

INDEX

Terms	Page No.	Terms	Page No.
Absorption	122	Collision frequency	115
Actinoid contraction	231	Collision theory of chemical reactions	115
Actinoids	209, 230	Column chromatography	161
Activated complex	112	Concentration of ores	149, 150
Activators	132	Concentration of solutions	34
Activation energy	113	Conductivity	73, 79
Adsorption	122	Conductors	24
Adsorption isotherm	125	Coordination compounds	237
Allotropic forms	175, 187	Coordination entity	240, 242
Ambidentate ligand	240	Coordination isomerism	246
Amorphous solids	2	Coordination number	12
Anisotropic	3	Coordination polyhedron	241
Anomalous behaviour of oxygen	182	Coordination theory	239
Antiferromagnetism	28	Copper matte	151, 156
Aqua regia	199	Corrosion	89
Arrhenius equation	111, 113	Cryoscopic constant	51
Atomic radii	166, 181, 193, 203	Crystal defects	22
Average rate	95	Crystal field splitting	251, 252
Avogadro constant	20	Crystal field theory	247, 250
Azeotrope	46, 47	Crystal lattice	7
Batteries	86	Crystalline solids	2, 3, 4
Binary solutions	33, 41, 44	Dalton's law	41
Biochemical catalysis	131	Daniell cell	64
Black phosphorus	176	Denticity	240
Blast furnace	154, 156, 157	Dependence on rate of concentration	98
Blister copper	157	Depressants	149
Body-centred unit	7, 11	Dialyser	138
Bohr magneton	27, 221	Dialysis	138
Bonding in metal carbonyls	254	Diamagnetism	28, 220
Bravais lattices	7	Didentate	240
Bredig's arc	137	Diode	27
Brown ring test	175	Dislocation defect	23
Brownian movement	140	Dispersed phase	134, 135
Calcination	150, 154	Dispersion medium	134, 135
Cast iron	156, 162	Dissociation constant	256
Catalyst	114, 128	Distillation	159
Cell potential	66	Ebullioscopic constant	49
Chelate	240	Electrical conductance	74
Chemical kinetics	93	Electro dialysis	138
Chemisorption	123	Electrochemical cells	64
Chiral	245	Electrochemistry	63
Chromatographic methods	160	Electrode potential	66, 218, 220
Cis - isomer	244, 245	Electrolytes	79
Classification of colloids	134	Electrolytic cell	83
Close-packed structures	12	Electrolytic refining	159
Coagulation	142	Electromotive force	66
Colligative properties	47, 56	Electron hole	26

Terms	Page No.
Electron vacancy	26
Electronegativity	167, 181, 193
Electronic configuration	210
Electronic defect	26
Electroosmosis	142
Elements	147
Ellingham diagram	152
Eluant	161
Empirical formula	238
Emulsions	135, 143
Enantiomers	245
End-centred unit	8
Enthalpy	124
Enzyme catalysis	131, 132
Equilibrium constant	71
f.- block elements	227
Face centred unit	7, 11
Facial isomer	245
Faraday's law	83
Ferrimagnetism	28
Ferromagnetism	28, 221
First order reaction	104, 109
Froth floatation	149
Fractional distillation	169
Frenkel defect	22, 23
Frequency factor	111
Freundlich isotherm	125
Fuel cells	88
Galvanic cell	64, 65, 89
Gangue	147, 148
Gels	135
Geometric isomerism	244
Giant molecules	5
Gibbs energy	65, 72, 117
Haber's process	128
Half-life	108
Hall heroult process	158
Halogens	192
Henry's law	40
Heterogeneous catalysis	128, 129
Heteroleptic complex	241
Holme's signals	176
Homogeneous catalysis	128
Homoleptic complex	241, 254
Hybridisation	248
Hydrate isomerism	249
Hydration enthalpy	217
Hydraulic washing	148
Hydro metallurgy	158

