Supplementary material (ESI) for Journal of Materials Chemistry

Supporting information for:

A Colorimetric Molecular Probe for Cu(II) Ions based on the Red/Ox Properties of Ru(II)phthalocyanines

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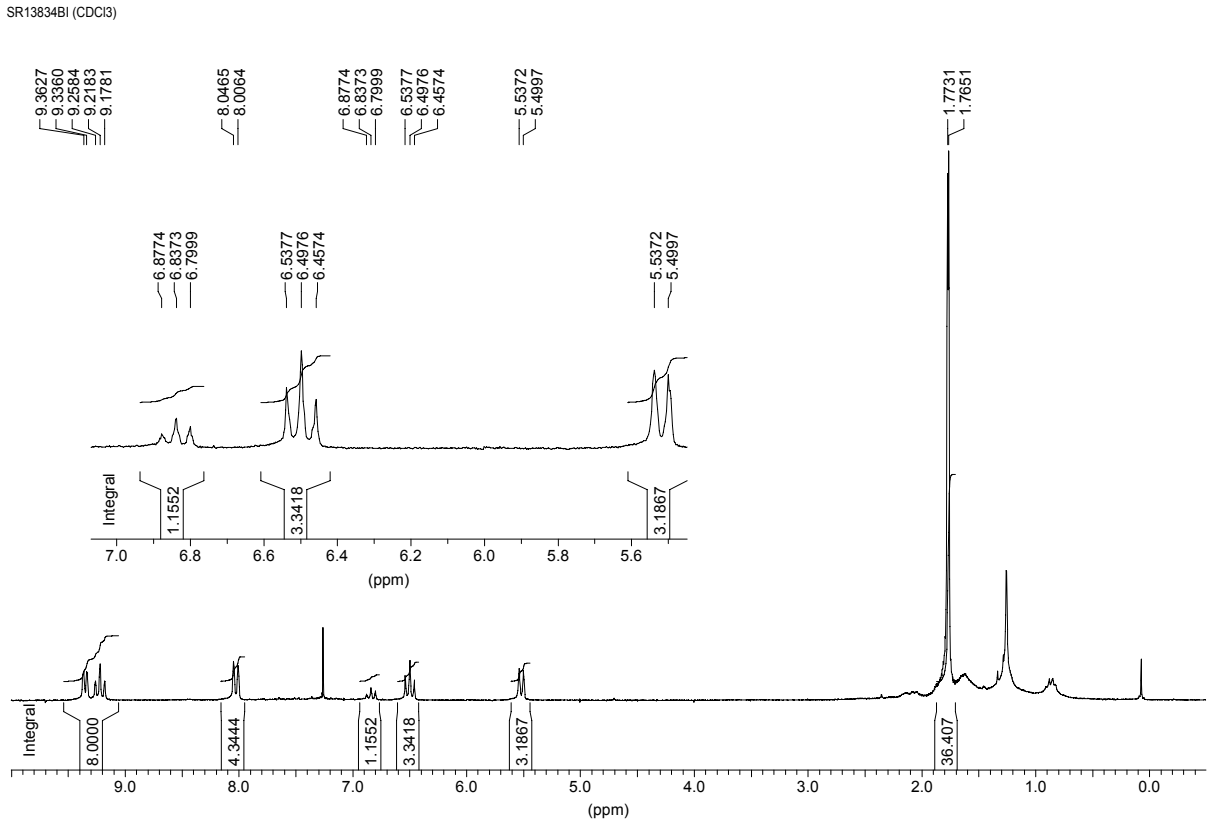

Figure S1. ^{1}H NMR ($CDCl_3$) of compound **3**.

