Electroactive C₂ symmetry receptors based on the biphenyl scaffold and tetrathiafulvalene (TTF) units

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General Experimental Methods

NMR spectra were recorded in deuterated solvents, at 500.13 MHz (^1H) and 125.75 MHz (^{13}C). Chemical shifts (δ) are expressed in ppm and are related to the tetramethylsilane (TMS) signal. Mass spectra were achieved on two different spectrometers, with MALDI-TOF or ESI sources. X-ray single-crystal diffraction data were collected at 293K on a IPDS diffractometer equipped with a graphite monochromator utilizing $\text{MoK}\alpha$ radiation ($\lambda = 0.71073\text{\AA}$). The structure was solved by direct methods using SIR92 and refined on F^2 by full matrix least-squares techniques using SHELXL-97 with isotropic thermal parameters for all atoms because of insufficient data. Absorption was corrected by multiscan technique and the H atoms were included in the calculation without refinement. Cyclic voltammetry experiments were carried out on a potentiostat-galvanostat with solvents and electrolyte of electrochemical grades. CV experiments were carried out at 298K in a conventional three-electrode cell equipped with a Pt disk working electrode (diameter: 1mm), a Pt wire counter electrode, and a Ag, AgCl reference electrode.

Materials

Unless otherwise noted, solvents and starting products were commercially available and used without further purification. MeOH was distilled from Mg. DMF was allowed to stand over molecular sieves ($4\text{\AA}$) for 3 days before use.

¹H-NMR spectrum of compound **3**

¹³C-NMR spectrum of compound **3**

¹H-NMR spectrum of compound **4**

¹³C-NMR spectrum of compound **4**

¹H-NMR spectrum of compound **5**

¹³C-NMR spectrum of compound **5**

^1H -NMR spectrum of compound **6**

^{13}C -NMR spectrum of compound **6**