Electronic Supplementary Information for

On chirality induction in poly(phenylenedisilanylene)s

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Synthesis of model-m,

benzene) $Mg, Me_3SiSiMe_2Cl$ Me_3SiMe_2Si $Me_3SiMe_2SiMe_2Si$ Me_3SiMe_2Si $Me_3SiMe_2SiMe_2Si$ $Me_3SiMe_2SiMe_2Si$ $Me_3SiMe_2SiMe_2Si$ $Me_3SiMe_2SiMe_2Si$ $Me_3SiMe_2SiMe_2SiMe_2Si$ Me_3SiMe_2Si

To Mg (0.41 g, 17 mmol) in THF (10 mL), a mixture of **4** (0.96 g, 2.3 mmol) and chloropentamethyldisilane (2.55 g, 15.3 mol) in THF (1 mL) was dropwised. After stirring at room temperature, the mixture was refluxed overnight. After the reaction, ethanol and H₂O were added to the mixture. The organic layer was extracted with dichloromethane (20 mL \times 4) washed with sat. NH₄Cl aq., sat. NaCl aq. and dried with MgSO₄. After flirtation and removal of the solvent, **model-m** was obtained after purification with silica gel chromatography, the preparative HPCL, and the preparative TLC as a colorless oil (38.0 mg, 0.074 mmol, 3% yield).

(1-(2S)-[2-(2-(2-methoxy)ethoxy]propan-2-oxy-3,5-bis(pentamethyldisilanyl)

Model-m: ¹H NMR (300 MHz, C₆D₆): $\delta = 0.13$ (s, 18H, Me₃Si), 0.38 (s, 12H, Me₂Si), 1.17 (d, 3H, CHC*H*3, *J*= 6.4 Hz), 3.12 (s, 3H, OCH3), 3.34 (t, 2H, *J* = 4.5 Hz), 3.45-3.60 (m, 6H), 3.73-3.87 (m, 2H), 4.04-4.09 (m, 1H), 7.25 (s, 2H, ArH), 7.42 (s, 1H, ArH); ¹³C NMR (75 MHz, C₆D₆): $\delta = -3.78$ (Me₃Si), -2.05 (Me₂Si), 17.6 (CH*C*H₃), 58.7 (OCH₃), 69.3, 71.0, 71.3, 71.7, 72.4, 74.8 (*C*H₂, *C*HCH₃), 120.2, 132.4, 140.6, 158.8 (Ar); ²⁹Si NMR (60 MHz, C₆D₆): $\delta = -21.2$ (SiMe₃), -19.3 (SiMe₂); Anal. Calcd for C₂₄H₅₀O₄Si₄: C, 55.97; H, 9.79; Found: C, 55.98; H, 9.81.

	ABS		CD			FL
	λ max/nm	$\epsilon/cm^{-1}M^{-1}$	λext/nm	$\Delta \epsilon/cm^{-1}M^{-1}$	$g_{abs} imes 10^{5 a}$	$\lambda_{FL}\!/\!nm$
m-1a	289	3800	291	+0.14	3.9	314 ^b
	296	3700	295	+0.17	4.5	
model-m	287	3400	287	+0.0044	1.3	311 ^c
	294	3200	295	+0.040	1.2	
^a $g_{abs} = \Delta \epsilon / \epsilon$. ^b Excited at 288 nm. ^c Excited at 287 nm.						

Table S1 Photophysical properties of m-1a and model-m in methanol



Fig. S1 Absorption and CD spectra of **m-model** in methanol ($c = 3.82 \times 10^{-4}$ M).



Figure 1S. ¹H NMR spectra of 5 in CDCl₃.





Figure 28. ¹³C NMR spectra of 5 in CDCl₃.





Figure 3S. ¹³C NMR dept spectra of 5 in CDCl₃.



Figure 4S. ¹H NMR spectra of 4 in CDCl₃.



