

Supporting Information

Photophysical, photodynamical, redox properties and BSA-interactions of novel isomeric tetra-cationic peripheral palladium(II)-bipyridyl porphyrins

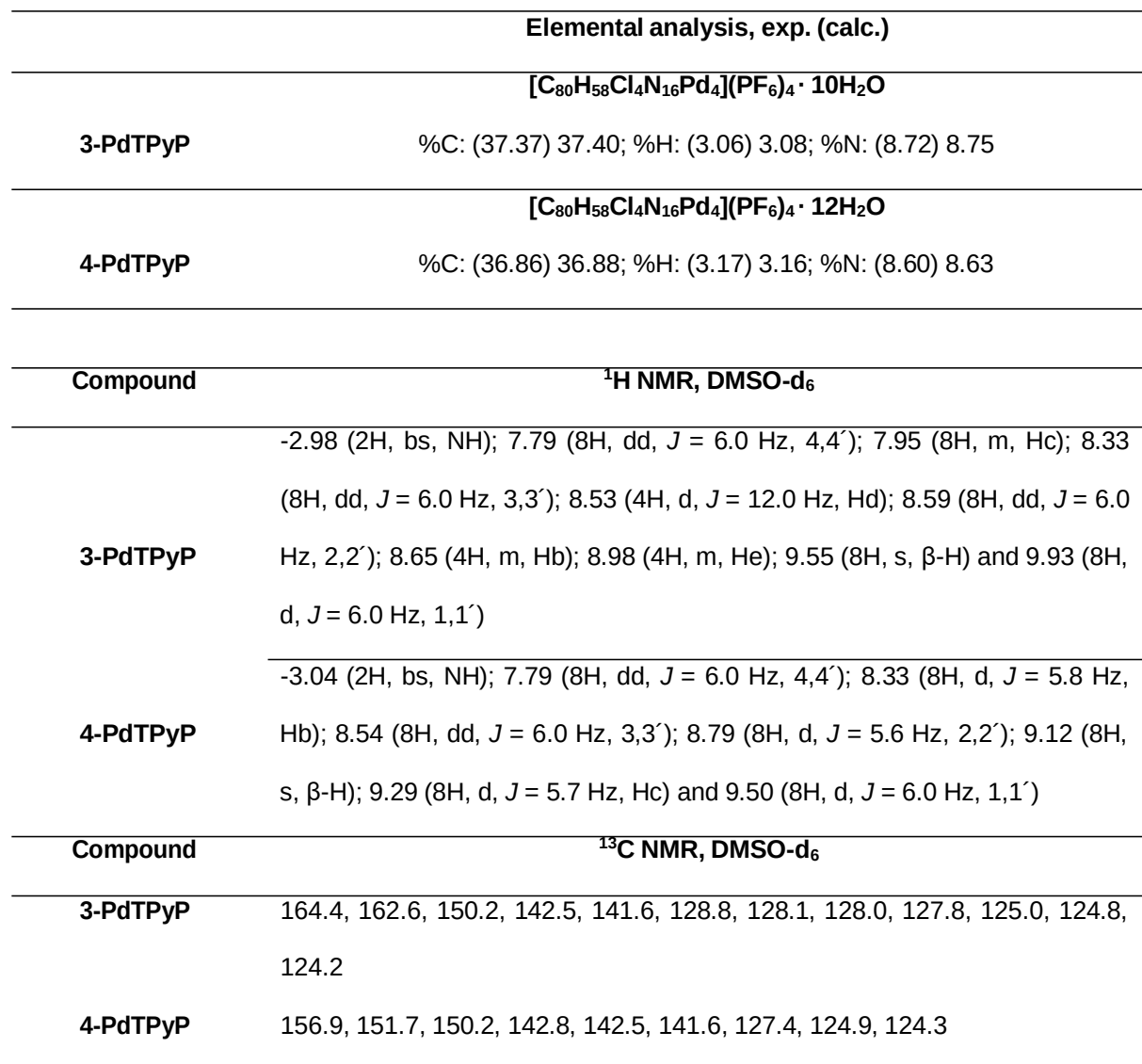
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Table S1: Elemental analysis and NMR data of porphyrins **3-PdTPyP** and **4-PdTPyP**.

Figures:

