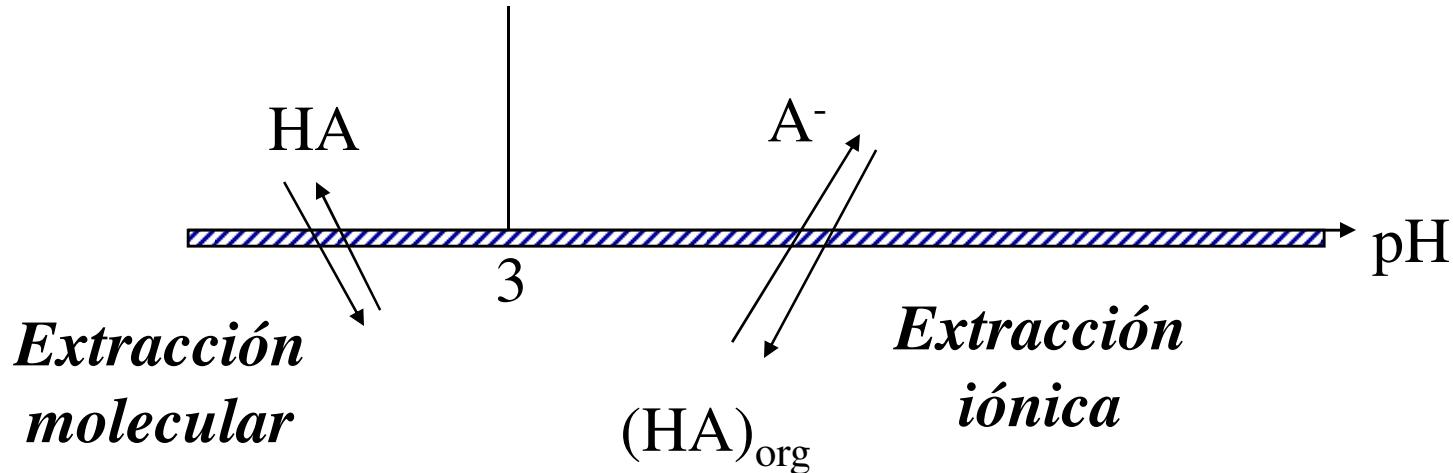


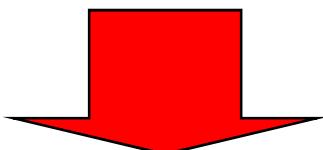
Acido salisilico DUZP (combinado)



$$\log(f/1-f) = f(\text{pH})$$

$$\begin{array}{ccc} \text{In CoVo} & \xrightarrow{\quad} & \text{Eq CoVo}(1-f) \\ \text{HA} & = & (\text{HA})_{\text{org}} \\ & & f\text{CoVo} \end{array}$$