Terms	Page No.
Hydrogen bonded molecular solids	4
Ideal solution	45
Impurity defect	23
Inhibitors	132
Inner transition metals	209, 227
Instability constant	256
Instantaneous rate of a reaction	96, 97
Insulators	25
Inter molecular forces	2
Interstitial compounds	223
Interstitial defect	22
Intrinsic semiconductors	25
Ionic conductance	75
Ionic radii	166, 181, 193
Ionic solids	5
Ionisation enthalpy	166, 181, 193, 203
Ionisation isomerism	246
Isomerism	244
Isotonic solution	54
Kinetic energy	113
Kohlrausch law	81, 82
Kraft temperature	136
Lanthanide contraction	213, 228
Lanthanoids	209, 227
Le Chateliers principle	38
Leaching	150
Lewis acids	240
Ligand field theory	247
Ligands	222, 240
Line defects	22
Linkage isomerism	248
Liquation	161
Long range order	2
Lyophilic colloids	137
Lyophobic colloids	137
Magnetic separation	151
Meridional isomer	247
Metal carbonyls	256
Metal excess defect	23
Metallic solids	5
Metallurgy	149, 153
Micelles	138
Minerals	149
Mischmetall	232
Molal elevation constant	49
Molality	37
Molar conductivity	79
Molarity	36, 53
Mole fraction	35, 48

Terms	Page No.	Terms	Page No.
Molecular orbital theory	249	Schottky defect	22, 23
Molecularity of a reaction	104	Secondary battery	87
Mond process	162	Secondary valence	237, 238
Monoclinic sulphur	189	Semi conductors	25
Mononuclear coordination compounds	244	Semipermeable membrane	53
Nernst equation	70	Shape-selective catalysis	130
Noble gases	204	Short range order	2
Non-ideal solution	45	Smoke screens	176
Non-polar molecular solids	4	Solid state	2
Octahedral voids	15, 17	Sols	135
Optical isomerism	245	Solubility	37
Order of a reaction	100	Solvate isomerism	247
Ores	148	Stereo isomerism	244
Osmotic pressure	53	Stoichiometric defect	22
Ostwald's process	129	Strong field ligands	251
Oxidation number	241	Structural isomerism	244
Oxidation state	194	Super cooled liquids	3
Oxides of nitrogen	172	Surface chemistry	121
Oxoacids of halogens	199	Temperature dependence of rate	111
Oxoacids of phosphorus	178, 179	Tetrahedral permanganate	226
Oxoacids of sulphur	189	Tetrahedral voids	14, 16
Ozone	185	Thermodynamics	154
Packing efficiency	18	Trans isomer	244
Paper chromatography	161	Transition metals	209, 212
Paramagnetism	27, 220	Tyndall cone	139
p-block elements	165	Tyndall effect	139
Peptization	138	Ultrafiltration	139
Physisorption	123	Unidentate	240
Pig iron	156	Unit cells	7, 10
Point defects	22	Units of rate constant	101
Polar molecular solids	4	Units of rate of a reaction	95
Polydentate	240	Vacancy defect	22
Primary battery	86	Valence bond theory	247, 250
Primary valence	237	Van arkel method	160
Pseudo first order reaction	110	Vapour phase refining	160
Pseudo solids	3	Vapour pressure	42, 44
Purification of metal	147	Voltaic cell	64
Pyrometallurgy	151, 157	Weak field ligands	251
Raoult's law	41, 44	Werner's theory	237, 239
Rate law	98, 99	Wheatstone bridge	73, 75
Reaction rate constant	99	White phosphorus	175
Redox couples	65	Wrought iron	156, 162
Red phosphorus	175	Zeolites	130, 131
Reverberatory furnace	151, 156	Zero order Reaction	103, 109
Reverse osmosis	55	Zeta potential	141
Rhombic sulphur	187	Zone refining	159, 160
Roasting	151, 154		