

Electronic supporting information

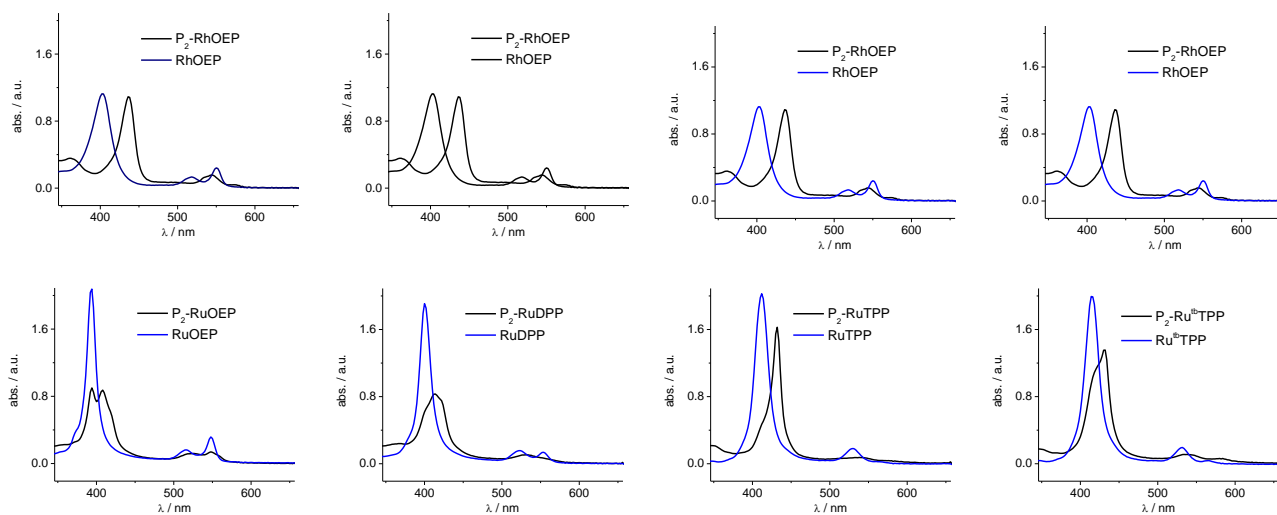
# Ruthenium(II) and rhodium (III) porphyrin phosphine complexes: influence of substitution pattern on structure and electronic properties