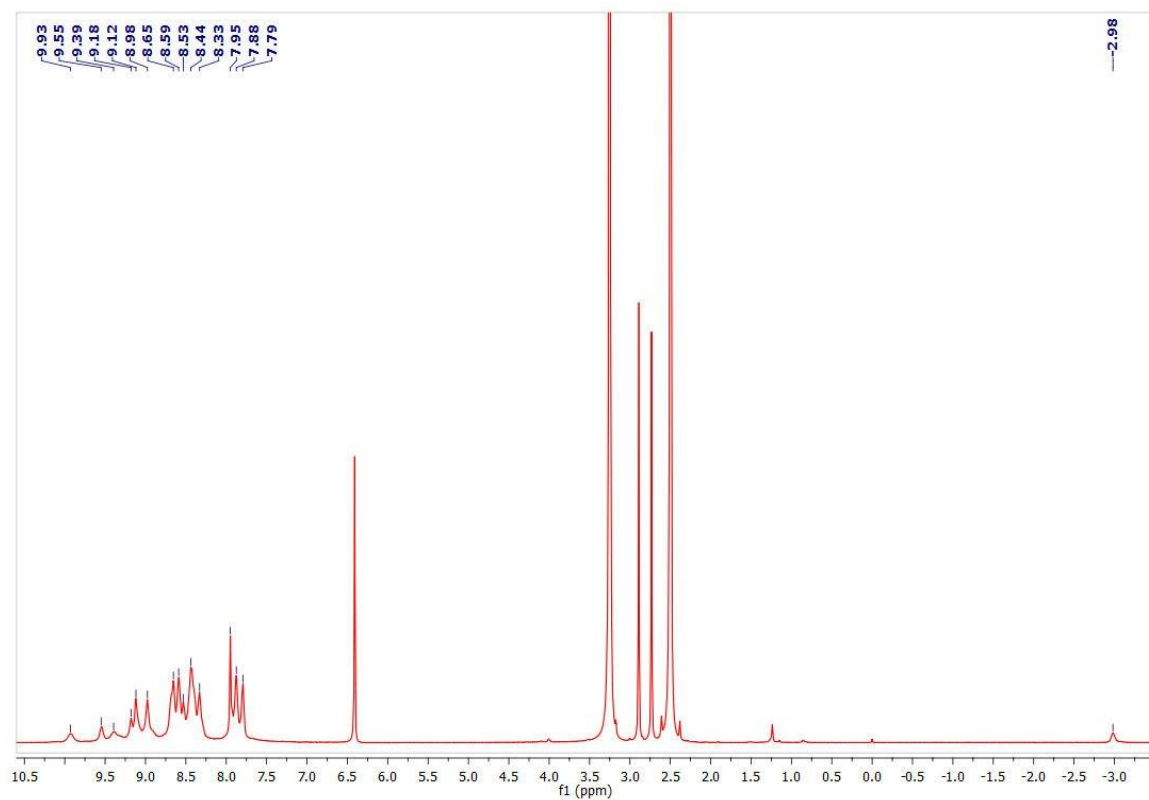


Figure S1: ¹H NMR spectrum of compound **3-PdTPyP**, in 600 MHz, DMSO-d₆. *residual peaks.

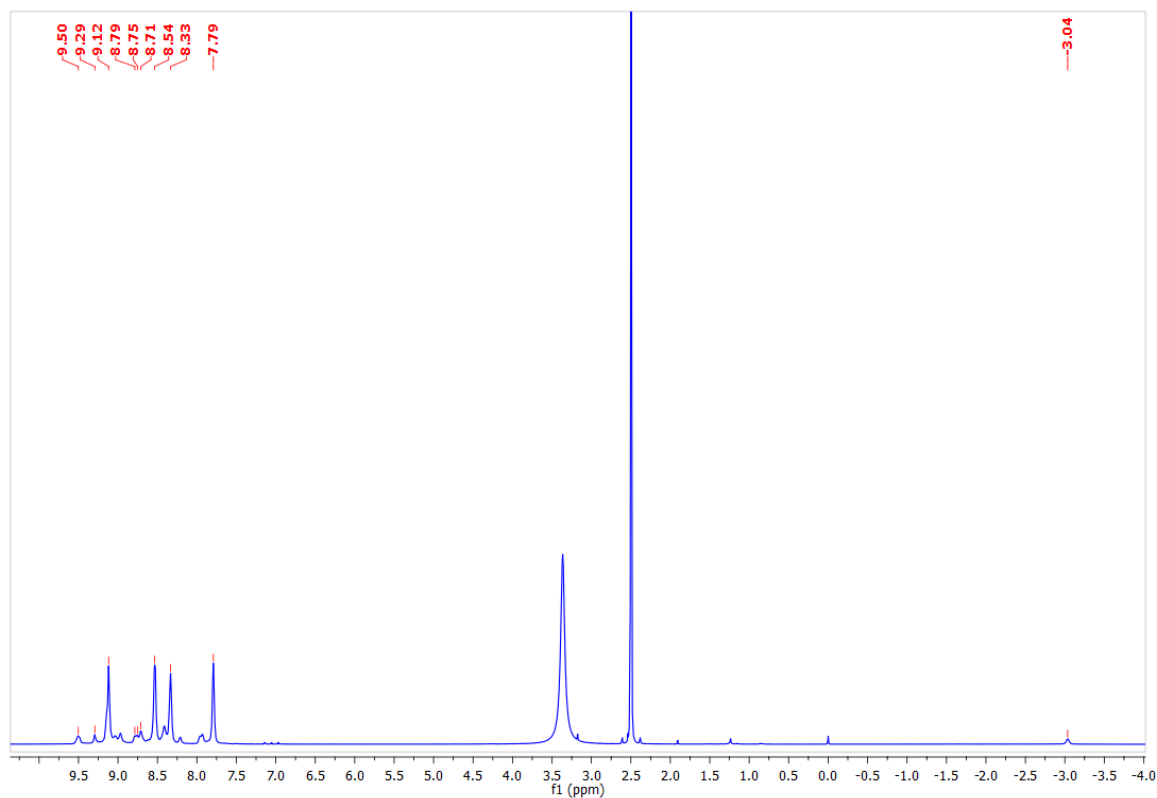


Figure S2: ¹H NMR spectrum of compound **4-PdTPyP**, in 600 MHz, DMSO-d₆. *residual peaks.

