APPENDIX II. *Quantities and units*

Quantity	Symbol	Unit	Symbol	Dimensions (within brackets), derived units etc.
Length	l	meter	m	1 fermi = $10^{\ 15}$ m = 1 fm; 1 μ = $10^{\ 6}$ m; 1 Å = $10^{\ 10}$ m
Mass	m	kilogram	kg	Basic SI unit; 1 ton (t) = 10^3 kg; 1 kg = 10^3 g (gram)
Time	t	second	s	" ; 1 (ephem.) year (y or a) = 365.24 days (d) =
Electric current	I	ampere	A	" ; = 8765.8 hours (h) = 3.1557×10^7 s
Thermodynamic temperature	T	kelvin	K	" ; $t_C = t_K - 273.15$, t_C = temp. in degree Celsius, °C
Amount of substance	n, ν	mole	mol	" ; molarity (mol/l) = $m_a M^{-1} V^{-1}$, m_a = mass of pure
Luminous intensity	I^*	candela	cd	" ; substance;
Atomic (molecular) weight	M	atomic mass unit	u	$M = m_i \times 10^3 \times \mathbf{N}_A$, m_i mass of atom (molecule); 1 mole = M g
Volume	V	cubic meter	m^3	1 m^3 = 10^3 liter (l, dm^3, L), 1 l = 10^3 milliliters (ml), 1 ml = 1 cm^3
Density (mass per unit volume)	ρ		kg m^{-3}	1 g cm^{-3} = 10^3 kg m^{-3}
Pressure	P	pascal	Pa	[Pa = Nm^{-2} = kg s^{-2} m^{-1}]; 1 atm = 1.013×10^5 Pa; 1 bar = 10^5 Pa
Energy	E	joule	J	[J = Ws = N m = kg m^2 s^{-2}] 1 torr = 133.3 Pa
Frequency	f, ν	hertz	Hz	[Hz = s^{-1}]
Force	F	newton	N	[N = kg m s^{-2}]; 1 dyne = 10^{-5} N; 1 kp = 9.8067 N
Angle, flat		radian	rad	1 rad = 57.30°; full circle 360° = 2π rad
" , space		steradian	sr	full space angle = 4π sr
Power	P	watt	W	[W = J $s^{\ 1}$ = N m $s^{\ 1}$ = kg m^2 $s^{\ 3}$]
Angular frequency	ω		rad s^{-1}	
Electric potential (voltage)	U	volt	V	[V = W A^{-1} = kg m^2 s^{-3} A^{-1}]
resistance	R	ohm	Ω	[Ω = V $A^{\ 1}$ = W $A^{\ 2}$ = kg m^2 $s^{\ 3}$ $A^{\ 2}$]
charge	q	coulomb	C	[C = A s]; 1 C = 0.1 **c** statcoulomb (esu)
capacitance	C	farad	F	[F = C V^{-1} = s A^2 W^{-1} = s^4 A^2 kg^{-1} m^{-2}]
Magnetic inductance	L^*	henry	H	[H = Wb $A^{\ 1}$ = V s $A^{\ 1}$ = kg m^2 $s^{\ 2}$ $A^{\ 2}$]
induction (flux density)	B	tesla	T	[T = Wb m^{-2} = V s m^{-2} = kg s^{-2} A^{-1}]; 1 gauss = 10^{-4} T
flux	ϕ_B^*	weber	Wb	[Wb = V s = W s A^{-1} = kg m^2 s^{-2} A^{-1}]
Radioactivity	A	becquerel	Bq	[Bq = (radioactive events) s^{-1}]; 1 curie (Ci) = 3.7×10^{10} Bq
Radiation exposure		kerma		[C kg^{-1} = A s kg^{-1}]
Radiation dose, absorbed	D	gray	Gy	[Gy = J $kg^{\ 1}$ = m^2 $s^{\ 2}$]; 1 Gy = 100 rad **
Radiation dose, equivalent	H	sievert	Sv	[Sv = J kg^{-1} = m^2 s^{-2}]; 1 Sv = 100 rem **

* Not used in this text. ** Old radiation dose unit (see §7.3).