

F.Q.UNAM

*Métodos
Espectrofotométricos
enzimáticos*

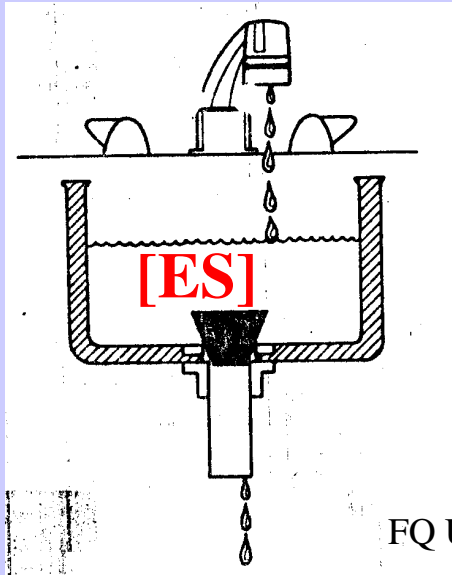
*Alejandro Baeza
2005*

FQ UNAM Alejandro Baeza 2007

Esquema general



Modelo Briggs y Haldane: estado estacionario "steady state"



V_{in}



$[ES]$

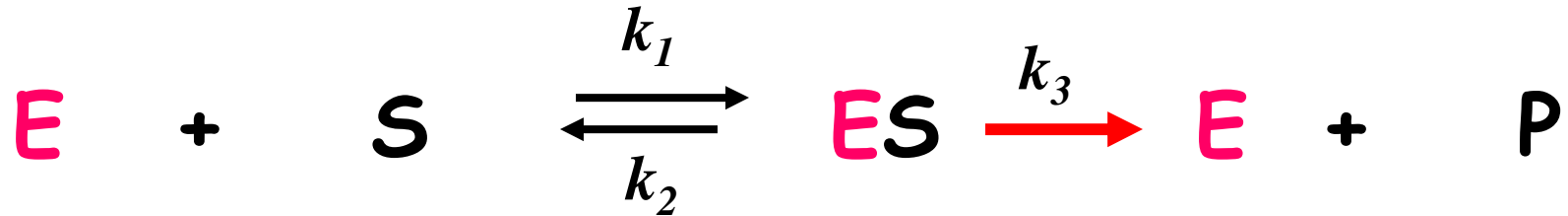


V_{out}

$$d[ES]/dt = 0$$

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Demostración:



$$V_f = k_1[E][S]$$

$$V_d = k_2[ES] + k_3[ES] = (k_2 + k_3)[ES]$$

$$V_f = V_d$$

$$k_1[E][S] = (k_2 + k_3)[ES]$$

$$(k_2 + k_3) / k_1 = [E][S] / [ES] = K_m$$

Jeffrey A. Cohlberg

“ K_M as an Apparent Dissociation Constant”

Journal of Chemical Education 56[8](1979)512-517

M.K. Ciolskz and J. Jordan

“Electrochemical and Spectrophotometrical Enzymatic Determinations”

Analytical Chemistry 65(1993)164-168

H.Prado, P. Diaz, J.L: Ortiz and A. Baeza

“Polarographic Determination of K_m and V_{max} of Gluthathione Reductase”

Current Separations 20:4(2004)117-120