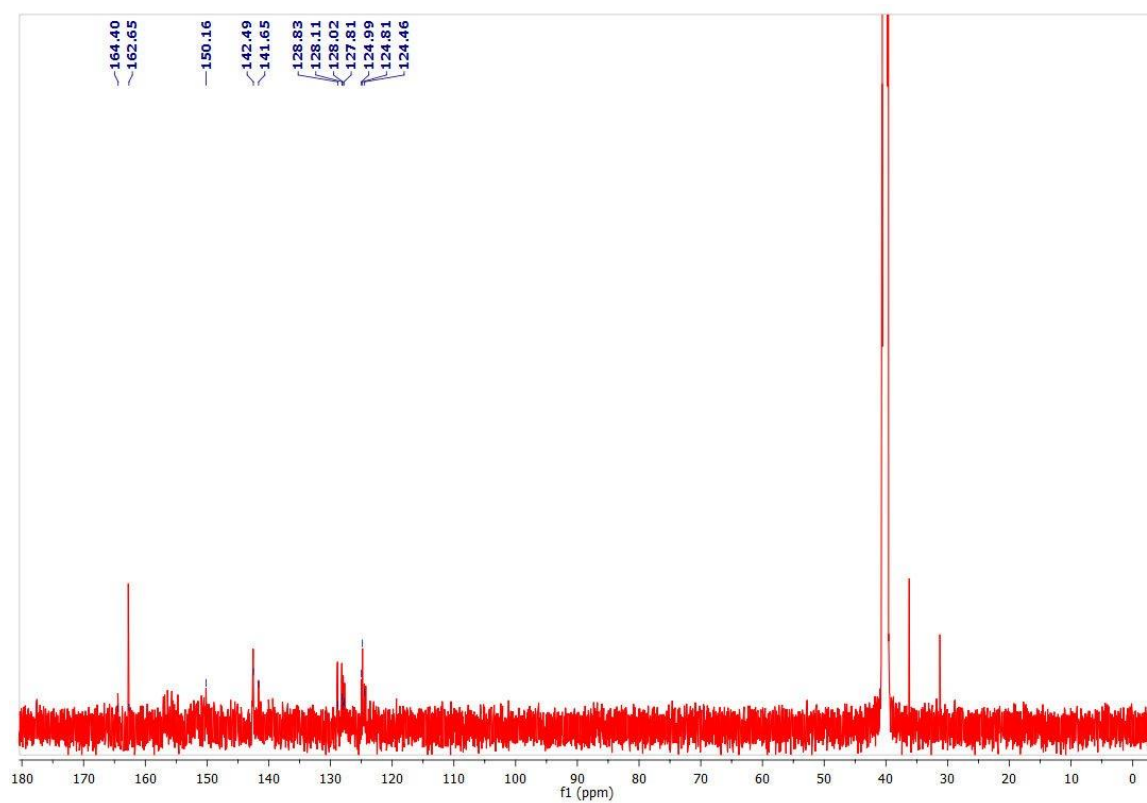


Figure S3: ^{13}C NMR spectrum of compound **3-PdTPyP**, in 150 MHz, DMSO- d_6 .

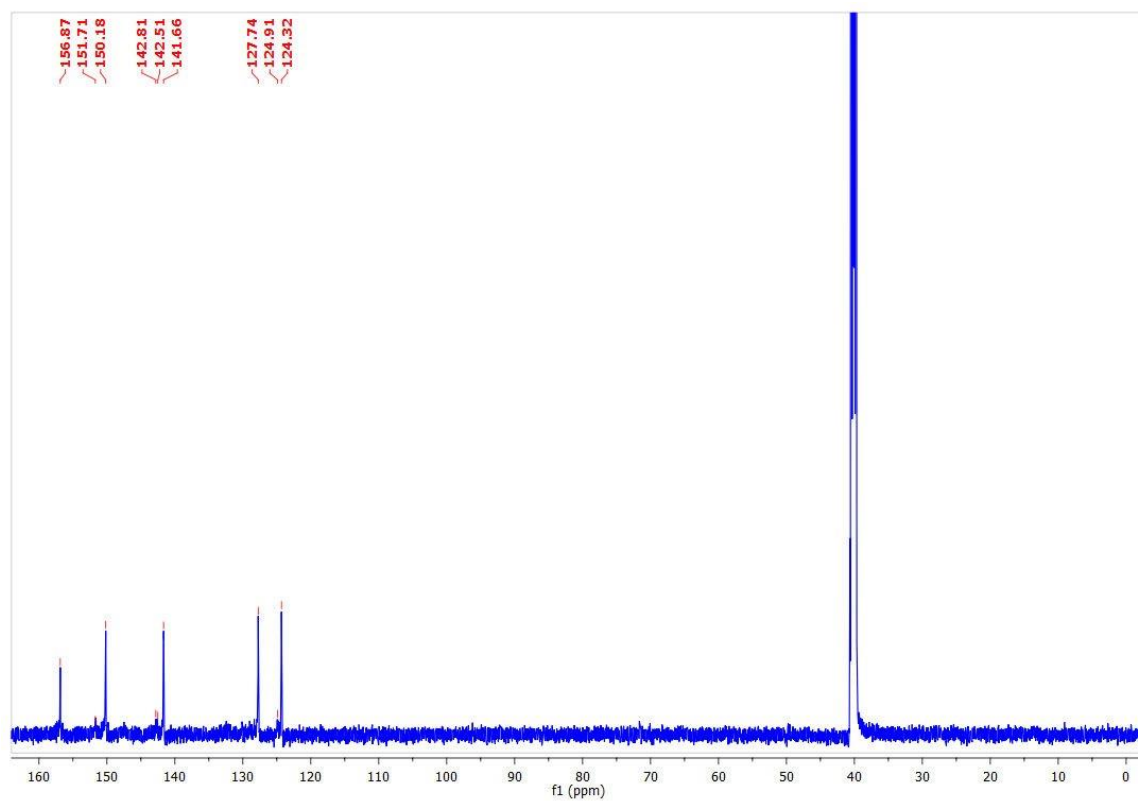


Figure S4: ^{13}C NMR spectrum of compound **4-PdTPyP**, in 150 MHz, DMSO- d_6 .

