

Дано:  $[M], [HA]$   
 $k_{on}, k_p, k_o$   
 $k_{неpm}$

$[R^+]-?, \bar{x}_n-?$   
 $V-?, P(3)-?$

$$N_3 \quad k_{on} [HA][M] = k_o [R^+]$$

$$[R^+] = \frac{k_{on} [HA][M]}{k_o}$$

$$V = k_p [R^+][M]$$

$$V = \frac{k_p k_{on} [HA][M]^2}{k_o}$$

$$\bar{x}_n = \frac{1}{\bar{x}_n} = \frac{k_o}{k_p [M]} + C_M$$

$$C_M = \frac{k_{неpm}}{k_p}$$

$$P_n(x) = p^{x-1} (1-p)$$

$$p = \frac{W_p}{W_p + W_{неpm} + W_o}$$

$$p = \frac{k_p [M]}{k_p [M] + k_{неpm} [M] + k_o}$$

$$W_p = k_p [R^+][M]$$

$$W_{неpm} = k_{неpm} [R^+][M]$$

$$W_o = k_o [R^+]$$

Demo:  $\frac{N_2}{N_0}$   
 $\frac{d[N]}{dt} = -k_p [I]_0 [M]$   
 $-\int \frac{d[M]}{[M]} = k_p [I]_0 \int dt$

$V = ? \quad \bar{X}_n = ?$   
 $\ln \left( \frac{[M]}{[M]_0} \right) = -k_p [I]_0 t$   
 $[M] = [M]_0 e^{-k_p [I]_0 t}$   
 $\bar{X}_n = \frac{[M]_0 - [M]}{[I]_0} \quad V = k_p [M] [I]_0$

Demo:  $\frac{N_3}{N_0}$   
 $k_p \pm k_{tr} = 0$   
 $[M]_0, [I]_0$   
 $k_t' t$   
 $-\frac{d[M]}{dt} = \frac{k_p}{k_t'} [I]_0^{0.5} [M]$

$\bar{X}_n = ? \quad V = ?$   
 $k_a = \frac{1}{k_t'}$   
 $[M] = [M]_0 e^{-k_a t}$   
 $V = k_p [I]_0^{0.5} [M]$   
 $\bar{X}_n = \frac{[M]_0 - [M]}{[I]_0}$

$\frac{F_1}{F_1 - ?}$

$f_1 + f_2 = 1$   
 $F_1 + F_2 = 1$   
 $\frac{F_1}{F_2} = \frac{f_1 (z_1 f_1 + f_2)}{f_2 (z_2 f_2 + f_1)}$   
 $\frac{F_1}{1 - F_1} = \frac{f_1 (z_1 f_1 + 1 - f_1)}{(z_2 (1 - f_1) + f_1)}$   
 $F_1$

$\Delta H^\circ, \Delta S^\circ$   
 $P$

$R^* + M \rightleftharpoons R^*$   
 $K = \frac{[R^*]}{[R^*][M]_{\text{publ}} [M]_{\text{publ}}}$   
 $\Delta G^\circ = -RT \ln K = RT \ln [M]_{\text{publ}}$   
 $\Delta H^\circ - T \Delta S^\circ = RT \ln [M]_{\text{publ}}$   
 $\ln [M]_{\text{publ}} = \frac{\Delta H^\circ - T \Delta S^\circ}{RT}$

$P_{\text{publ}} = \frac{[M]_0 - [M]_{\text{publ}}}{[M]_0}$   
 $[M]_0 = \frac{1000 P}{\mu - P}$

N6

Demo:  $\pm$   
 $k_p, k_p$   
 $t$   $[I]_0$   $[M]_0$   
 $k_g$

$$-\frac{d[M]}{dt} = k_p [I]_0 [M]$$

$$-\int \frac{d[M]}{[M]} = \int k_p [I]_0 dt$$

$X_n$  -?  $V$  -?

$$\ln \left( \frac{[M]}{[M]_0} \right) = -k_p [I]_0 t$$

$$[M] = [M]_0 e^{-k_p [I]_0 t}$$

$$k_p = d k_p^- + (1-d) k_p^{\pm}$$

$$d = \sqrt{\frac{k_g}{k_p}}$$

$$V = k_p [M] [I]_0$$

$$X_n = \frac{[M]_0 - [M]}{[I]_0}$$

Data:  $[M]_0, [I]_0$   
 $k_0, k_p$   
 V-?  
 p-?

$$\begin{aligned}
 -\frac{d[M]}{dt} &= k_p [R^\bullet] [M] \quad 17 \\
 -\frac{d[R^\bullet]}{dt} &= k_0 [I] \\
 \int \frac{d[M]}{[M]} &= \int_0^t k_p dt
 \end{aligned}$$

$$[R^\bullet] = [I]_0 e^{-k_0 t}$$

$$-\frac{d[M]}{dt} = k_p [I]_0 e^{-k_0 t} [M]$$

$$-\int \frac{d[M]}{[M]} = k_p [I]_0 \int_0^t e^{-k_0 t} dt$$

$$[M]_0 + \ln\left(\frac{[M]}{[M]_0}\right) = k_p [I]_0 \left( \frac{e^{-k_0 t} - 1}{-k_0} \right)$$

$\Downarrow [M]$

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Given:  
 $p, t$   
 $k_p$   
-----  
 $[I]_0$  - ?  
 $X_n$  - ? (cum  $[M]_0$ )

$$\ln\left(\frac{[M]}{[M]_0}\right) = -k_p [I]_0 t$$

$$p = \frac{[M]_0 - [M]}{[M]_0} = 1 - \frac{[M]}{[M]_0}$$

$$\frac{[M]}{[M]_0} = 1 - p$$

$$\ln(1-p) = -k_p [I]_0 t$$

$$\Leftrightarrow [I]_0$$

$$X_n = \frac{[M]_0 - [M]}{[I]_0}$$