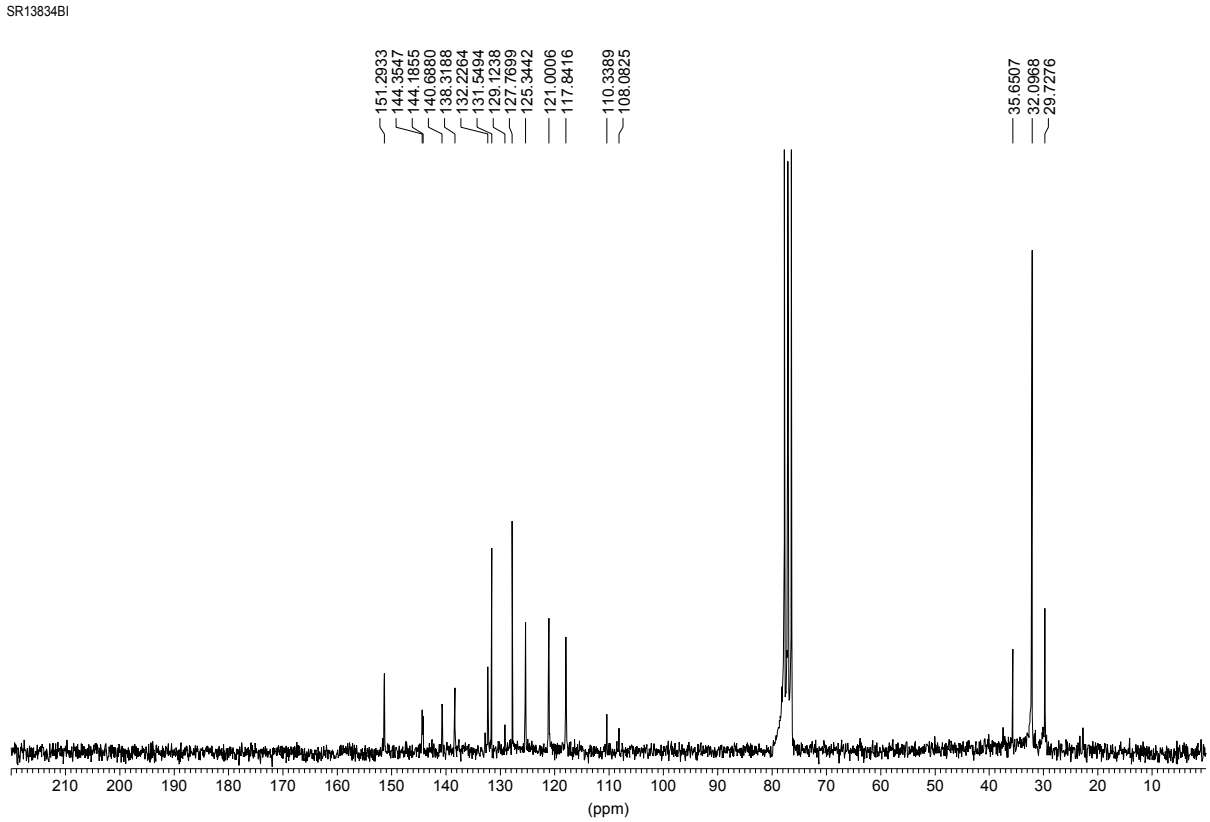

Figure S2. ^{13}C NMR of ($CDCl_3$) of compound **3**.

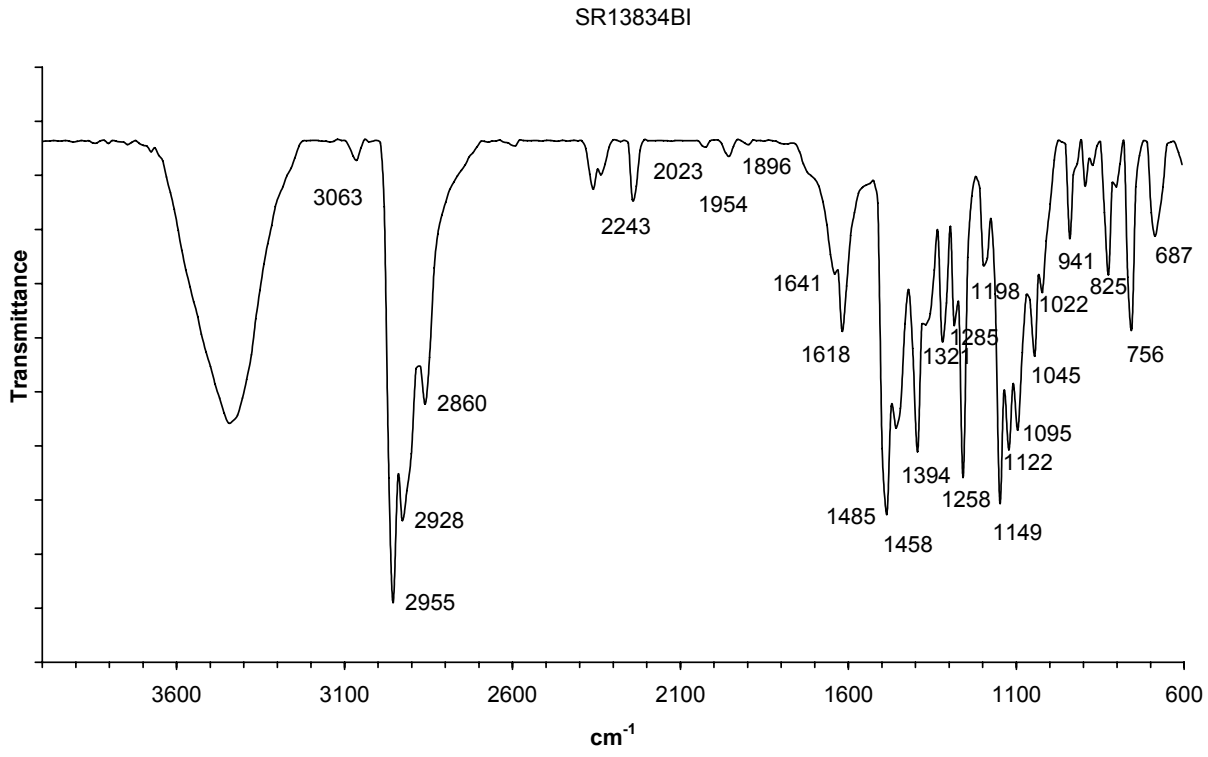

Figure S3. IR (KBr) of compound **3**.

