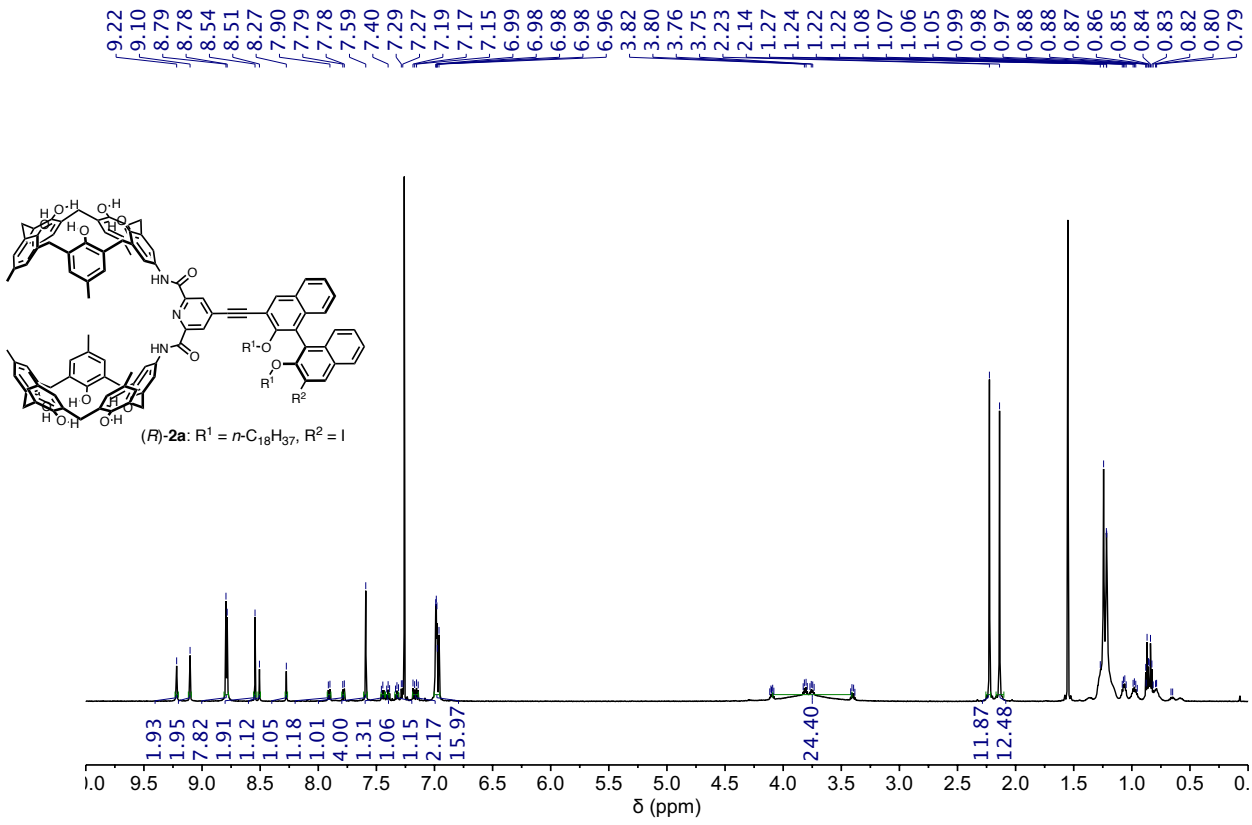


Figure S12. ^{1}H NMR spectrum of (*R*)-**2a** in chloroform-*d*.

