

$\delta X = X - X_0$	$X_0 \in \langle X - \Delta X, X + \Delta X \rangle$	$\bar{T} = \frac{T_1 + T_2 + T_3 + \dots + T_n}{n}$	
$s_T = \sqrt{\frac{(T_1 - \bar{T})^2 + (T_2 - \bar{T})^2 + \dots + (T_n - \bar{T})^2}{n-1}}$	$s_{\bar{T}} = \frac{s_T}{\sqrt{n}}$	$\Delta T = 3 \cdot s_{\bar{T}}$	
$F = const \cdot A^a \cdot B^b \cdot C^c \cdot \dots$	$\Delta F = \pm F \cdot \left[\left a \cdot \frac{\Delta A}{A} \right + \left b \cdot \frac{\Delta B}{B} \right + \left c \cdot \frac{\Delta C}{C} \right + \dots \right]$	$F = A \pm B \Rightarrow \Delta F = \Delta A + \Delta B$	
$Me \rightleftharpoons Me^{z+} + z \cdot e^-$	$\Delta V_e = V_e - V_r = \Delta V_0 + \left(\frac{R \cdot T}{z \cdot F} \right) \cdot \ln(c_j)$	$\Delta V_d = V_2 - V_1 = \left(\frac{u^+ - u^-}{u^+ + u^-} \right) \cdot \left(\frac{R \cdot T}{z \cdot F} \right) \cdot \ln\left(\frac{c_1}{c_2}\right)$	
$u = \frac{v}{E}$	$E = \Delta V_{e1} - \Delta V_{e2}$	$E = \left(\frac{R \cdot T}{z \cdot F} \right) \cdot \ln\left(\frac{c_1}{c_2}\right)$	
$E = \Delta V_e - \Delta V_{kal}$	$W = q \cdot U$	$I = \frac{1}{R} \cdot U$	$R = \rho \cdot \frac{l}{S}$
$J = \frac{I}{S}$	$J \cdot \Delta t = \frac{I \cdot \Delta t}{S} = \frac{\Delta Q}{S}$	$I_p = (CH \cdot R) \cdot \frac{1}{\Delta t} + R$	
$F = \eta \cdot S \cdot \frac{\Delta v}{\Delta x}$	$\eta_{wt} = \frac{\eta}{\eta_0} - 1$	$[\eta] = \lim_{c \rightarrow 0} \left(\frac{\eta_{wt}}{c} \right)$	$\Delta V = \frac{\pi \cdot r^4 \cdot \Delta t}{8 \cdot l \cdot \eta} \cdot \Delta p$
$R = 6 \cdot \pi \cdot r \cdot v \cdot \eta$	$\eta = \frac{2 \cdot r^2 \cdot g \cdot (\rho - \rho_c)}{9 \cdot v}$	$\frac{\eta}{\eta_0} = \frac{t}{t_0} \cdot \frac{\rho}{\rho_0}$	$\Phi = \frac{V_c}{V_r}$
$\frac{\eta}{\eta_0} = 1 + 2,5 \cdot \Phi$	$[\eta] = 2,5 \cdot \frac{N_A}{M} \cdot v_{cz}$	$r = \sqrt[3]{\frac{3 \cdot M}{10 \cdot \pi \cdot N_A} \cdot [\eta]}$	$\frac{\rho}{\rho_0} = 1 + 0,23 \cdot c$
$\frac{dn}{dt} = -D \cdot S \cdot \frac{dc}{dx}$	$D = \frac{k \cdot T}{6 \cdot \pi \cdot r \cdot \eta}$	$\overline{\Delta x^2} = 2 \cdot D \cdot t$	$P = \frac{D}{dx}$
$\frac{dn}{dt} = P \cdot S \cdot (c_1 - c_2)$	$c_2 = \frac{c_0}{2} \cdot (1 - e^{-C \cdot D \cdot t})$	$C = \frac{2 \cdot A}{V \cdot dx}$	$\ln\left(\frac{c_0}{c_0 - 2 \cdot c_2}\right) = C \cdot D \cdot t$
$\frac{c_0}{2} = c_0 \cdot e^{-\kappa \cdot t_{1/2}}$	$c = c_0 \cdot e^{-\kappa \cdot t}$	$\kappa = \frac{\ln(2)}{t_{1/2}} \approx \frac{0,693}{t_{1/2}}$	$\pi = f \cdot c_m \cdot R \cdot T$
$E = E_{el} + E_{osc} + E_{rot}$	$h \cdot \nu = E_2 - E_1 = \Delta E_{el} + \Delta E_{osc} + \Delta E_{rot}$	$P = P_0 \cdot e^{-k \cdot d}$	$k = a_\lambda \cdot c$
$P = P_0 \cdot e^{-a_\lambda \cdot c \cdot d}$	$\tau = \frac{P}{P_0}$	$\tau = e^{-a_\lambda \cdot c \cdot d}$	$A = -\log(\tau)$
$A = \varepsilon_\lambda \cdot c \cdot d$	$\varepsilon_\lambda = a_\lambda \cdot \log(e)$	$SpO_2 = \frac{oksyHb}{deoksyHb + oksyHb} \cdot 100\%$	
$n = \text{tg}(\varphi)$	$I = I_0 \cdot \cos^2(\beta)$	$\alpha = [\alpha]_\lambda \cdot c \cdot l$	