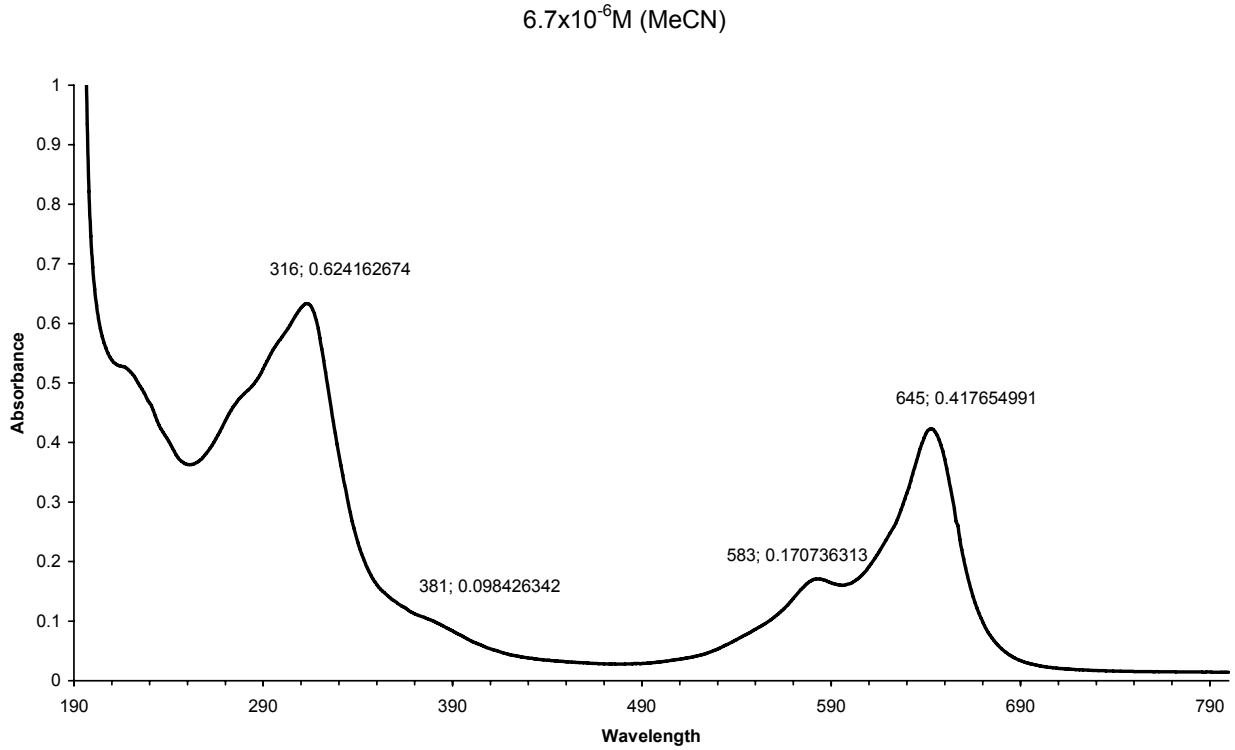

Figure S4. UV/Vis (MeCN) of compound **3**.