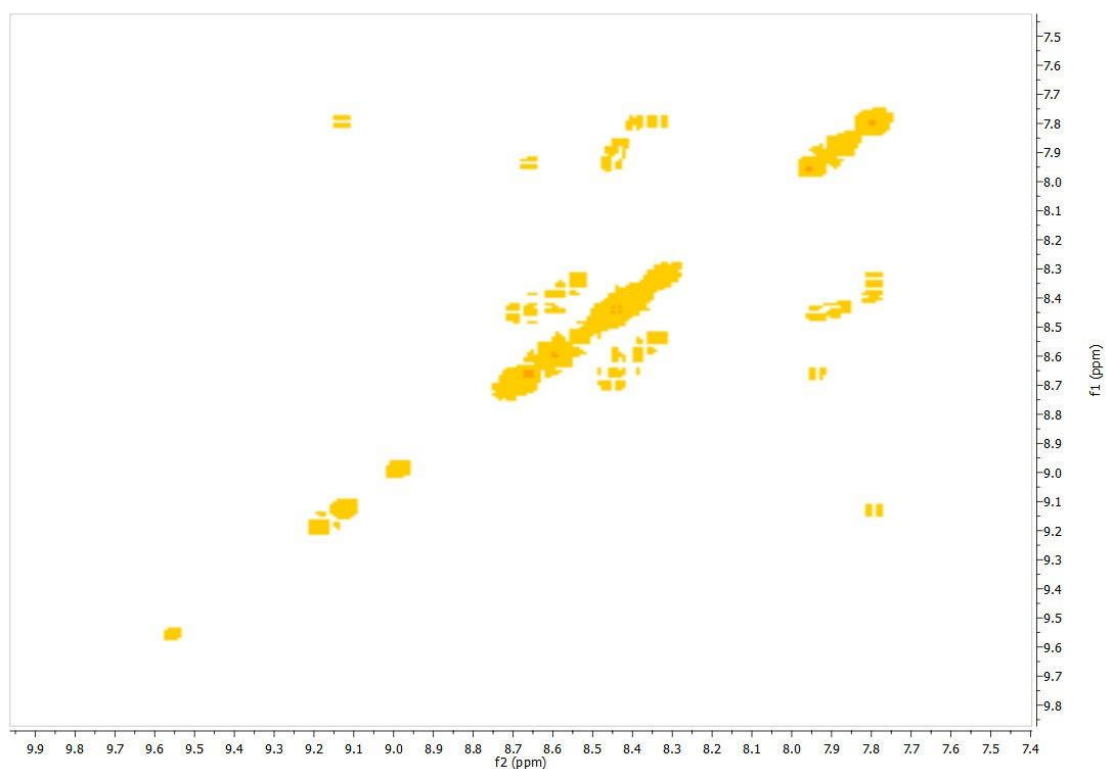


Figure S5: COSY 2D NMR spectrum of compound **3-PdTPyP**, in DMSO-d₆.

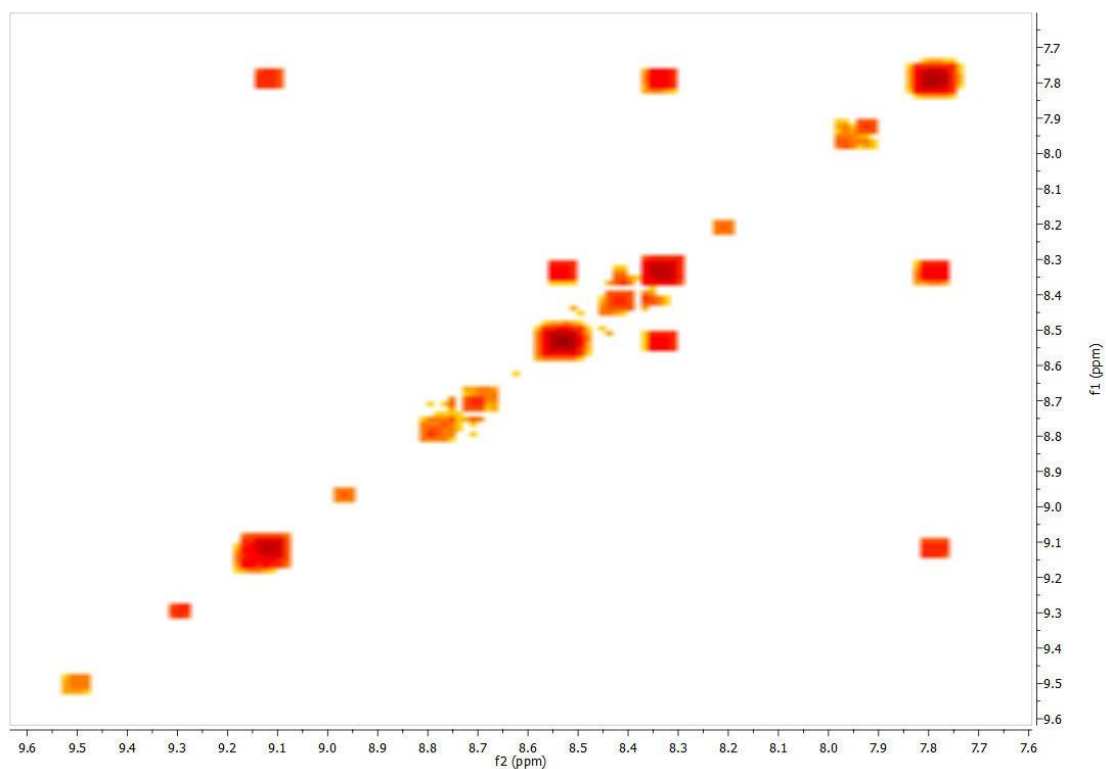


Figure S6: COSY 2D NMR spectrum of compound **4-PdTPyP**, in DMSO-d₆.