$\lambda_{min} = \frac{h \cdot c}{e \cdot U_a}$	$I = C \cdot Z \cdot i_a \cdot U_a^2$	$h \cdot \nu = E_k + W$	$h \cdot \nu = E_k + h \cdot \nu' + W$
$h \cdot \nu = E_{kp} + m_{0p} \cdot c^2 + E_{ke} + m_{0e} \cdot c^2$	$I = I_0 \cdot e^{-\mu \cdot d}$	$\mu_m = \frac{\mu}{\rho}$	
$d_{1/2} = \frac{\ln(2)}{\mu} \approx \frac{0,693}{\mu}$	$a = a_0 \cdot e^{-\mu \cdot d}$	$\ln(a) = \ln(a_0) - \mu \cdot d$	$LET = \frac{\Delta E}{\Delta l}$
$D = \frac{\Delta E}{\Delta m}$	$X = \frac{\Delta Q}{\Delta m}$	$H = Q \cdot D$	$D' = \frac{\Delta D}{\Delta t}$
			$H=1000 \cdot \frac{\mu - \mu_{wody}}{\mu_{wody}}$

$Q = \frac{\Delta V}{\Delta t}$	$S_1 \cdot v_1 = S_2 \cdot v_2 = const$		$p_{S1} + \rho \cdot g \cdot h_1 + \frac{1}{2} \cdot \rho \cdot v_1^2 = p_{S2} + \rho \cdot g \cdot h_2 + \frac{1}{2} \cdot \rho \cdot v_2^2 = const.$								
$Q = \frac{\pi \cdot r^4}{8 \cdot l \cdot \eta} \cdot \Delta p$		$Q = \frac{1}{R_N} \cdot \Delta p$		$N_R = \frac{2 \cdot r \cdot v \cdot \rho}{\eta}$							
$v = \sqrt{\frac{K}{\rho}}$	$K = \frac{\Delta p}{\frac{\Delta V}{V}}$	$v_t = F \cdot \sqrt{\frac{E \cdot d}{2 \cdot R \cdot \rho_c}}$		$v_p = \frac{\Delta V}{S \cdot \Delta t}$	$v_t = \frac{l_{AB}}{\Delta t}$						
$p = \rho \cdot c \cdot v$		$I = \frac{\Delta E}{\Delta t \cdot S} = \frac{P}{S}$		$I = \frac{1}{2} \cdot \frac{p_0^2}{\rho \cdot c}$		$L = \log_{10} \left(\frac{I}{I_0} \right)$					
$L_p = 2 \cdot \log_{10} \left(\frac{p}{p_0} \right)$		$Z_W = \rho \cdot c = \sqrt{\rho \cdot E}$		$R = \frac{I_R}{I_I} = \left(\frac{Z_1 - Z_2}{Z_1 + Z_2} \right)^2$							
$R = \frac{U}{I} = \frac{1}{G}$	$\kappa = \frac{1}{\rho}$	$R = \rho \cdot \frac{\ell}{S} = \frac{1}{G}$		$\epsilon_r = \frac{C}{C_0}$	$C = \epsilon_0 \cdot \epsilon_r \cdot \frac{S}{d}$						
$P = \frac{q}{S}$	$\vec{p} = \frac{\sum_i \vec{p}_i}{V}$	$\tau = \frac{4 \cdot \pi \cdot \eta \cdot r^3}{k \cdot T}$		$K = \frac{R_{10^4}}{R_{10^6}}$	$\Phi = \frac{V_{krwinek}}{V_{krwinek+osocza}}$						
$\frac{\frac{\kappa}{\kappa_0} - 1}{\frac{\kappa}{\kappa_0} + 2} = \Phi \cdot \frac{\frac{\kappa_k}{\kappa_0} - 1}{\frac{\kappa_k}{\kappa_0} + 2}$		$\Phi = \frac{2 \cdot (\kappa_0 - \kappa)}{\kappa + 2 \cdot \kappa_0}$		$\kappa = \frac{C}{R}$		$X_C = \frac{1}{\omega \cdot C}$					
$W = \sigma \cdot \Delta S$	$\sigma = \frac{F}{l}$	$\Delta p = \frac{2 \cdot \sigma}{R}$		$\frac{\sigma}{\sigma_0} = \frac{n_0 \cdot \rho}{n \cdot \rho_0}$	$\sigma = \frac{r \cdot h \cdot \rho \cdot g}{2 \cdot \cos(\alpha)}$	$\sigma = \frac{\rho \cdot V \cdot g}{2 \cdot \pi \cdot r \cdot n}$					
$\sigma_p = \frac{F}{l}$		$\sigma_p = \sigma_0 - \sigma$		$\sigma_p \cdot S_w = n_{cz} \cdot k_B \cdot T$		$S_w = n_{cz} \cdot s_0$					
$V_w = \frac{c \cdot V_k}{\rho}$		$s_{cz} = \frac{S_w}{n_{cz}} = \frac{S_w \cdot M}{c \cdot V_k \cdot N_A}$		$d_{cz} = \sqrt{\frac{4 \cdot s_{cz}}{\pi}}$		$l_{cz} = \frac{c \cdot V_k}{\rho \cdot S_w}$					
Przedrostek	giga	mega	kilo	hekto	deka	decy	centy	mili	mikro	nano	piko
Symbol	G	M	k	h	da	d	c	m	μ	n	p
Mnożnik	10 ⁹	10 ⁶	10 ³	10 ²	10 ¹	10 ⁻¹	10 ⁻²	10 ⁻³	10 ⁻⁶	10 ⁻⁹	10 ⁻¹²