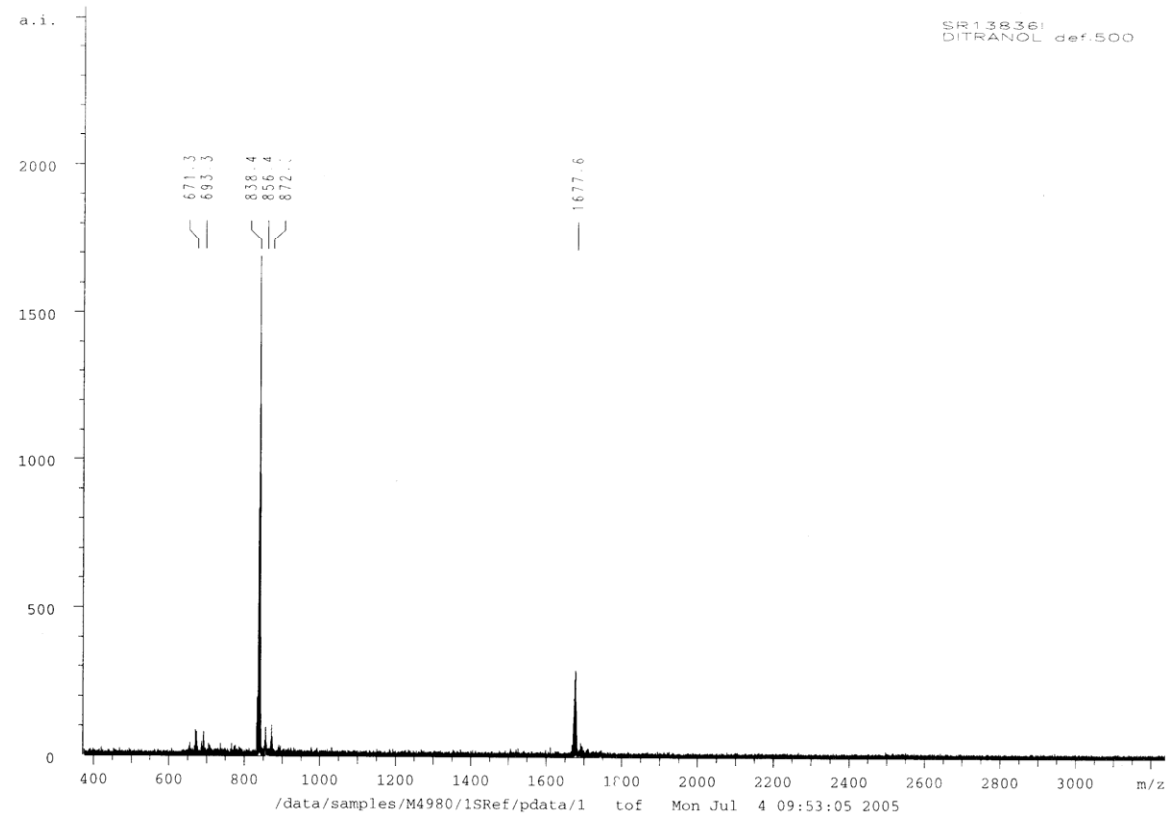

Figure S5. MS(MALDI-TOF, DITHRANOL) of compound **3**.

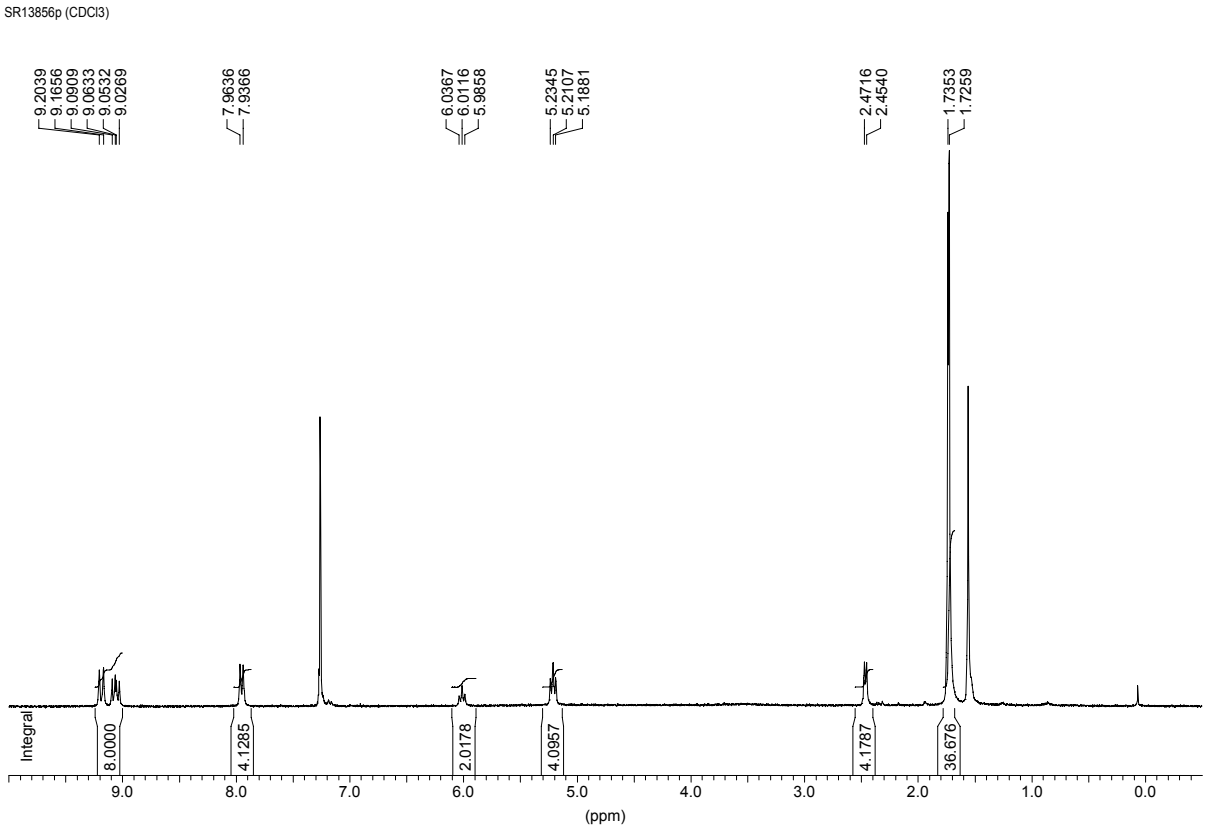

Figure S6. ^{1}H NMR ($CDCl_3$) of compound **1**.