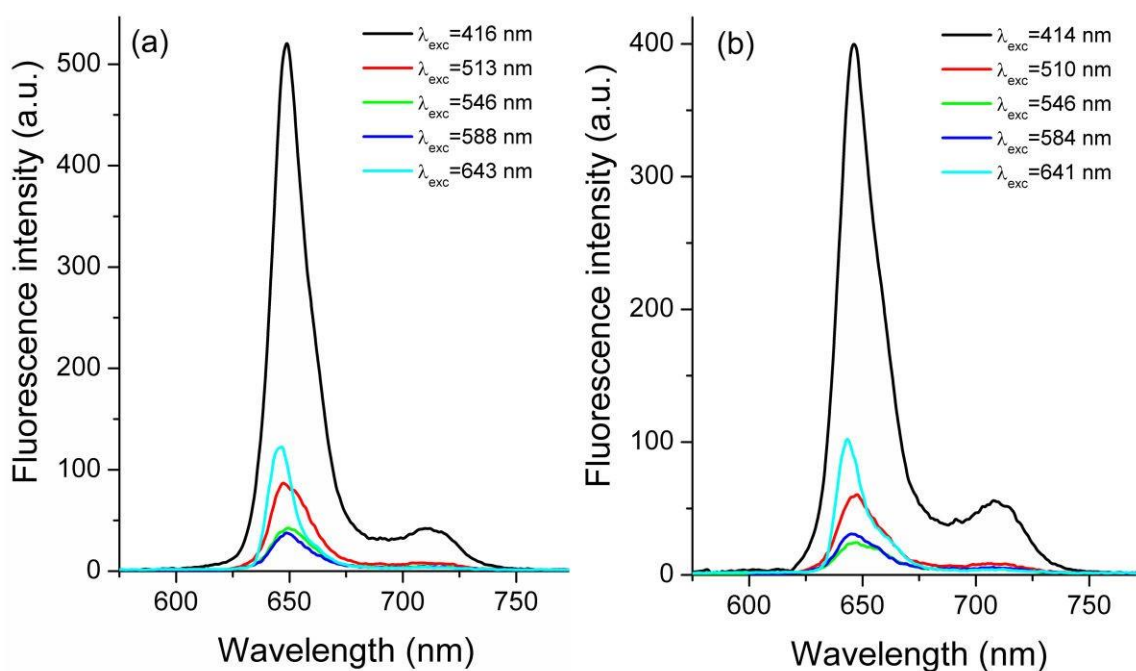


Figure S7: Steady-state fluorescence emission spectra in solution of different wavelengths [ca. 10^{-6} M] of porphyrins (a) **3-PdTPyP** and (b) **4-PdTPyP** obtained at the absorption maxima.

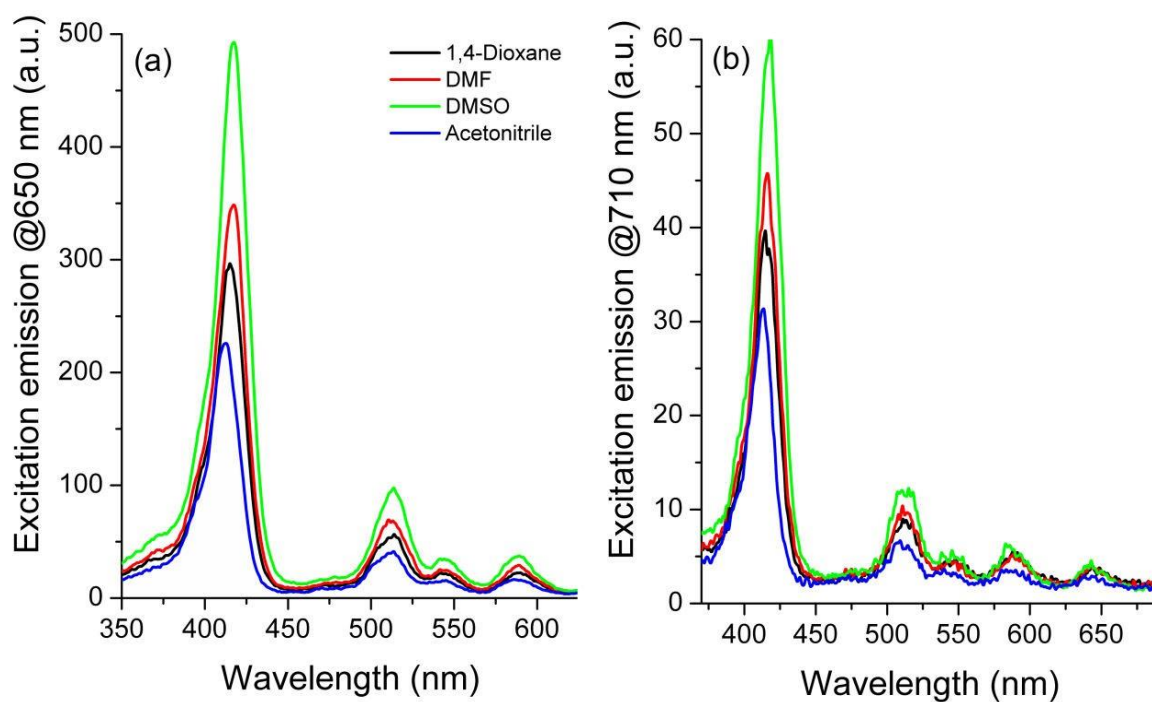


Figure S8: Excitation spectra in solution of different organic solvents [ca. 10^{-6} M] of porphyrin **3-PdTPyP** using as observation wavelengths (a) 650 nm and (b) 710 nm.

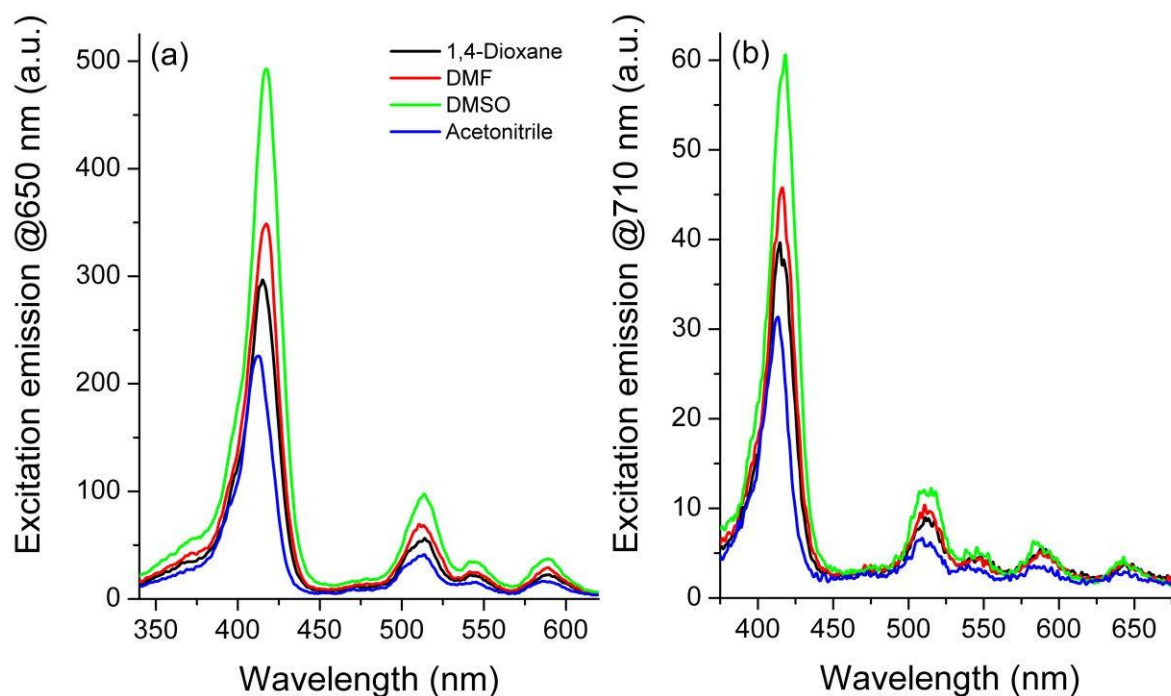


Figure S9: Excitation spectra in solution of different organic solvents [ca. 10^{-6} M] of porphyrin **4-PdTPyP** using as observation wavelengths (a) 650 nm and (b) 710 nm.

