SUPPLEMENTARY INFORMATION

Axially Diethylaminophenoxypropanoxy Substituted New Subphthalocyanines: Synthesis and Electropolymerization properties

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1.1. Materials

1,3-Bis[3-(diethylamino)phenoxy]propan-2-ol 2 [1] and 2,3-bis[3-(diethylamino)phenoxy]propan-1-ol 4 [2] were prepared according to the literature. Boron subphthalocyanine chloride 1 was purchased from Aldrich. All reagents and solvents were of reagent grade quality and were obtained from commercial suppliers. All solvents were dried and purified as described by Perrin and Armarego [3].

1.2. Equipment

The IR spectra were recorded on a Perkin Elmer 1600 FT-IR Spectrophotometer, using KBr pellets. $^1$H and $^{13}$C-NMR spectra were recorded on a Bruker Ascend 400 MHz spectrometer in CDCl$_3$, and chemical shifts were reported ($\delta$) relative to Me$_4$Si as internal standard. Mass spectra were measured on a Micromass Quatro LC/ULTIMA LC-MS/MS spectrometer and MALDI-MS of complexes were obtained in dihydroxybenzoic acid as MALDI matrix using nitrogen laser accumulating 50 laser shots using Bruker Microflex LT MALDI-TOF mass spectrometer. Optical spectra in the UV-vis region were recorded with a Perkin Elmer Lambda 25 spectrophotometer.

1.3. Electrochemical measurements

The cyclic voltammetry (CV) and square wave voltammetry (SWV) measurements were carried out with Gamry Interface 1000 potentiostat/galvanostat controlled by an external Pc and utilizing a three-electrode configuration at 25°C. The working electrode was a Pt disc with a surface area of 0.071 cm$^2$. A Pt wire served as the counter electrode. Saturated calomel electrode (SCE) was employed as the reference electrode and separated from the bulk of the
solution by a double bridge. Electrochemical grade TBAP in extra pure DCM was employed as the supporting electrolyte at a concentration of 0.10 mol dm$^{-3}$.

References