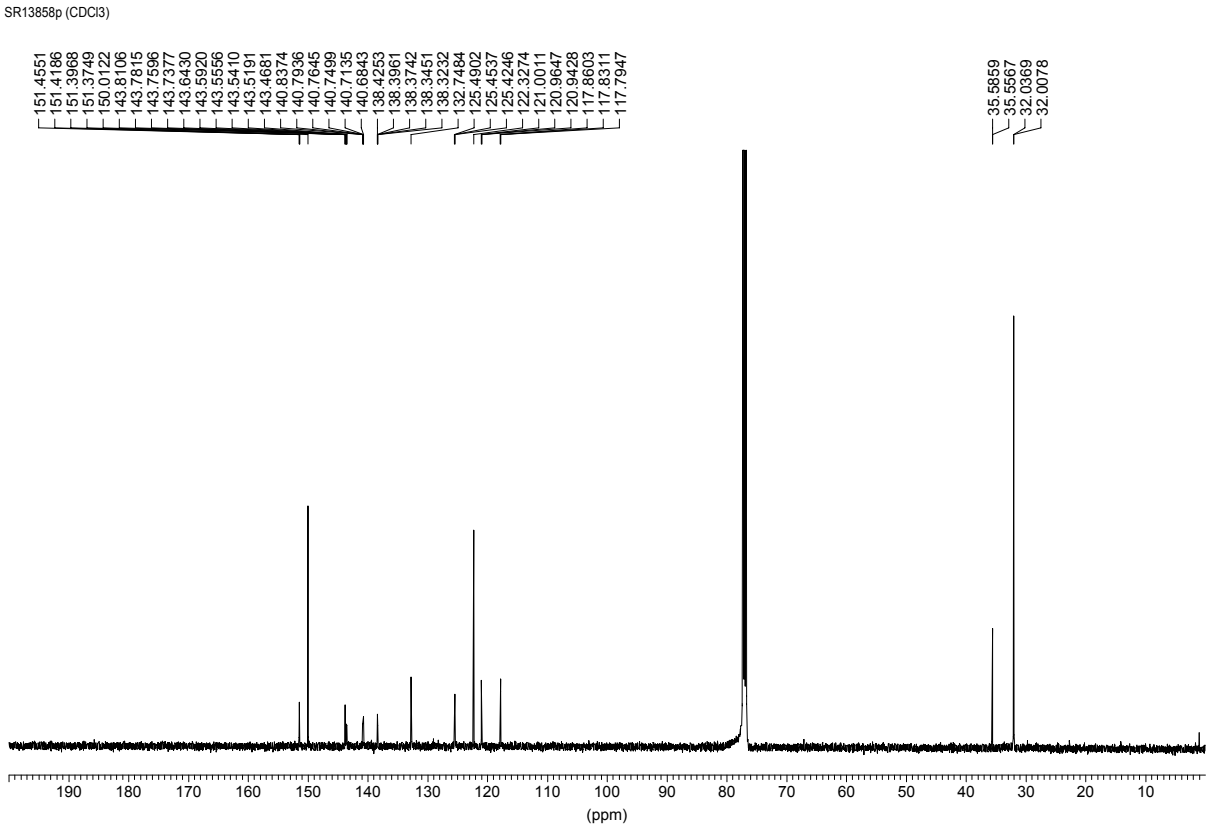

Figure S7. ^{13}C NMR ($CDCl_3$) of compound **1**.