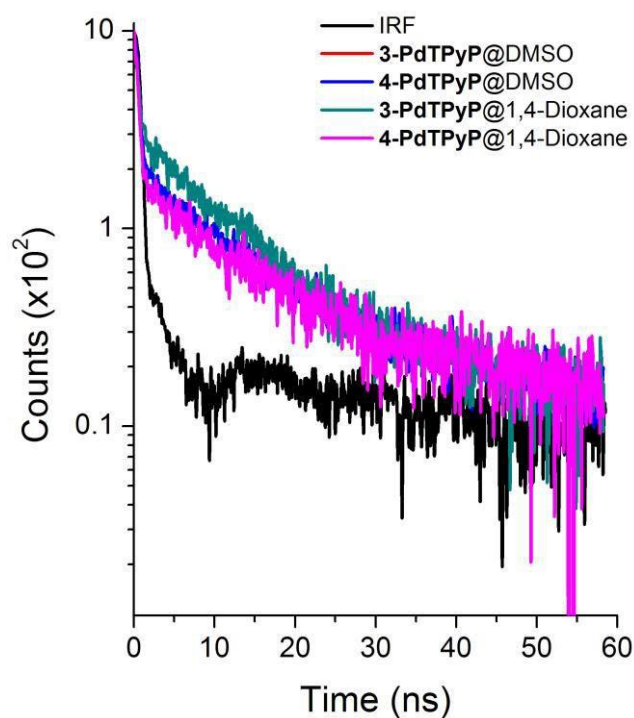


Figure S10: Time-resolved fluorescence decays of porphyrins **3-PdTPyP** and **4-PdTPyP** in DMSO and 1,4-dioxane [$\sim 10^{-6}$ M] using an excitation wavelength of 405 nm (LED). IRF=instrument response factor.

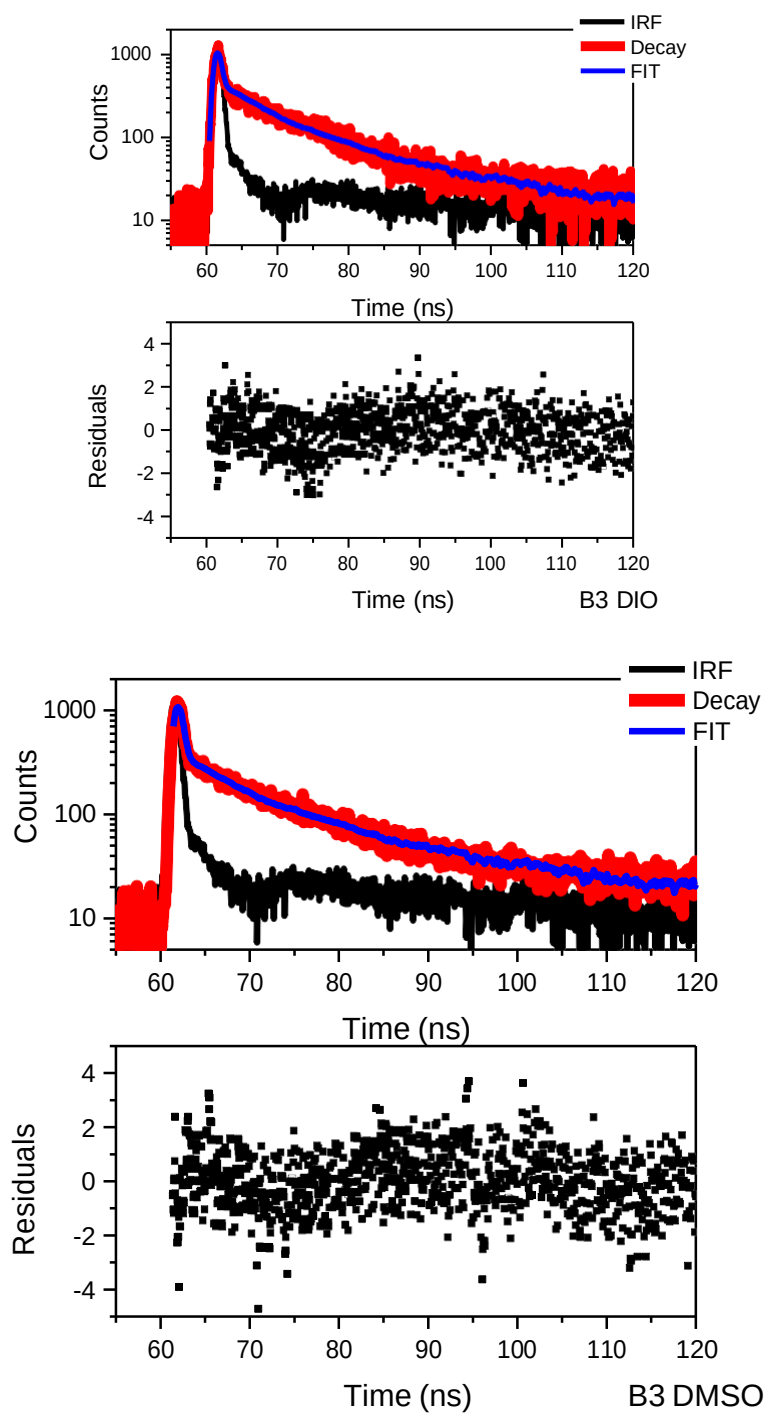


Figure S11: Time resolved fluorescence emission spectra of **3-PdTPyP** in 1,4-dioxane (up) and DMSO (down) and the respective residuals.

