****

****

LIST OF SYMBOLS

****

****

LIST OF SYMBOLS

PART - I

M	:	Molarity/Molecular weight
N	:	Normality
P	:	Percentage purity of an acid
d	:	density of an acid
v	:	Volume of an acid
b	:	basicity of an acid
m.f.	:	mole fraction
R	:	Resistance in ohms
S	:	Constant
l	:	length of conductor
A	:	Area of conductor
C	:	Current in ampers
G	:	Conductance in mho
σ_c	:	Conductivity
R_x	:	unknown Resistance
C	:	Cell constant

PART - II

V	:	Rate of dissolution
V_t	:	Rate of tangential dissolution
V_s	:	Rate of surface dissolution
T	:	Absolute temperature

C	:	Concentration of an etchant
L	:	Length of an etch pit along [110]
Ca	:	acid concentration
K	:	Constant
Ka	:	Constant
H^+	:	Concentration of acidic ions
σ_c	:	electrical conductivity of an etchant
n	:	order of chemical reaction
n_t	:	order of tangential dissolution
σ	:	Viscosity of an etchant
n_σ	:	order for viscosity increase
n_c	:	order for conductivity decrease
n_o	:	absolute viscosity of water at 20°C
K_1	:	Constant
K_2	:	Constant
t	:	time
D	:	amount of reaction
K	:	Boltzmann constant
A	:	Pre-exponential factor (frequency factor)
A_t	:	frequency factors for tangential dissolution
A_o	:	constant
A_s	:	frequency factors for surface dissolution
E	:	Activation energy (ev)
E_t	:	Activation energy for tangential dissolution (ev)

E_s : Activation energy for surface dissolution

D : Rate of diffusion

E_c : activation energy for conductivity (ev)

E_σ : activation energy for viscosity (ev)

E_{cat} : Apparent activation energy

E_{true} : true energy of activation

ΔE : enthalpy of adsorption

PART - III

P : load in gms.

d : diagonal length of indentation mark

d_k : diagonal length of Knoop indentation mark

d_v : diagonal length of Vickers indentation mark

T_Q : absolute quenching temperature

a : standard hardness (constant)

n : slope of log P - log d graphs

H : Hardness number (Kg. mm^{-2})

$\overline{H}$: Average hardness in high load region.

H_k : Knoop hardness number (Kg. mm^{-2})

H_v : Vickers hardness number (Kg. mm^{-2})

ϵ : Compressive stress

A : Area of cross-section

A_o : Initial area of cross-section

l_o	:	length (initial)
l	:	length after small compression
b	:	Constant
c	:	Constant
HLR	:	High Load Region
m, m_1, m_2 m_3, m_4	:	Slopes of various graphs
k, r, s,	:	Constants
A, B, C, D, E, F	:	Constants
σ_c	:	electrical conductivity of calcite (crystal)