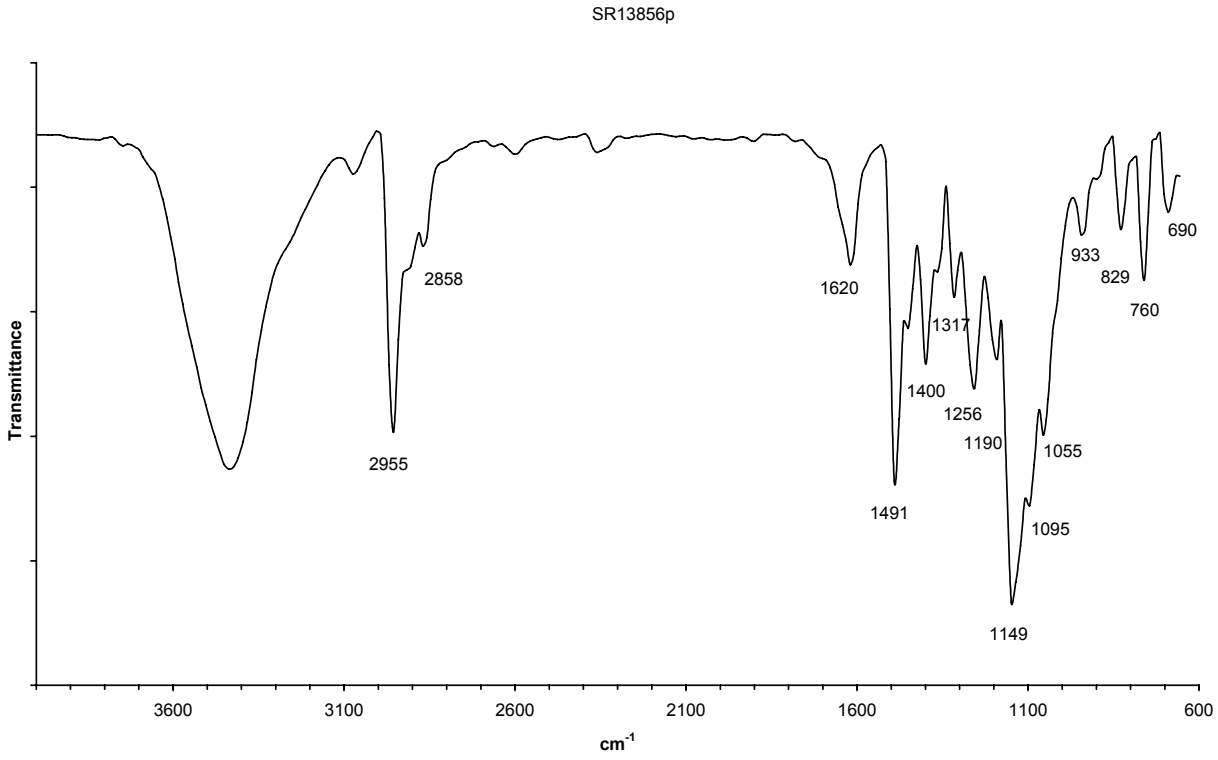

Figure S8. IR (KBr) of compound **1**.

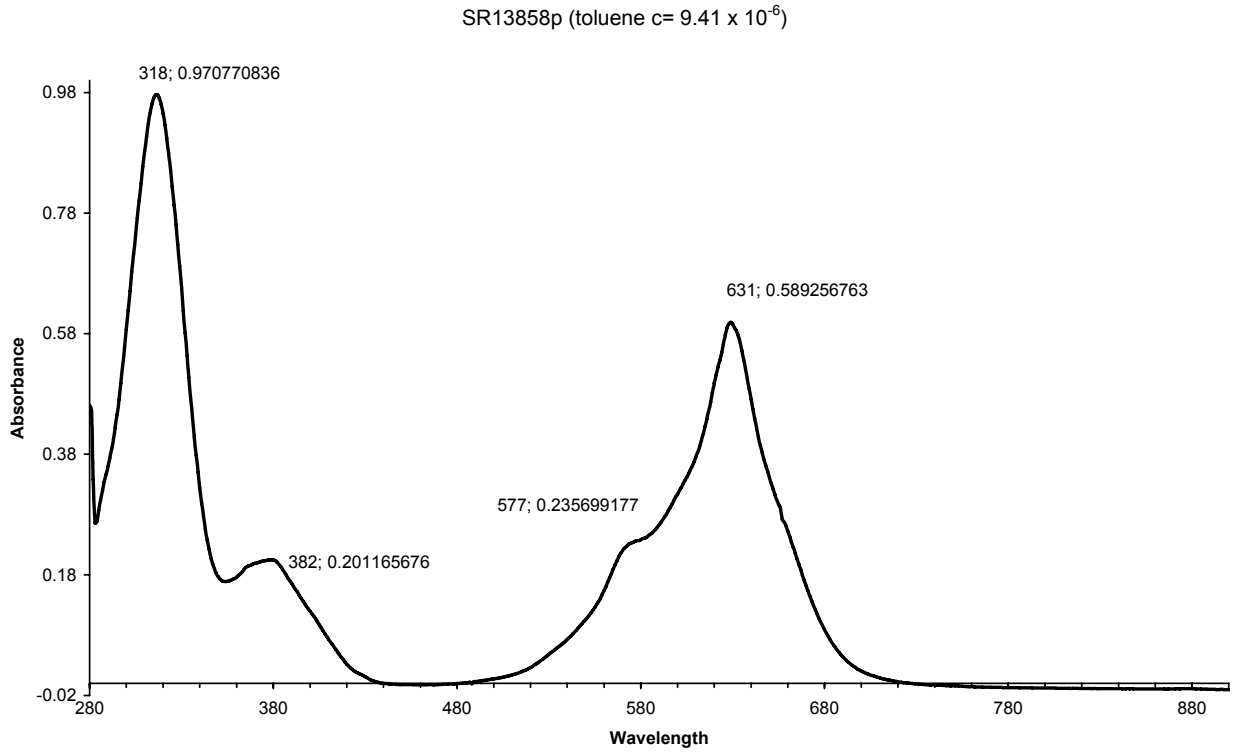

Figure S9. UV/Vis (toluene) of compound **1**.