Figure 5S. ¹³C NMR spectra of 4 in CDCl₃.



Figure 6S. ¹H NMR spectra of 3 in CDCl₃.



Figure 7S. ¹³C NMR spectra of 3 in CDCl₃.

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 parameters

 CX
 30.00 cm
 71
 780.000 pm

 F1P
 180.000 pt
 72
 720.000 pt

 F2P
 -20.000 pt
 72
 -1509.35 Hz

 PPMCM
 6.666667 ptm/s
 720.000 pt

HZCM

-20.000 ppm -1509.35 Hz 6.66667 ppm/cm 503.11841 Hz/cm





Figure 8S. ¹³C NMR dept spectra of 3 in CDCl₃.

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	F2 - Acquisition Parameters Date 50000 Time 21.14 INSTRUM dpx300 PROBHD 5 mm QNP 1H PULPROS zgig30 TD 65536 SOLVENT C6D6 NS 90
	LS 1.1904.76 Hz SMH 1.19162 Hz FIDRES 0.181652 Hz AQ 2.7525620 sec RG 2.56 DW 42.000 DE 4.50 usec DE 4.50 usec D1 0.300000 sec PL12 16.00 dB D1 10.00000000 sec SF01 6.70 usec DE 4.50 usec SF01 59.624316 Miz NUC1 295i PL1 OCPDERC2 waltz16 PCD2 100.00 usec SF02 300.131205 Miz
r sa haan dha an ballada a baha kaba kabada da a sa a da da da a sa bada a sa ba sa sa da a sa sa da da sa sa d	 NOC2 Im PL2 -6.00 dB F2 - Processing parameters SI 32768 SF 59.6273730 MHz WDW EM SSB 0 LB 1.00 Hz GB 0 PC 1.40 1D NME plot parameters
ראס איז	 CX 32.00 cm F1P 0.000 ppm F1 0.00 Hz F2P -40.000 ppm F2 -2385.09 Hz F2MCM 1.25000 ppm/cm H2CM 74.53422 Hz/cm

Figure 9S. ²⁹Si NMR spectra of 3 in CDCl₃.



Figure 10S. ¹H NMR spectra of m-2b in CDCl₃.



Figure 11S. ¹³C NMR spectra of m-2b in CDCl₃.





Figure 12S. ²⁹Si NMR spectra of m-2b in CDCl₃.







Figure 14S. ¹³C NMR spectra of m-1b in CDCl₃.

51MP2 (SIMP2) Muz 834/ (SIMP2) MW2 /05723



Figure 15S. ²⁹Si NMR spectra of m-1b in CDCl₃.



Figure 16S. ¹H NMR spectra of 8 in CDCl₃.



Figure 17S. ¹³C NMR spectra of 8 in CDCl₃.



Figure 18S. ¹H NMR spectra of 7 in CDCl₃.



Figure 19S. ¹³C NMR spectra of 7 in CDCl₃.

1000	206.11		17.204 17.504 	Current Data Parameters NAME EXPRO F2 - Acquisition Parameters Date_ 500000 Time 13.29 INSTRUM dpx300 PROBHD 5 mm QNP 1H PULPROG dept135 TD 65536
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			the contract to the trace of the second s	SF 75.4677190 MH2 WUW 544 SSB 0 LB 1.00 H2 GB 0 PC 1.40 10 NMR plot parameters CX 30.00 cm F1P 180.000 ppm F1 13584.19 H2 F2P -20.000 ppm F2 -1509.35 H2 F2 -509.35 H2

Figure 20S. ¹³C dept NMR spectra of 7 in CDCl₃.









Figure 23S. ¹³C NMR spectra of **p-2** in CDCl₃.







Figure 25S. ²⁹Si NMR spectra of **p-2** in CDCl₃.







Figure 27S. ¹³C NMR spectra of **p-1** in CDCl₃.



Figure 28S. ²⁹Si NMR spectra of p-2 in CDCl₃.