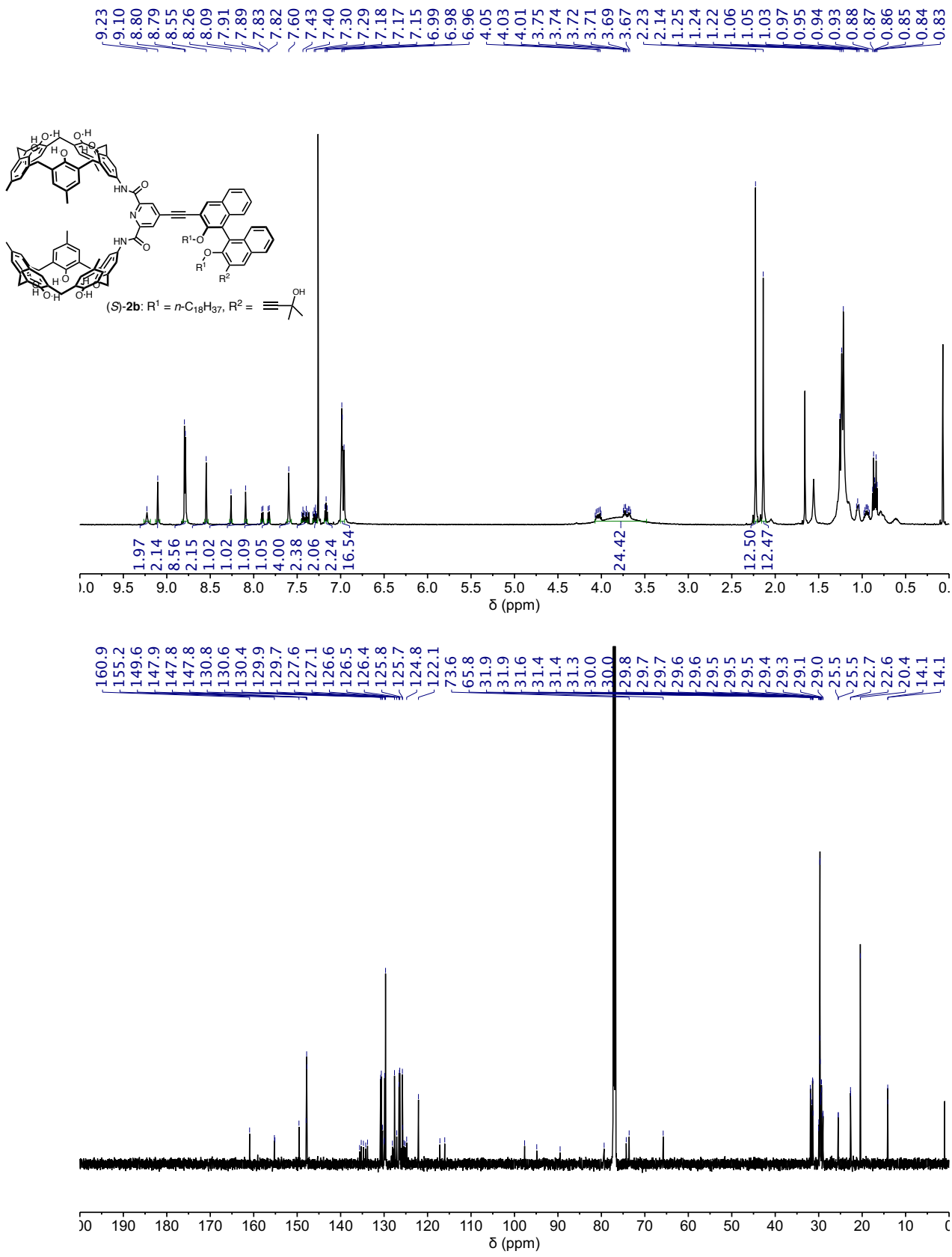


Figure S13. ^{1}H and ^{13}C NMR spectra of (*S*)-**2b** in chloroform-*d*.

