List of Physico-chemical Symbols adopted by the Chemical Society. [See J.C.S., 1921, 119, 502—512.]

1. Mathematical Symbols.

	Usual symbol.	Alternative symbol.
Base of natural (Napierian) logarithms	e	
Diameter	d	
Radius	<i>r</i>	
Ratio of circumference to diameter	π	
Summation	Σ	
Variation	δ	
Total differential	d	
Partial differential	δ	
0.77		

2. Universal Constants.

Acceleration due to gravity	\boldsymbol{g}
Mechanical equivalent of heat	J
Avogadro's constant [number of molecules	
in 1 gram-molecule (mole)]	N
Gas constant per mole	R
Faraday's constant (number of coulombs	
per gram-equivalent of an ion)	$oldsymbol{F}$
Charge on an electron	e

3. General Physics and Chemistry.

Mass m Time t Volume v , v Density (mass per unit volume) d Pressure p , P Concentration v Mole fraction v Critical constants: pressure, volume, temperature (absolute), density v Reduced quantities: pressure, volume, temperature, density v van der Waals's constants v Fluidity v Viscosity v Surface tension v Diffusion coefficient v Atomic weight v Velocity coefficient of reaction v Equilibrium constant v Velocity coefficient v Degree of dissociation (electrolytic, thermal,	Length Height	l h	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		m	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Time	t	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		v, ₹	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Density (mass per unit volume)	d	D
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		p, P	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Concentration	c, C	
perature (centigrade), temperature (absolute), density Reduced quantities: pressure, volume, temperature, density van der Waals's constants Fluidity Viscosity Surface tension Diffusion coefficient Atomic weight Molecular weight Velocity coefficient of reaction Equilibrium constant van't Hoff coefficient Degree of dissociation (electrolytic, thermal,	Mole fraction	x	
Reduced quantities: pressure, volume, temperature, density $\{t_n, T_n, t_n\}$ and der Waals's constants $\{t_n, t_n\}$ by the viscosity $\{t_n, t_n\}$ by the vi	Critical constants: pressure, volume, temperature (centigrade), temperature	$\mid \cdot \mid \cdot$	
temperature, density $\begin{pmatrix} t_r, T_r, d \\ a, b \end{pmatrix}$ Fluidity $\begin{pmatrix} v_r, T_r, d \\ a, b \end{pmatrix}$ Viscosity $\begin{pmatrix} v_r, T_r, d \\ a, b \end{pmatrix}$ Surface tension $\begin{pmatrix} v_r, T_r, d \\ a, b \end{pmatrix}$ Surface tension $\begin{pmatrix} v_r, T_r, d \\ a, b \end{pmatrix}$ Offusion coefficient $\begin{pmatrix} v_r, T_r, d \\ a, b \end{pmatrix}$ Atomic weight $\begin{pmatrix} v_r, T_r, d \\ a, b \end{pmatrix}$ Molecular weight $\begin{pmatrix} v_r, T_r, d \\ a, b \end{pmatrix}$ Velocity coefficient of reaction $\begin{pmatrix} v_r, T_r, d \\ a, b \end{pmatrix}$ Equilibrium constant $\begin{pmatrix} v_r, T_r, d \\ a, b \end{pmatrix}$ Ven't Hoff coefficient $\begin{pmatrix} v_r, T_r, d \\ a, b \end{pmatrix}$ Ven't Hoff coefficient $\begin{pmatrix} v_r, T_r, d \\ a, b \end{pmatrix}$ Degree of dissociation (electrolytic, thermal,	Reduced quantities: pressure, volume,	$ \hat{j} p_r, v_r$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	temperature, density	$\int \int t_r, T_r, d$	
Fluidity ϕ Viscosity η Surface tension γ γ ϕ Atomic weight γ Molecular weight γ		a, b	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Fluidity	1 1	
Surface tension		1 ' 1	
Diffusion coefficient Δ Atomic weight A Molecular weight M Velocity coefficient of reaction k Equilibrium constant K van't Hoff coefficient K Degree of dissociation (electrolytic, thermal,		, γ	σ
Atomic weight		<u>``</u>	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Atomic weight	A	
Velocity coefficient of reaction		M	
Equilibrium constant		k	
van't Hoff coefficient		$K_{\bullet}(K_{\bullet}, K_{\bullet})$	
Degree of dissociation (electrolytic, thermal,		, ,	
		, ,	
etc.) a	, , ,	α	

