

## ภาคผนวกที่ 5 ค่าคงที่ทางฟิสิกส์

Quantity	Numerical value
Gravity constant	$6.67 \times 10^{-11} \text{ m}^3/\text{kg}\cdot\text{s}^2$
Number of <b>molecul</b> ed in 1 kmole (Avogadro's number) $N_A$	$6.025 \times 10^{26} \text{ kmole}^{-1}$
Volume of 1 kmole of an ideal gas under standard conditions $V_0$	$22.4 \text{ m}^3$
Universal gas constant $R$	$8.31 \times 10^3 \text{ J/kmole}\cdot\text{deg}$
Boltzmann's constant $k$	$1.38 \times 10^{-23} \text{ J/deg}$
Faraday's number $F$	$9.65 \times 10^4 \text{ C/kg}\cdot\text{eq}$
Stefan-Boltzmann's constant $\sigma$	$5.67 \times 10^{-8} \text{ W/m}^2\cdot\text{deg}^4$
Planck's constant $h$	$6.625 \times 10^{-34} \text{ J}\cdot\text{s}$
Electron charge $e$	$1.602 \times 10^{-19} \text{ C}$
Rest mass of an electron $m_e$	$9.11 \times 10^{-31} \text{ kg} = 5.49 \times 10^{-4} \text{ amu}$
Rest mass of a proton $m_p$	$1.672 \times 10^{-27} \text{ kg} = 1.00759 \text{ amu}$
Rest mass of a neutron $m_n$	$1.675 \times 10^{-27} \text{ kg} = 1.00899 \text{ amu}$
Velocity of light propagation in a vacuum	$3.00 \times 10^8 \text{ m/s}$