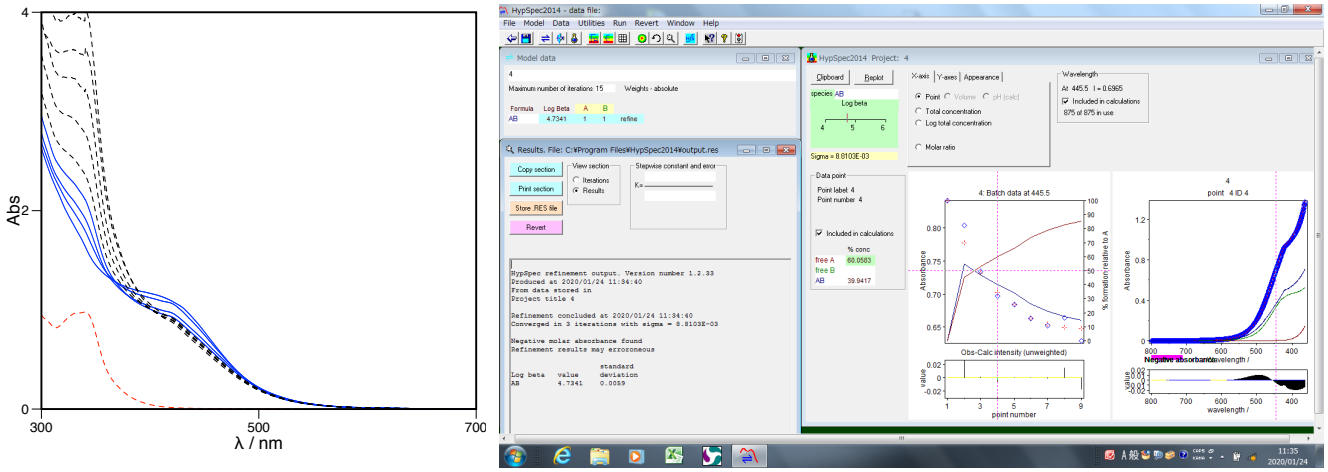


Figure S14. (left) UV/vis spectra of poly-**1** (1.76×10^{-5} mol L^{-1}) with **2a** (from bottom: 0.0, 0.5, 1.0, 1.5, 2.0, 3.0, 4.0, 5.0, 6.0 eq.) and **2a** (6.19×10^{-5} mol L^{-1}) (dashed red curve) at 293 K in toluene. (b) Screen capture of the global analysis of the titration data using Hypspec.

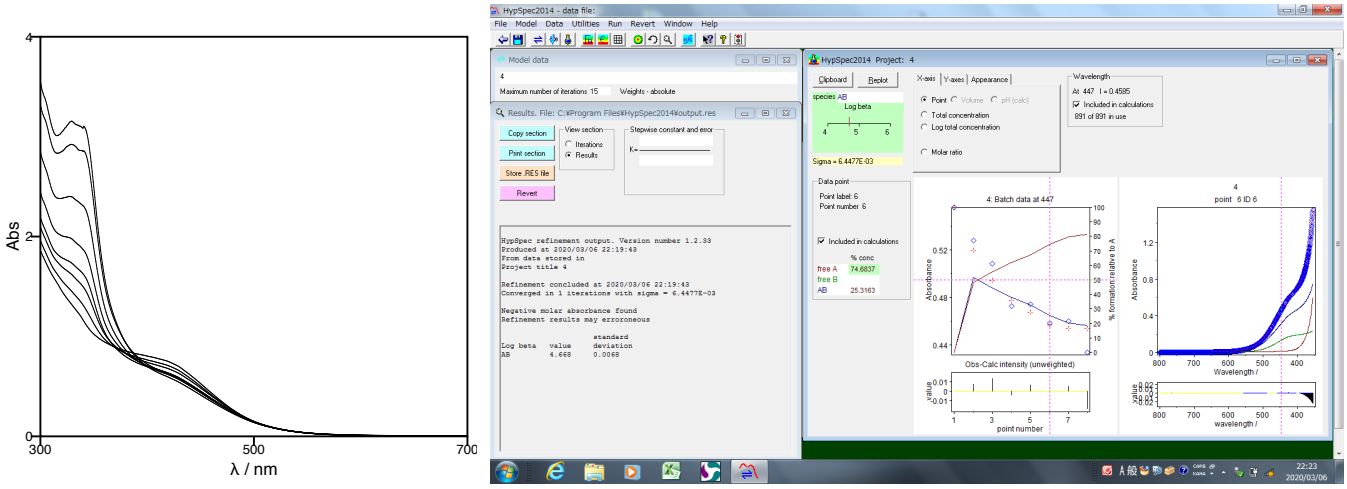


Figure S15. (left) UV/vis spectra of poly-**1** (3.08×10^{-5} mol L^{-1}) with **2b** (from bottom: 0.0, 0.5, 1.0, 1.5, 2.0, 3.0, 4.0, 4.5 eq.) and **2a** (6.19×10^{-5} mol L^{-1}) (dashed red curve) at 293 K in toluene. (b) Screen capture of the global analysis of the titration data using Hypspec.