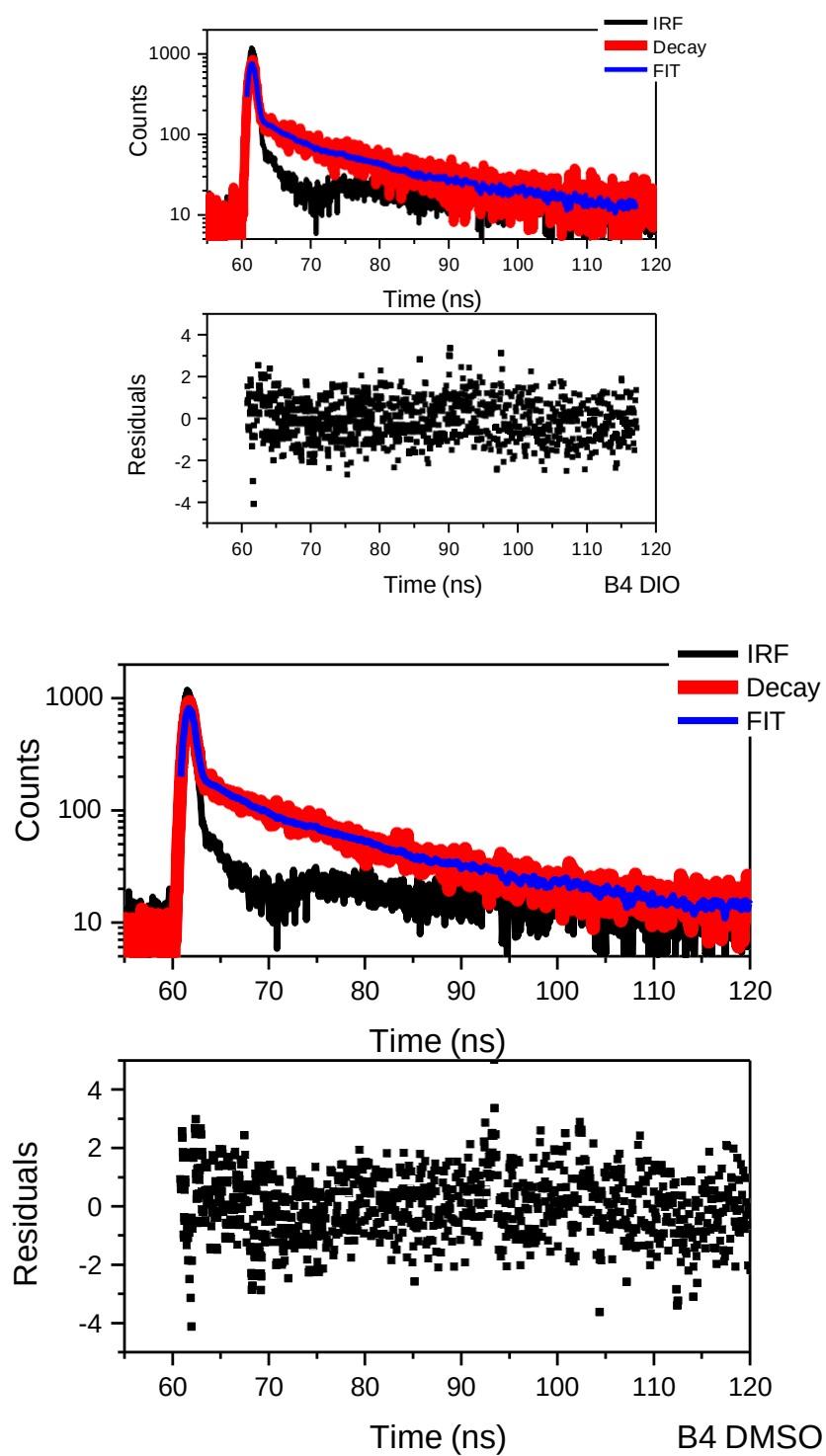


Figure S12: Time resolved fluorescence emission spectra of **4-PdTPyP** in 1,4-dioxane (up) and DMSO (down) and the respective residuals.

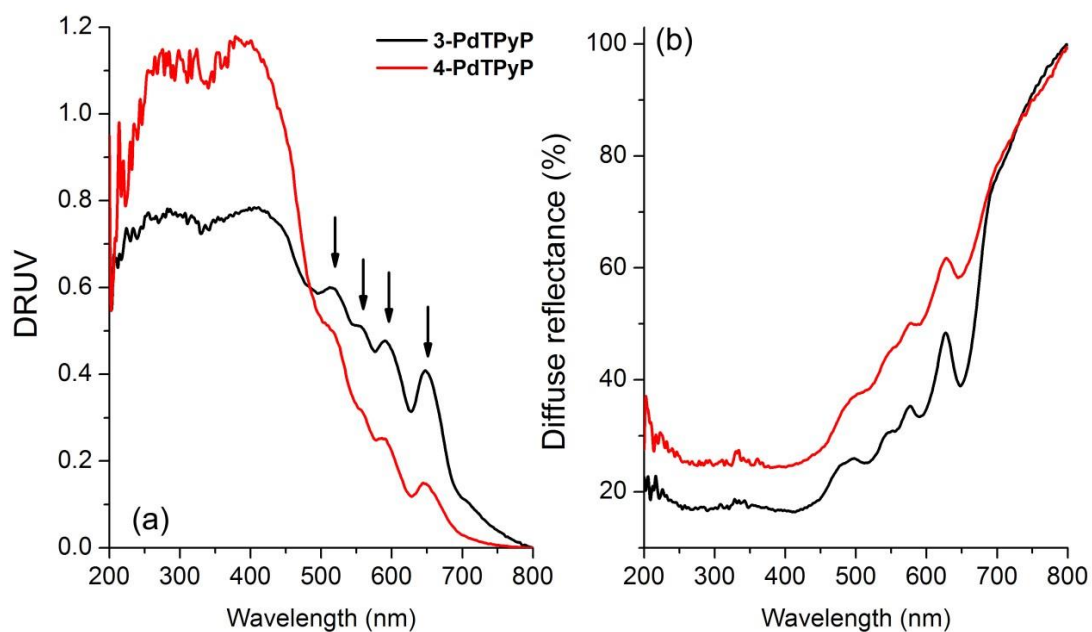


Figure S13: (a) UV-Vis absorption (DRUV) and (b) diffuse reflectance spectra of porphyrins **3-PdTPyP** and **4-PdTPyP**.

