4.21: Ch. 4 References and Abbreviations

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Abbreviations

1-MeIm	1-methylimidazole
1,2-Me_2Im	1, 2-dimethylimidazole

2-MeIm	2-methylimidazole
2,3-DPG	2,3-diphosphoglycerate
3,4-Me_2-Py	3,4-dimethylpyridine
4-t-Bu-Py	4-t-butylpyridine
4-CN-Py	4-cyanopyridine
4-NH_2-Py	4-aminopyridine
a_i	activity of component i
Arg	arginine
B	general axial base ligand that binds to a metalloporphyrin
Ch	chlorocruorin
E_1, E_{-1}	activation energy
EDTA	ethylenediaminetetraacetic acid
E°	electrochemical potential at unit activity and fugacity
E°'	electrochemical potential at physiological pH (7.4) and unit pressure (1 atm = 760 Torr)
Er	ertythrocruorin
EtOH	ethanol
EXAFS	extended x-ray absorption fine structure
G	Gibbs free energy
H	enthalpy
H_2(6,6-CP)	cyclophane-strapped porphyrin (see Figure 4.23)
H_2(Poc-PF)	pocket picket-fence porphyrin
H_2Amide-Im	basket-handle porphyrin: imidazole base covalently attached to porphyrin with amide straps; amide straps on other side of porphyrin (see Figure 4.23)
H_2Bis-Poc	meso-tetrakis (2,4,6-triphenylphenyl) porphyrin
H_2bzacen	N,N-ethylenebis (benzoylacetoninime)
H_2C_2Cap	capped porphyrin; see Figure 4.23
H_2Ether-Py	basket-handle porphyrin: as for H_2Amide-Im except ether straps and pyridine base (see Figure 4.23)
H_2MPIX-Im	mesoporphyrin IX dimethylester with imidazole covalently attached to porphyrin (see Figure 4.23)
H_2PF	picket fence porphyrin, meso-tetrakis (α,α,α,α-o-pivalamidephenyl) porphyrin (see Figure 4.23)
H_2PPIX	protoporphyrin IX dimethylester
H_2PPIX-Im	protoporphyrin IX dimethylester with imidazole covalently attached to porphyrin (see Figure 4.23)
Hb	hemoglobin

HbA	human adult hemoglobin
HbF	human fetal hemoglobin
Hc	hemocyanin
His	histidine
His^{203}	position on polypeptide chain (203) of a histidine residue
Hr	hemerythrin
Im	imidazole
k	rate constant
K_p, K_c	equilibrium constant: concentration of gas expressed in terms of pressure (P) and molarity (M), respectively
L_i	allosteric constant: equilibrium constant for conformational change of protein with i ligands bound
M	general metalloprophyrinato species
M	molarity, moles/L
M	general metal complex
Mb	myoglobin
Me	methyl group
met	oxidized (e.g. met Hb)
OEP	2,3,7,8,12,13,17,18-octaethylporphyrinato
P	pressure, usually in Torr or mm Hg
THF	tetrahydrofuran
TPP	5,10,15,20-tetraphenylporphyrinato