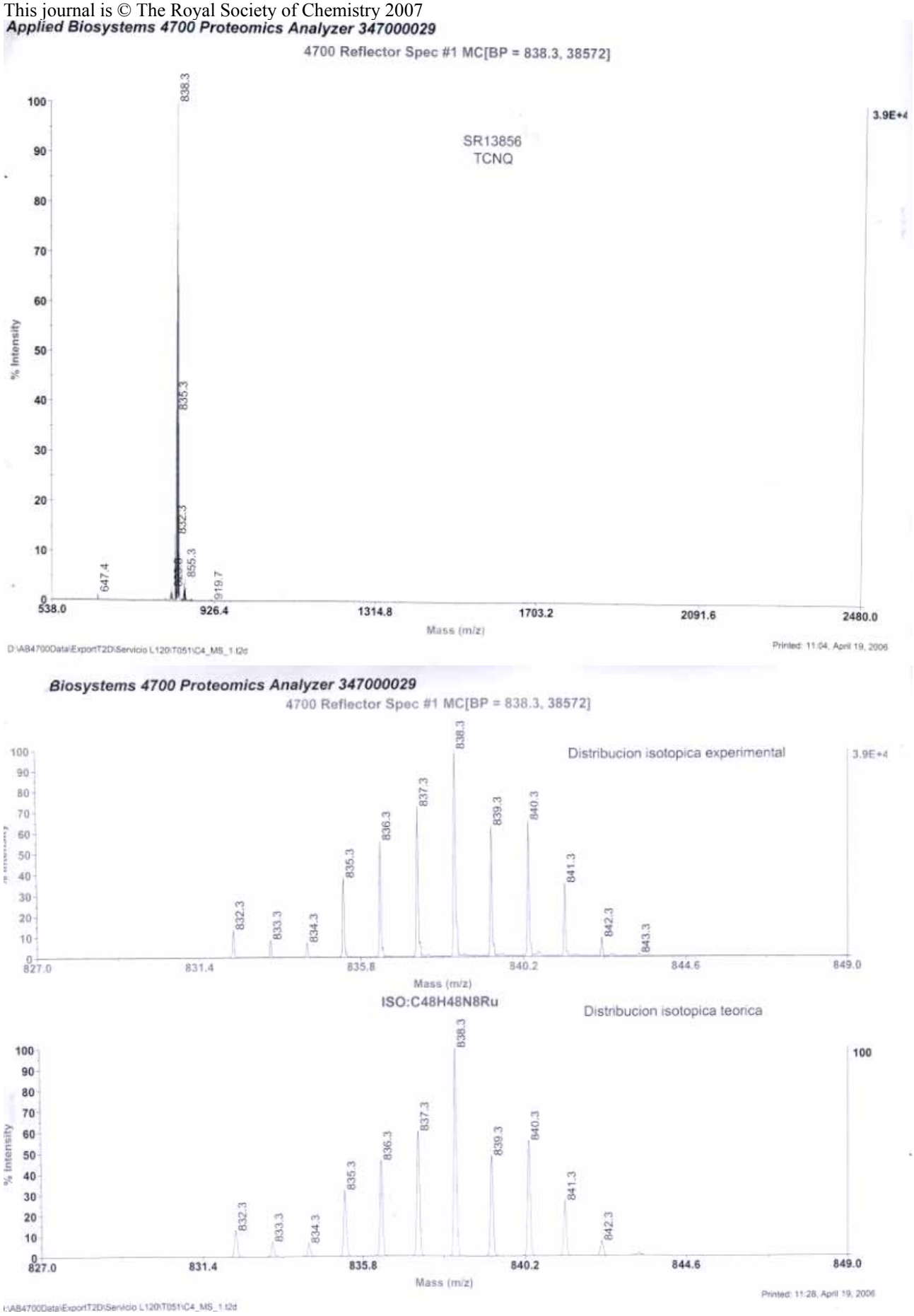

Figure S10. MS(MALDI-TOF, DITHRANOL) of compound **1**. Upper part: Complete spectrum. Lower part: Experimental *vs.* theoretical isotopic pattern.