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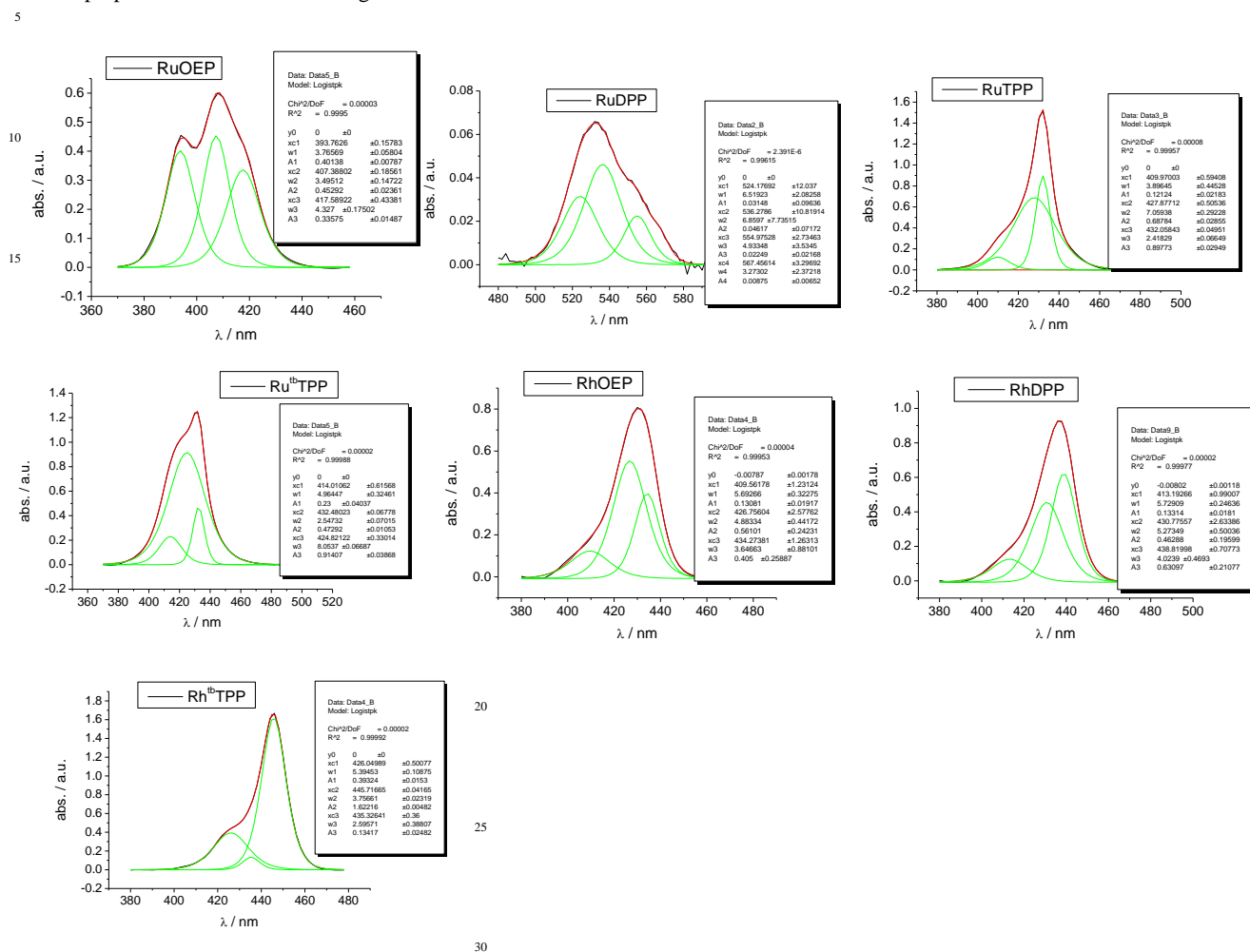
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**Fig. S1** UV-vis spectra of the porphyrin complexes.  $c = 5 \times 10^{-6}$  M in DCM; porphyrin : phosphine = 1 : 2.



**Fig. S2** Deconvolution of the B-band absorbances of the porphyrin complexes for the determination of the association constants. DCM; porphyrin : phosphine = 1 : 1. Black curves are measured absorbances, green curves are fitted absorbances, red curves are superpositions of the calculated green absorbances.



	absorbance			% composition			conc total	conc complex			K <sub>1</sub>	K <sub>2</sub>
	por	por-P	por-P <sub>2</sub>	por	por-P	por-P <sub>2</sub>	mol·L <sup>-1</sup>	por	por-P	por-P <sub>2</sub>	L×mol <sup>-1</sup>	L×mol <sup>-1</sup>
RhOEP	0.123	0.552	0.395	11.49533	51.58879	36.91589	1E-6	1.14953E-7	5.15888E-7	3.69159E-7	1.95201E7	4.8216E5
RhDPP	0.125	0.454	0.616	10.46025	37.99163	51.54812	1E-6	1.04603E-7	3.79916E-7	5.15481E-7	1.7361E7	8.37505E5
RhdTPP	0.39	0.133	1.61	18.28411	6.23535	75.48054	1E-6	1.82841E-7	6.23535E-8	7.54805E-7	9.32574E5	6.24741E6
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RuOEP	0.401	0.453	0.336	33.69748	38.06723	28.23529	5E-6	1.68487E-6	1.90336E-6	1.41176E-6	3.3524E5	9.16086E4
RuDPP	0.453	0.358	0.598	32.15046	25.40809	42.44145	5E-6	1.60752E-6	1.2704E-6	2.12207E-6	2.45809E5	1.91348E5
RuTPP	0.121	0.682	0.897	7.11765	40.11765	52.76471	1E-6	7.11765E-8	4.01176E-7	5.27647E-7	3.95943E7	8.22636E5
RudtTPP	0.23	0.914	0.462	14.3213	56.91158	28.76712	1E-6	1.43213E-7	5.69116E-7	2.87671E-7	1.38741E7	3.53257E5