



# APPENDIX B

## PROBABLE VALUE OF GENERAL PHYSICAL CONSTANTS

<i>Constant</i>	<i>Symbol</i>	<i>Value</i>
Electronic charge	q	$1.602 \times 10^{-19} \text{ C}$
1 electron volt	eV	$1.602 \times 10^{-19} \text{ Joules}$
Electronic mass	m	$9.109 \times 10^{-31} \text{ kg}$
Ratio of charge to mass of an electron	q/m	$1.759 \times 10^{11} \text{ C/kg}$
Planck's constant	h	$6.626 \times 10^{-34} \text{ J-s}$
Boltzmann constant	k	$8.620 \times 10^{-5} \text{ eV}^\circ\text{K}$
Velocity of light	c	$2.998 \times 10^8 \text{ m/s}$
Acceleration of gravity	g	$9.807 \text{ m/s}^2$
Permeability of free space	$\mu_0$	$1.257 \times 10^{-6} \text{ H/m}$
Permittivity of free space	$\epsilon_0$	$8.854 \times 10^{-12} \text{ F/m}$
1 Joule	J	$6.25 \times 10^{18} \text{ eV}$