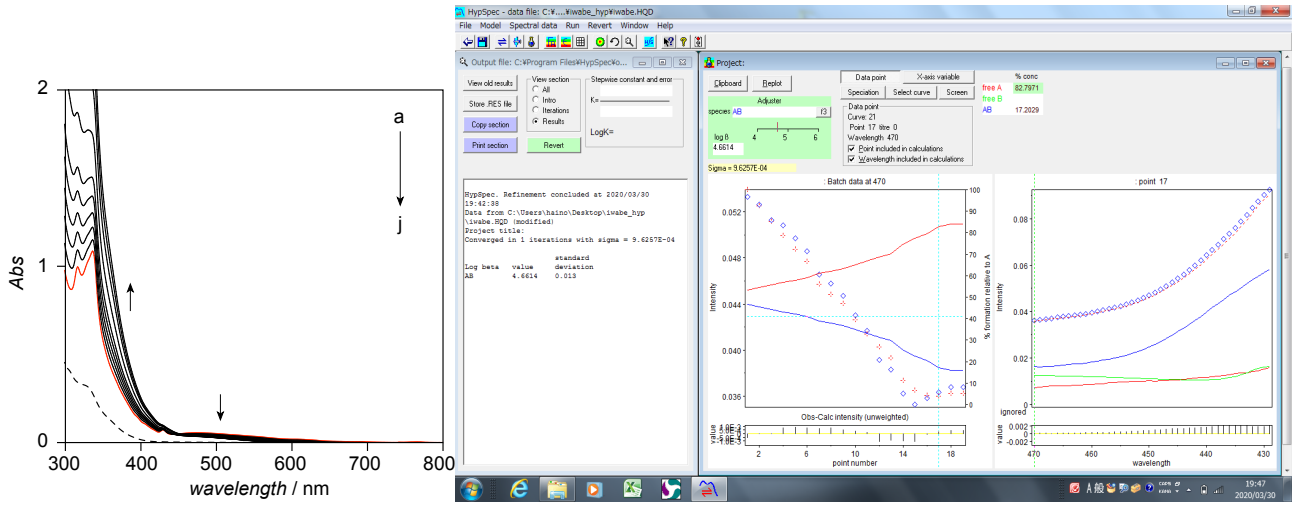


Figure S16. UV/vis spectra of **4** (2.01×10^{-5} mol L^{-1}) with **9** (a-j: 0.00, 0.812, 1.61, 2.40, 3.22, 4.08, 6.02, 8.06, 10.1, 12.1×10^{-5} mol L^{-1}) and **9** (dashed curve) at 293 K in toluene.

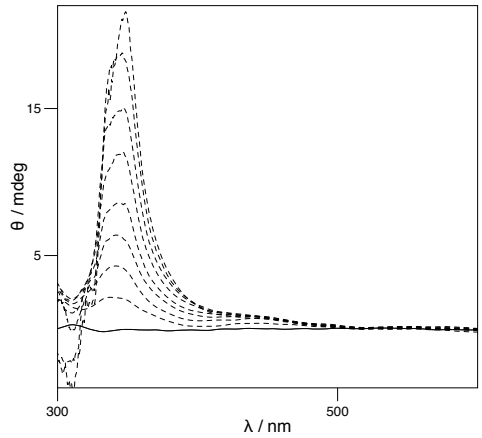


Figure S17. CD changes of poly-**1** (1.76×10^{-5} mol L^{-1}) upon the addition of (*S*)-**2a** (from bottom: 0.0, 0.5, 1.0, 1.5, 2.0, 3.0, 4.0, 5.0, 6.0 eq) at 273 K in toluene. An optical path length of 1 mm was used for measurements.

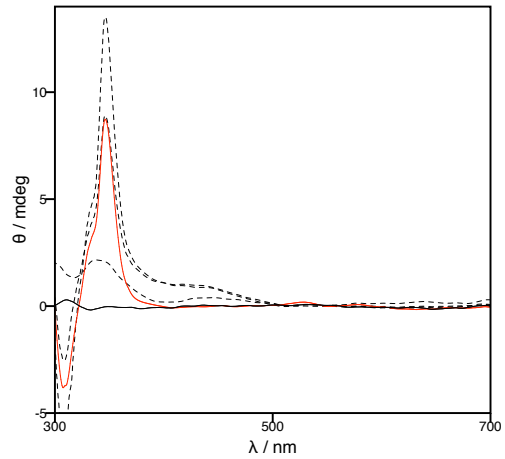


Figure S18. CD changes of poly-**1** (1.76×10^{-5} mol L^{-1}) upon the addition of (*S*)-**2b** (from bottom: 0.0, 2.0, 3.0 eq), and CD spectra of (*S*)-**2b** (6.19×10^{-5} mol L^{-1}) (solid red curve) and at 273 K in toluene. An optical path length of 1 mm was used for measurements.

References

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