4. Heat and Thermodynamics.

4. Heat and I hermou	gramics.	
1	Usual	Alternative
	symbol.	$\mathbf{sym}\mathbf{bol}$.
Temperature (centigrade)	t	θ
Temperature (absolute)	T	
Critical temperature	t_e, T_{\bullet}	
Reduced temperature	t_r , T_r	
	t_{cs}, T_{cs}	
Critical solution temperature		
Quantity of heat	Q	
Entropy	Š	
Specific heat	c	
Specific heat at constant pressure	c_p	
	ور	
Specific heat at constant volume	c_{ullet}	
Ratio of specific heats, $c_p:c_v$	$\overset{oldsymbol{\gamma}}{C}$	
Molecular heat		
Molecular heat at constant pressure	C_{p}	
Molecular heat at constant volume	$C_{ullet}^{oldsymbol{p}}$	
Latent heat per gram	l	
Latent heat per mole	$oldsymbol{L}$	
Maximum work (diminution of free energy)	$m{A}$	
		!
* O		
5. Optics.		
Wave-length of light	Ι λ	ı
Refractive index	n	n_r
Specific refractive power (Gladstone and	ļ	
Dale)	r_{θ} , $[r_{\theta}]_{\lambda}^{t^{\circ}}$	
Specific refractive power (Lorentz and	, 69, F. 6.1V	
Lorenz)	r. 78	
Lorenz)	r_L , $[r_L]_{\lambda}$	•
	R_{θ}, R_{L}	}
Molecular refractive power	K P. 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	}
	$\left\{\begin{array}{c} R_{\boldsymbol{\theta}}, R_{\boldsymbol{L}} \\ [R_{\boldsymbol{\theta}}]_{\lambda}^{t^{o}}, [R_{\boldsymbol{L}}]_{\lambda}^{t^{o}} \end{array}\right.$	}
Angle of optical rotation	a	{
Specific rotatory power	[a]	1
Molecular rotatory power	M[a]	1
On a 'Go man mad's and ad' an		1
Specific magnetic rotation	[ω]	
Molecular magnetic rotation	$M[\omega]$	
6. Electricity and M	aanetism	
G. Island tolly and 12		
Quantity of electricity	Q I	
Current intensity	Ĭ	1
Resistance	\bar{R}	W
		"
Electromotive force	$oldsymbol{E}$	
Electrode potential, or discharge potential	i	1
of an ion	$oldsymbol{E}$	e
Electrode potential referred to the normal	1	
hydrogen or normal calomel electrode		
mydrogon of normal caloniol of which is		1
respectively, the potential of which is	170 170	
taken as zero	E_h, E_o	€,, €
Normal potential, i.e., the electrode poten-	l .	1
tial referred to the normal hydrogen or	i .	
normal calomel electrode respectively,	l	
when the solution is melecular normal	(
when the solution is molecular-normal		
in respect of all participating sub- stances and ions of variable concentra-		i
stances and ions of variable concentra-	1	
tion	$_{0}E_{\lambda}, _{0}E_{c}$	0€% 0€
Dielectric constant		J 0
Conductivity (specific conductance)	к	1
Equipolant and distinction		
Equivalent conductivity	Λ	
Equivalent conductivity at different dilu-		
tions—volumes in litres containing		1
l gram-equivalent	Λ_{10} , Λ_{v} , Λ_{∞}	1
3 1	10	

6. Electricity and Magnetism—(continued).

	Usuai symbol.	symbol.
Equivalent conductivity of kation and		\ •
of anion	Λ_k , Λ_a	
Equivalent conductivity of specified ions	$\mathbf{\Lambda_{K^{*}}} \mathbf{\Lambda_{Cl}}$	
Molecular conductivity	μ	
Velocity of kation and of anion in cm./ sec.		
when the potential gradient is 1 volt		
per cm	$U_{k},\ U_{a}$	1
Transport number of kation and of anion	n_k, n_a	
Magnetic permeability	μ	
Magnetic susceptibility	κ	1

List of Symbols, Arranged Alphabetically.

