

Table S1. UV-vis spectral data for the interaction of H₂t(py)P with H₂C₂O₄ in CH₂Cl₂.

Porphyrins and the dications	Soret band	Q(0,0) band
	(λ /nm)	(λ /nm)
H ₂ t(2-py)P	417.0	642.2
[H ₄ t(2-py)P](HC ₂ O ₄) ₂	449.8	645.2
$\Delta\nu$ (cm ⁻¹)	-1748.7	-77.3
H ₂ t(3-py)P	418.0	646.4
[H ₄ t(3-py)P](HC ₂ O ₄) ₂	439.7	636.2
$\Delta\nu$ (cm ⁻¹)	-1180.6	248.0
H ₂ t(4-py)P	416.0	643.0
[H ₄ t(4-py)P](HC ₂ O ₄) ₂	443.1	654.3
$\Delta\nu$ (cm ⁻¹)	-470.2	-268.5

Table S2. UV-vis spectral data for the interaction of H₂t(py)P with HNO₃ in CH₂Cl₂.

Porphyrins and the dications	Soret band (λ /nm)	Q(0,0) band (λ /nm)
H ₂ t(2-py)P	417.0	642.0
[H ₄ t(2-py)P](NO ₃) ₂	449.8	650.9
$\Delta\nu$ (cm ⁻¹)	-1748.7	-213.0
H ₂ t(3-py)P	418.0	646.4
[H ₄ t(3-py)P](NO ₃) ₂	441.9	639.6
$\Delta\nu$ (cm ⁻¹)	-1293.8	164.5
H ₂ t(4-py)P	416.0	643.0
[H ₄ t(4-py)P](NO ₃) ₂	453.2	647.5
$\Delta\nu$ (cm ⁻¹)	-1973.1	-107.9

Table S3. UV-vis spectral data for the interaction of H₂t(py)P with H₂SO₄ in CH₂Cl₂.

Porphyrins and the dications	Soret band (λ /nm)	Q(0,0) band (λ /nm)
H ₂ t(2-py)P	417.0	642.0
[H ₄ t(2-py)P](HSO ₄) ₂	447.6	641.8
$\Delta\nu$ (cm ⁻¹)	-1639.5	4.8
H ₂ t(3-py)P	418.0	646.4
[H ₄ t(3-py)P](HSO ₄) ₂	436.3	633.9
$\Delta\nu$ (cm ⁻¹)	-1019.0	305.0
H ₂ t(4-py)P	416.0	643.0
[H ₄ t(4-py)P](HSO ₄) ₂	446.4	640.7
$\Delta\nu$ (cm ⁻¹)	-1637.0	55.9