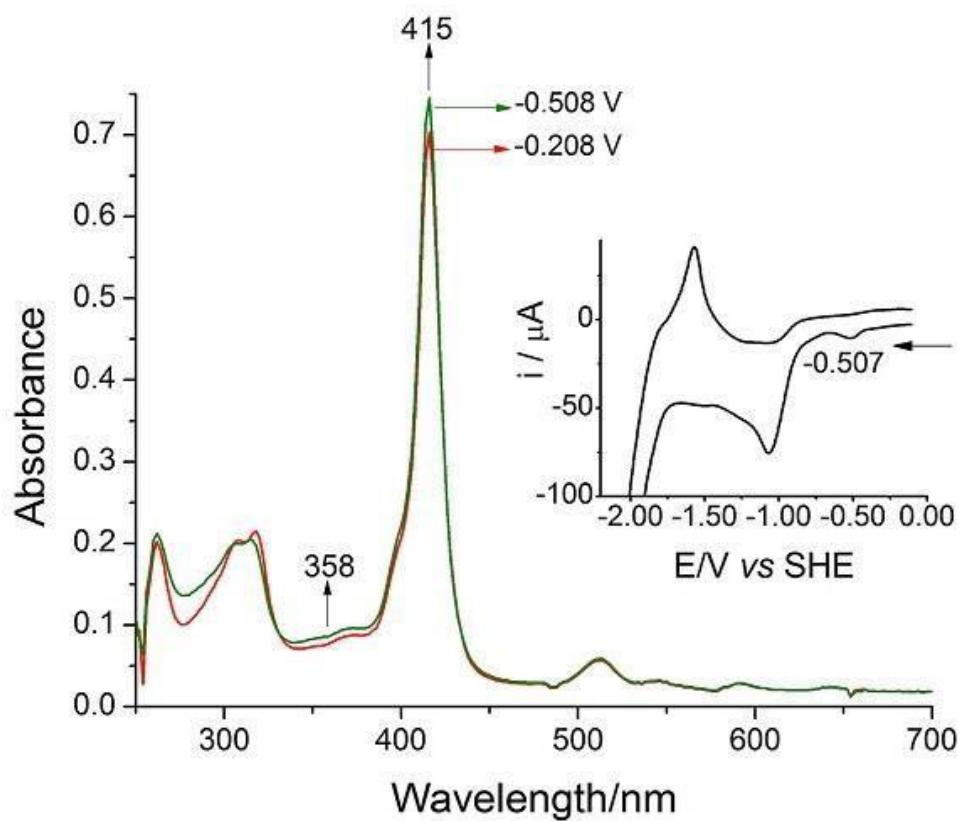


Figure S14: Thin-layer UV-visible spectra features for reduction processes of **4-PdTPyP**, $I = 0.10 \text{ mol L}^{-1}$ TBAPF₆ in DMF. Insets show the voltammetry scans.

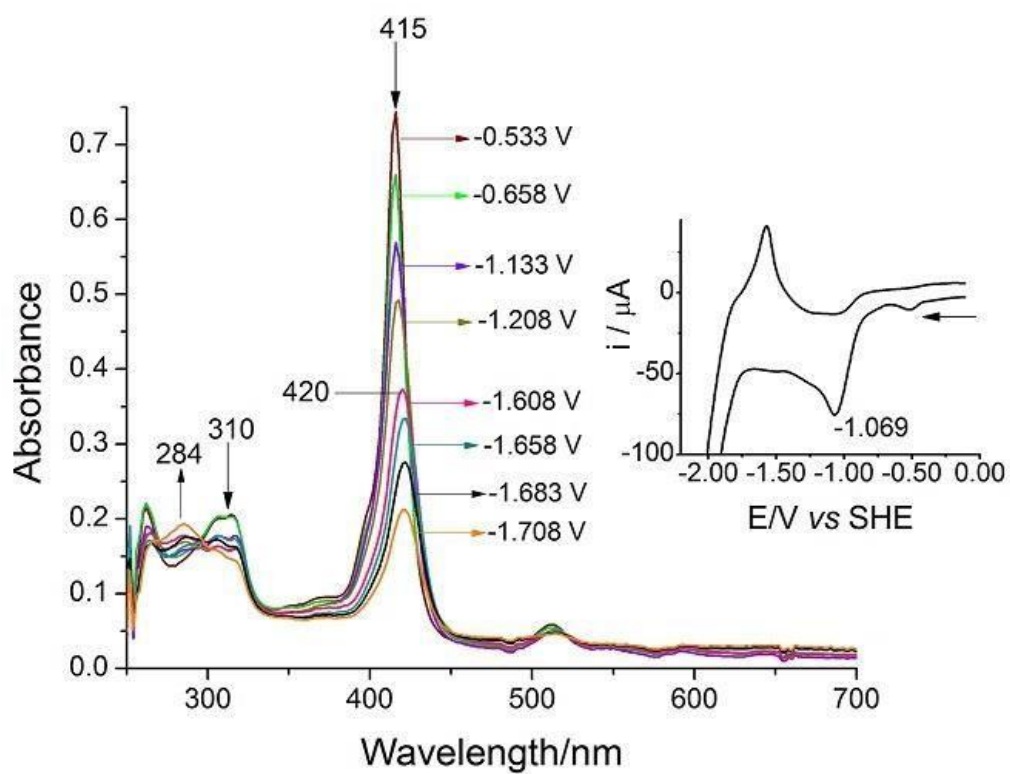


Figure S15: Thin-layer UV-visible spectra features for reduction processes of **4-PdTPyP**, $I = 0.10 \text{ mol L}^{-1}$ TBAPF₆ in DMF. *Insets* show the voltammetry scans.