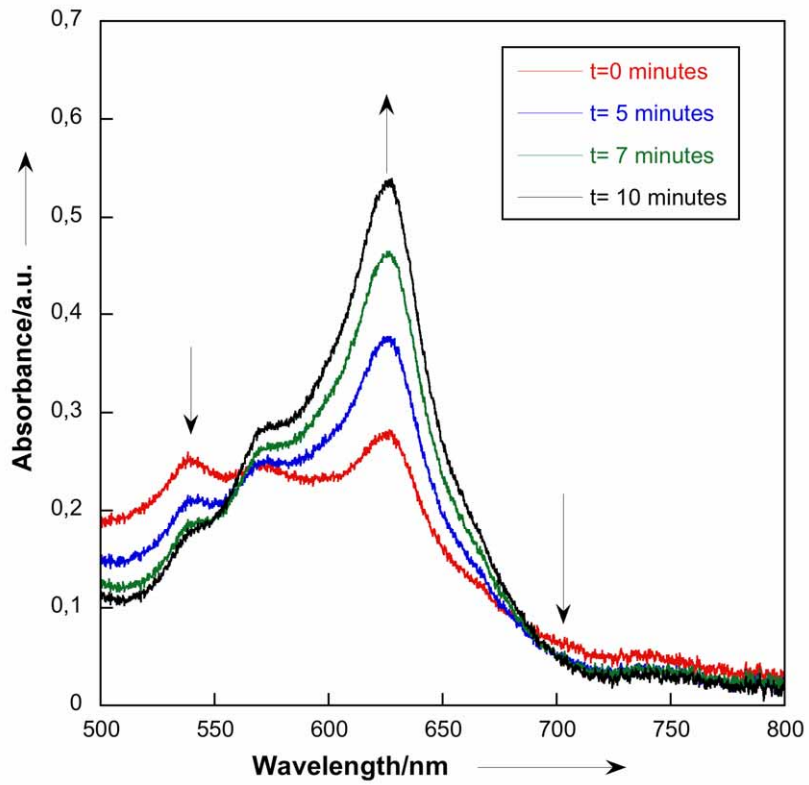

Figure S11. Changes on the absorbance spectra of **1** under applied bias (-0.7 V vs SCE) in acetonitrile. UV/Vis spectra monitoring the dissappearance of the phthalocyanine radical cation $[Ru^{II}t\text{-}Bu_4PcPy_2]^{+\bullet}$ and the appearance of $Ru^{II}t\text{-}Bu_4PcPy_2$ **1**.

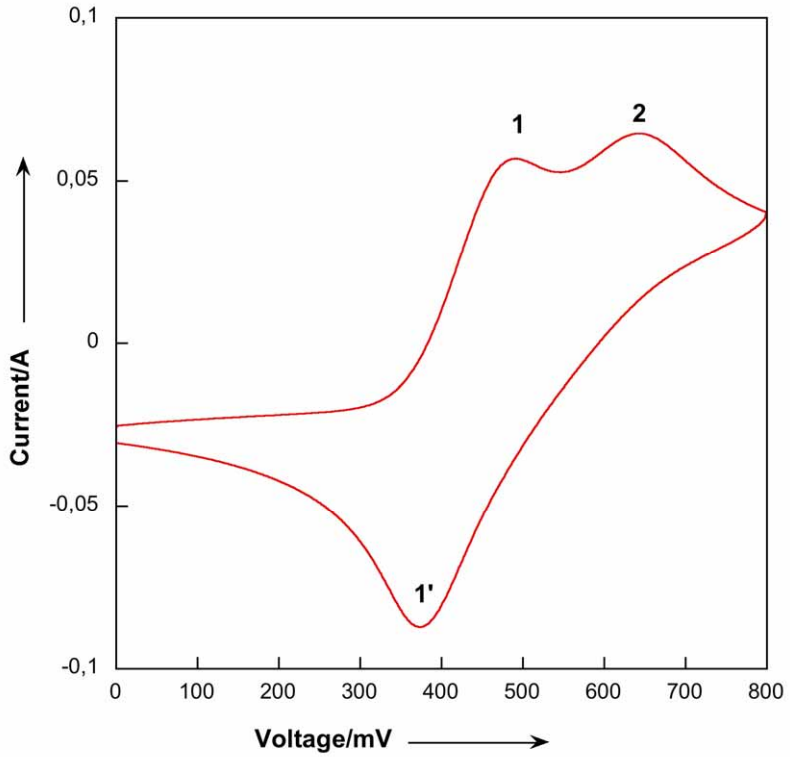

Figure S12. Cyclic voltammetry (0.1V/s) for an argon degassed acetonitrile solution of ferrocene and $CuCl_2 \bullet 2H_2O$. The electrochemical waves 1,1' and 2 correspond to the red/ox process of the ferrocene and $CuCl_2 \bullet 2H_2O$ respectively.