Symbol.	Name of quantity.
A	Atomic weight; maximum work.
a	Van der Waals's constant.
b	Van der Waals's constant.
\boldsymbol{c}	Concentration; molecular heat.
c '	Concentration; specific heat.
$C_{\mathfrak{p}}, C_{\mathfrak{p}}$	Molecular heat at constant pressure, and at constant volume.
c_p, c_v D	Specific heat at constant pressure, and at constant volume.
D	Alternative symbol for density.
d	Diameter; total differential; density.
$oldsymbol{d}_{\mathfrak{o}}$	Critical density.
d	Reduced density.
\boldsymbol{E}	Electromotive force; electrode potential.
e	Base of Napierian logarithms; charge on an electron.
$E_{\mathtt{A}},\ E_{\mathtt{c}}$	Electrode potential referred to the normal hydrogen or the normal calomel electrode, respectively, the potential of which is taken as zero.
$_{0}E_{4}, _{0}E_{c}$	Normal potential, that is, the electrode potential referred to
0224, 0226	the normal hydrogen or the normal calomel electrode
	respectively, when the solution is molecular-normal in
	respect of all participating substances and ions of
	variable concentration.
F	Faraday's constant (number of coulombs per gram-equiv.
-	alent of an ion).
a	Acceleration due to gravity.
$egin{array}{c} g \\ h \\ I \\ oldsymbol{i} \\ J \end{array}$	Height.
ï	Current.
ā	Van't Hoff's coefficient.
Ĵ	Mechanical equivalent of heat.
K	Equilibrium constant.
$K_{\mathfrak{o}}, K_{\mathfrak{p}}$	Equilibrium constant, when molar concentrations and
e,p	partial pressures respectively are employed.
$m{k}$	Velocity coefficient of reaction.
$\widetilde{m{L}}$	Latent heat per mole.
l	Length; latent heat per gram.
M	Molecular weight.
M[a]	Molecular rotatory power.
$M[\omega]$	Molecular magnetic rotatory power.
m	Mass.
N	Avogadro's constant (Loschmidt's number) or number of
	molecules in 1 gram-molecule.
n	Refractive index.

List of Symbols, Arranged Alphabetically—(continued).

11.00 0, .	ogniooto, 1111 ungou 111 priudostoutty (continuou).
Symbol.	Name of quantity.
n_k, n_a	Transport number of kation and of anion.
n,	Refractive index (alternative symbol).
\ddot{P}	Pressure.
p	Pressure.
p_c, p_r	Critical pressure : reduced pressure.
\widetilde{Q}	Quantity of heat; quantity of electricity.
\check{R}	Gas constant per mole; electrical resistance.
R_{G}, R_{L}	Molecular refractive power, according to Gladstone and
	Dale, and to Lorentz and Lorenz respectively.
r	Radius.
r_{θ}, r_{L}	Specific refractive power according to Gladstone and Dale,
	and to Lorentz and Lorenz respectively.
s	Entropy.
T	Absolute temperature.
T_{ullet}	Critical temperature (on the absolute scale).
$T_{m{r}}$	Reduced temperature (absolute).
T_{i}	Critical solution temperature (absolute).
t	Time; temperature (centigrade).
t_a	Critical temperature (centigrade).
t _c .	Critical solution temperature (centigrade).
$U_{k}^{t_{r}}U_{a}$	Reduced temperature (centigrade).
U_k, U_a	Velocity of kation and of anion in cm./sec. when the poten-
77	tial gradient is 1 volt per cm.
V	Volume.
v 41 41	Critical volume: reduced volume.
$v_c, v_r W$	Electrical resistance (alternative symbol).
æ	Mole fraction.
a	Degree of dissociation (electrolytic, thermal, etc.); angle
-	of optical rotation.
[a]	Specific rotatory power.
ັ້າ	Surface tension; ratio of specific heats.
Δ	Diffusion coefficient.
δ	Variation.
δ	Partial differential.
€	Electrode potential (alternative symbol); dielectric con-
	stant.
€ħ, €	Electrode potential referred to the normal hydrogen or the
	normal calomel electrode respectively, the potential of
	which is taken as zero (alternative symbols).
o€h, o€	Normal potential, that is, the electrode potential referred to
	the normal hydrogen or the normal calomel electrode
	respectively, when the solution is molecular-normal in respect of all participating substances and ions of
	variable concentration (alternative symbols).
m	Viscosity.
$\overset{oldsymbol{\eta}}{ heta}$	Temperature (centigrade), (alternative symbol).
к	Specific conductance (conductivity); magnetic suscepti-
Α.	bility.
Λ	Equivalent conductivity.
Λ_{10} , Λ_{v} , Λ_{∞}	Equivalent conductivity at different dilutions (volumes in
107	litres containing 1 gram-equivalent).
Λ_k, Λ_a	Equivalent conductivity of kation and of anion.
λ	Wave-length of light.
μ	Molecular conductivity; magnetic permeability.
π	Ratio of circumference to diameter.
Σ	Summation.
σ	Surface tension (alternative symbol).
, Φ ,	Fluidity.
[w]	Specific magnetic rotation.