

# Synthesis, Characterization, and Electrochemical Studies of $\beta,\beta'$ -Fused Metallocenoporphyrins

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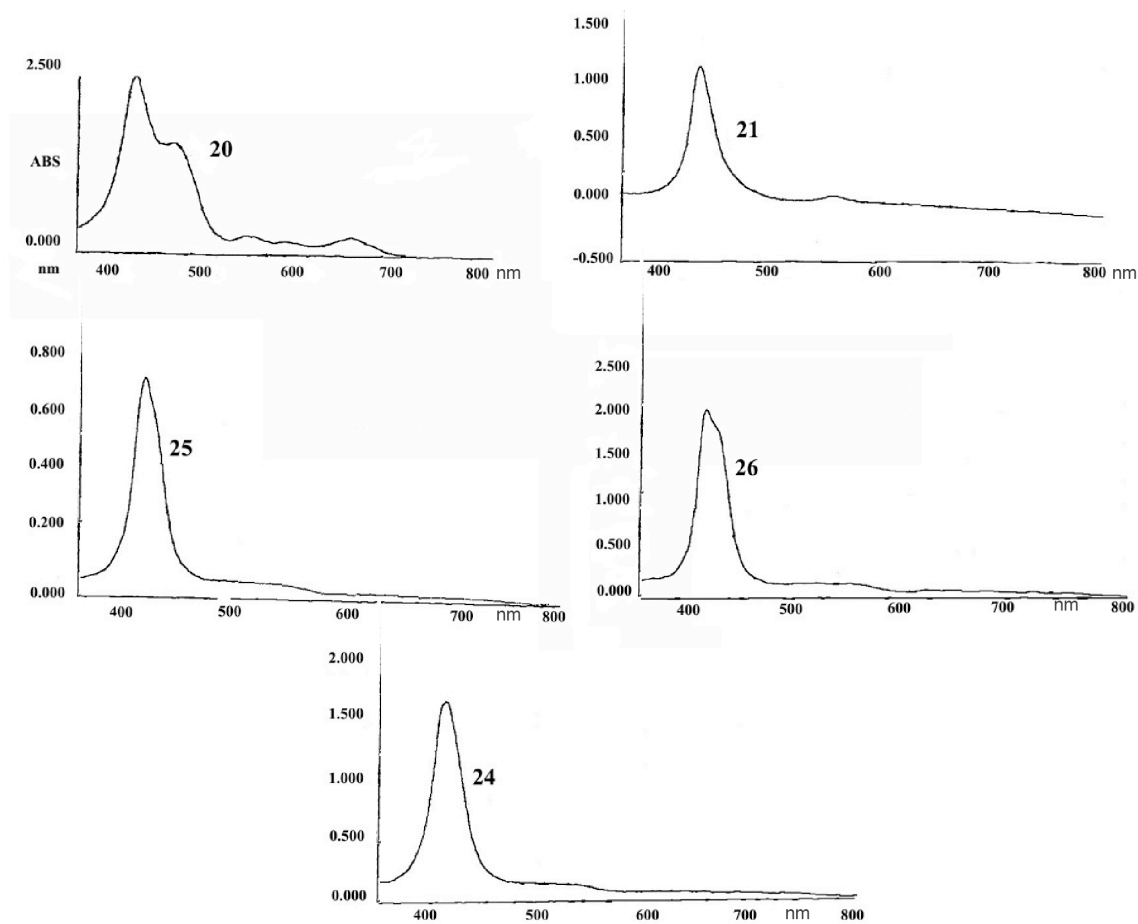
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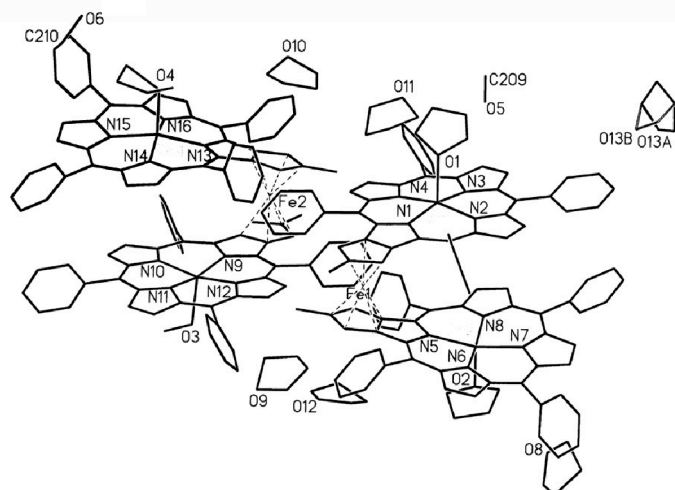
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CIF for compound <b>26</b>	Separate file



**Figure S1.** UV/Visible spectra ( $\text{CHCl}_3$ ) of bisporphyrinatoferrocenes (**24-26**) and mono-ruthenocenoporphyrins (**20, 21**)



**Figure S2.** X-Ray crystal structure of bisporphyrinatoferrocene **26**: showing molecules in one asymmetric unit.

**Table S1.** Half-wave Potentials (V vs SCE) in PhCN Containing 0.1 M TBAP.

compound	oxidation			reduction		$\Delta E_{1/2}^d$ (V)	ref
	Por-centered		Mc-centered	Por-centered			
(TPP)Ni	1.12 <sup>a</sup>			-1.23	-1.78	2.35	6
Ruthenocene			0.60-0.78 <sup>b</sup>				7-9
Ferrocene			0.49				<i>tw</i>
Ni <b>2</b>	1.13 <sup>a</sup>			-1.31	-1.85	2.44	<i>tw</i>
Ni <b>13</b>	1.19	0.99		-1.36	-1.95	2.35	<i>tw</i>
Ni <b>20</b>	1.09	0.93 <sup>c</sup>	0.58	-1.32		2.25	<i>tw</i>
Ni <b>24</b>	1.22 <sup>a</sup>	1.22 <sup>a</sup>	0.39	-1.24, -1.35		2.46	<i>tw</i>
(TPP)Cu	1.31	1.02		-1.28	-1.73	2.30	6
Cu <b>25</b>	1.17 <sup>a</sup>	1.17 <sup>a</sup>	0.40	-1.38 <sup>a</sup>	-1.87 <sup>a</sup>	2.55	<i>tw</i>

<sup>a</sup>Two one-electron overlapping processes. <sup>b</sup>Irreversible two-electron process. The reported potentials are 0.60 V vs SCE in CH<sub>3</sub>CN, 0.1 M TBABF<sub>4</sub> (ref 7), 0.69 V vs Ag/AgClO<sub>4</sub> in CH<sub>3</sub>CN, 0.2 M LiClO<sub>4</sub> (ref 8) and 0.78 V vs SCE in CH<sub>3</sub>CN, 0.1 M TBABF<sub>4</sub> (ref 9), respectively. <sup>c</sup>E<sub>pa</sub> at a scan rate of 0.1 V/s. <sup>d</sup>HOMO-LUMO gap, the potential difference between the first porphyrin-centered reduction and oxidation. *tw* = this work.