

LIST OF ABBREVIATIONS

The following abbreviations are used as indicated except otherwise stated in the chapters. All temperatures are in °C unless specifically mentioned as in °K.

Coordinating groups

Aacetn	acetoacetanilide
acetam	acetoacetamide
An	aniline
bean	dianion of bis(2,4-pentanedione) ethylenediimine
Cl-Aacetn	chloroacetoacetanilide
Etacac	ethylacetoacetate
hapim	o-hydroxyacetophenoneimine
hax	o-hydroxyaloxime
N-Rsalim	N-Rsalicylaldimine
$[N,N'en(salim)_2]^*$	N,N'-ethylenebis(salicylaldimine)
oxine	8-quinolinolate
Ph, btdn	1-phenyl-1,3-butanedionate
Ph ₂ , prdn	1,3-diphenyl-1,3-propanedionate
ptdn	2,4-pentanedionate
py	pyridine

*Commonly known as salen

sal	salicylaldehyde
tfptdn	trifluoro-2,3-pentanedionate
X,N-Rsalim	X,N-Rsalicylaldimine
X, oxine	X,8-quinolinolate
X, ptdn	3-X, 2,4-pentanedionate
X, sal	X, salicylaldehyde

Coordination Compounds :

Co(bean)(ptdn)	tris bis(2,4-pentanedionato) ethylenediimine (2,4-pentanedionato) cobalt (III)
M(An) ₃ Cl ₃	trichlorotrianiiline metal (III)
M(hapim) _n	n(o-hydroxyacetophenoneiminato) metal (n)
M(hax) _n	n(o-hydroxyaldoximinato) metal (n)
M(N-Rsalim) _n	n(N-Rsalicylaldiminato) metal (n)
M [N,N'en(salim) ₂]	N,N'-ethylenebis(salicylaldiminato) metal (II)
M [N,N'en(X,salim) ₂]	N,N'-ethylenebis(X, salicylaldiminato) metal (II)
M (oxine) _n	n(8-quinolinolato) metal (n)
M(Ph,btdn) _n	n(1-phenyl-1,3-butanedionato) metal (n)
M(Ph ₂ ,prdn) _n	n(1,3-diphenyl-1,3-propanedionato) metal (n)
M(ptdn) _n	n(2,4-pentanedionato) metal (n)
M(Py) ₃ Cl ₃	trichlorotripyridine metal (III)

$M(\text{sal})_n$	n(salicylaldehydato) metal (n)
$M(X, N\text{-Rsalim})_n$	n(X, N-Rsalicylaldiminato) metal (n)
$M(X, \text{oxine})_n$	n(X, 8-quinolinolato) metal (n)
$M(3, X, \text{ptdn})$	n(3-X, 2,4-pentanedionato) metal (n)
$M(X, \text{sal})_n$	n(X, salicylaldehydato) metal (n)

Reagents and solvents :

DMF	dimethylformamide
NBS	N-bromosuccinimide
NCS	N-chlorosuccinimide
NHS	Succinimide
NIS	N-iodosuccinimide
NXS	N-halosuccinimide
RNH_2	primary amine
TMS	tetramethylsilane
Py	Pyridine

Other quantities and symbols

A°	Angstrom unit
atm.Pr.	atmospheric pressure (710 mm at Pune)
Benz	benzyl
B.M.	Bohr magneton
b.p.	boiling point

dec	decomposition temperature
E_a	activation energy
Eqn	equation
Et	ethyl
Fig	figure
g	grammes
h	hour
Hz	Hertz
i-But	iso-butyl
i-Pr	iso-propyl
Kcal	kilocalories
L	ligand
lit	literature
M	metal
[M]	molar
max	maximum
Me	methyl
MHz	megahertz
min	minutes
m.p.	melting point
n-But	normal-butyl
n-Pr	normal-propyl
Ph	phenyl
R	nitrogen substituent

Ref	reference
sec	seconds
T	absolute temperature ($^{\circ}\text{K}$)
t-But	tertiary-butyl
Temp	temperature ($^{\circ}\text{C}$)
TLC	thin layer chromatography
v	volume
X	ring substituent
Y	azomethine carbon substituent
ν	frequency, cm^{-1}
μ	microns ($\equiv 10^{-6}$ meters)
m μ	millimicrons \equiv nanometers