



LABORATORIUM KIMIA FISIKA
Jurusan Kimia - FMIPA
Universitas Gadjah Mada (UGM)

MATEMATIKA KIMIA

Lampiran – Tabel konstanta fisik

(Sumber : Barrante, Applied Mathematics fo Physical Chemistry)

Drs. Iqmal Tahir, M.Si.

Laboratorium Kimia Fisika, Jurusan Kimia
Fakultas Matematika dan Ilmu Pengetahuan Alam
Universitas Gadjah Mada, Yogyakarta, 55281

Tel : 0857 868 77886; Fax : 0274-545188

Email :

iqmal@ugm.ac.id

atau

iqmal.tahir@yahoo.com

Website :

<http://iqmal.staff.ugm.ac.id>

<http://iqmaltahir.wordpress.com>

TABEL KONSTANTA FISIK

Constant	Symbol	Value (SI Units)
Avogadro's number	N_A	$6.022169 \times 10^{23} \text{ mol}^{-1}$
Boltzmann constant	k	$1.380662 \times 10^{-23} \text{ J} \cdot \text{K}^{-1}$
Electron rest mass	m_e	$9.109558 \times 10^{-31} \text{ kg}$
Electron charge	e	$1.602191 \times 10^{-19} \text{ C}$
Faraday constant	F	$9.648670 \times 10^4 \text{ C} \cdot \text{mol}^{-1}$
Gas constant	R	$8.31434 \times 10^0 \text{ J} \cdot \text{mol}^{-1} \cdot \text{K}^{-1}$
Permittivity of vacuum	ϵ_0	$8.854188 \times 10^{-12} \text{ C}^2 \cdot \text{J}^{-1} \cdot \text{m}$
Planck's constant	h	$6.626196 \times 10^{-34} \text{ J} \cdot \text{s}$
Proton rest mass	m_p	$1.672614 \times 10^{-27} \text{ kg}$
Rydberg constant	R_H	$1.096776 \times 10^7 \text{ m}^{-1}$
Speed of light in a vacuum	c	$2.997925 \times 10^8 \text{ m} \cdot \text{s}^{-1}$



LABORATORIUM KIMIA FISIKA
Jurusan Kimia – FMIPA, UGM