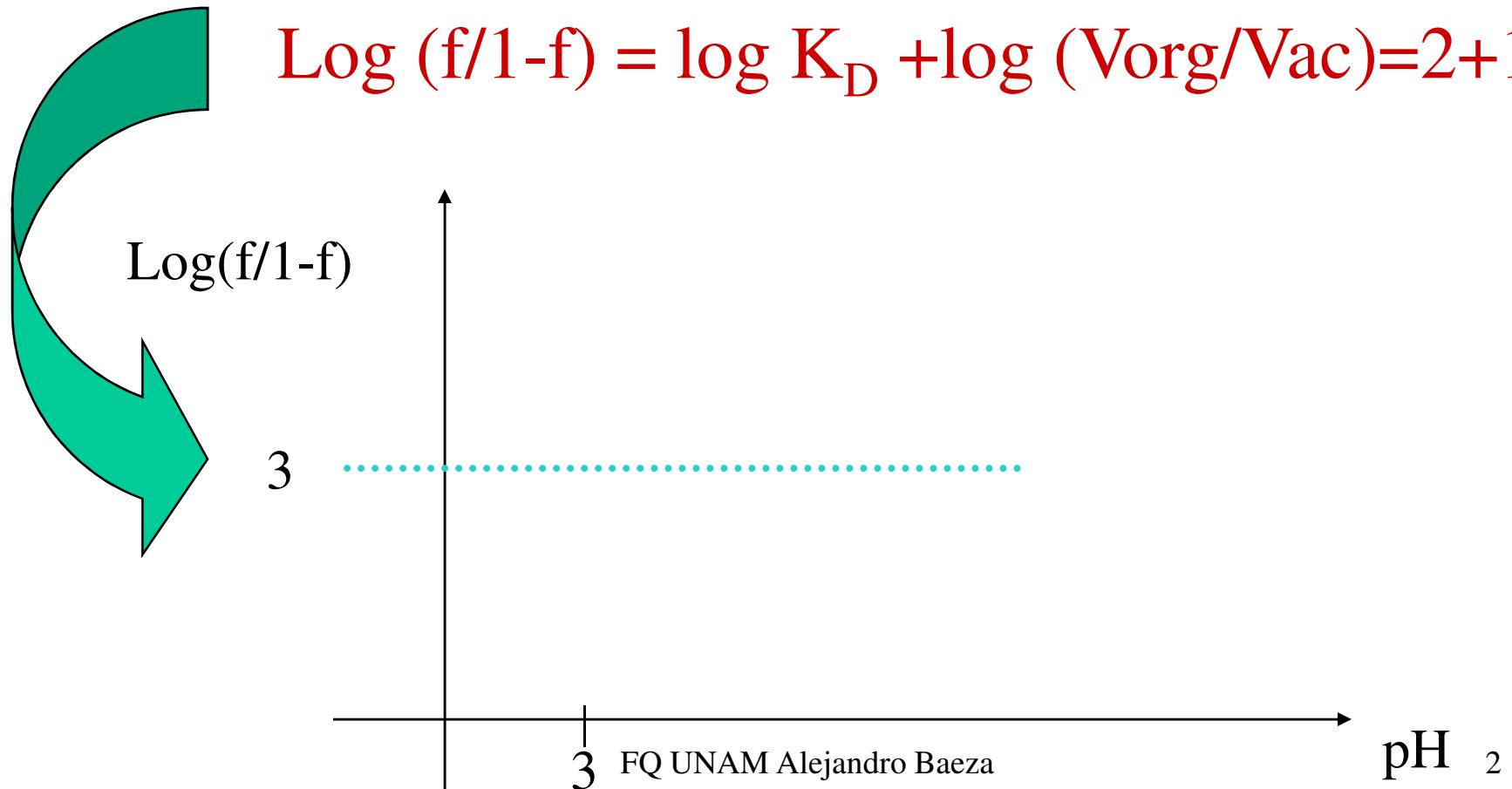
$K_D = 76.92; \log K = 1.9$



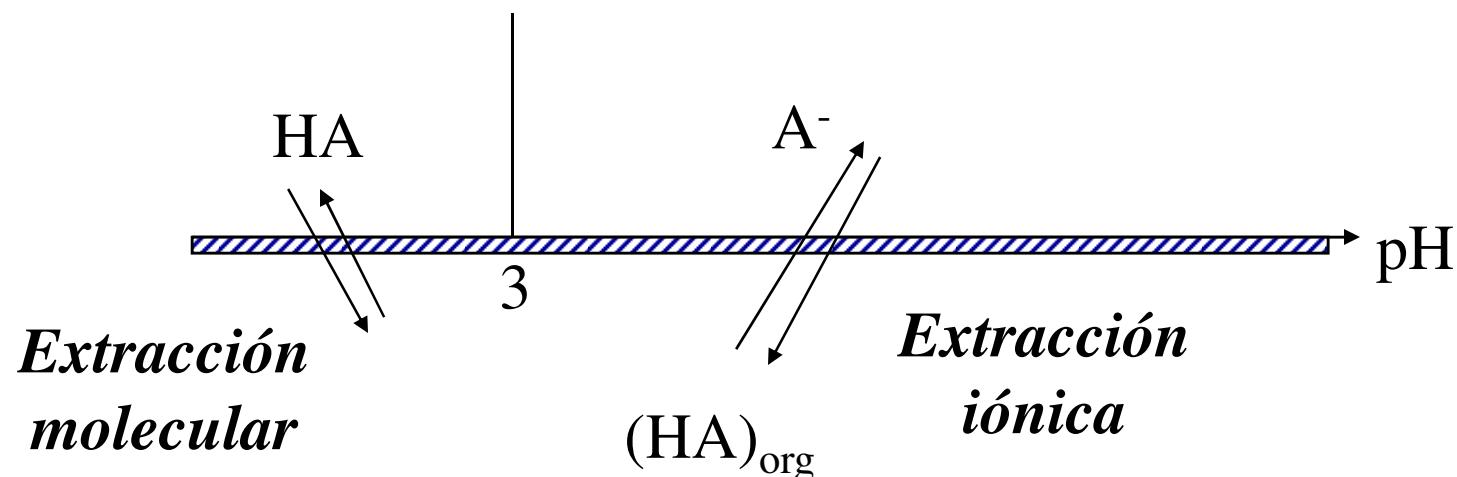
continua

$$K_D = \frac{(HA)_{org}}{(HA)} = \frac{f \cancel{C_o} V_o / V_{org}}{\cancel{C_o} \cancel{V_o} (1-f) / \cancel{V_o}} = \frac{f (V_{ac} / V_{org})}{(1-f)}$$

$\text{Log } (f/1-f) = \log K_D + \log (V_{org}/V_{ac}) = 2+1=3$

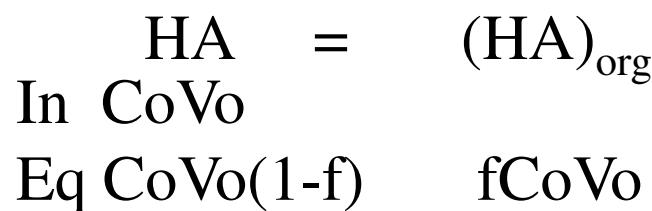


Acido salisilico DUZP (combinado)

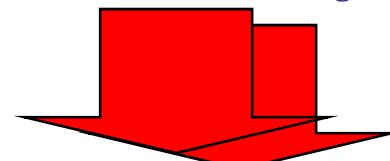


$$\log(f/1-f) = f(\text{pH})$$

$$K_D = 76.92; \log K = 1.9$$



$$\begin{array}{rcl} \cancel{\text{HA}} & = & (\text{HA})_{\text{org}} \quad K = 10^{1.9} \\ \cancel{\text{A}^- + \text{H}^+} = \cancel{\text{HA}} & & K = 10^3 \\ \hline \text{A}^- + \text{H}^+ = (\text{HA})_{\text{org}} & & K = 10^{4.9} \end{array}$$



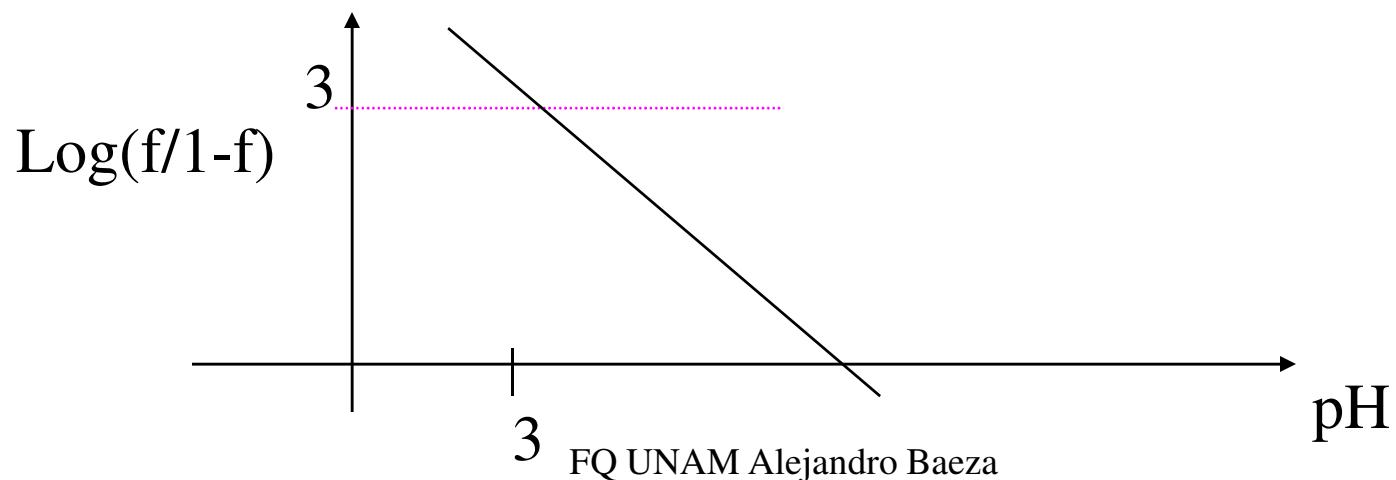
continua³



In fCoVac
Eq CoVac(1-f) 10^{-pH} fCoVac

$$K_E = \frac{fCoVac/V_{org}}{CoVac(1-f)/V_{vac} (10^{-pH})} = \frac{f(Vac/V_{org})}{(1-f) 10^{-pH}}$$

$$\log(f/1-f) = \log K + \log(V_{org}/Vac) + pH = 5.9 - pH$$



$$pH = pK_a$$

$$(HA)_{ac} = C_o/2$$

$$(HA)_{org} = C_o/2$$

$$\log(f/(1-f)) = \log C_o - 0.3$$

$$\begin{aligned}\log(f/(1-f)) &= (f/(1-f)) \\(f/(1-f)) &= 1 \\f &= 0.5\end{aligned}$$

