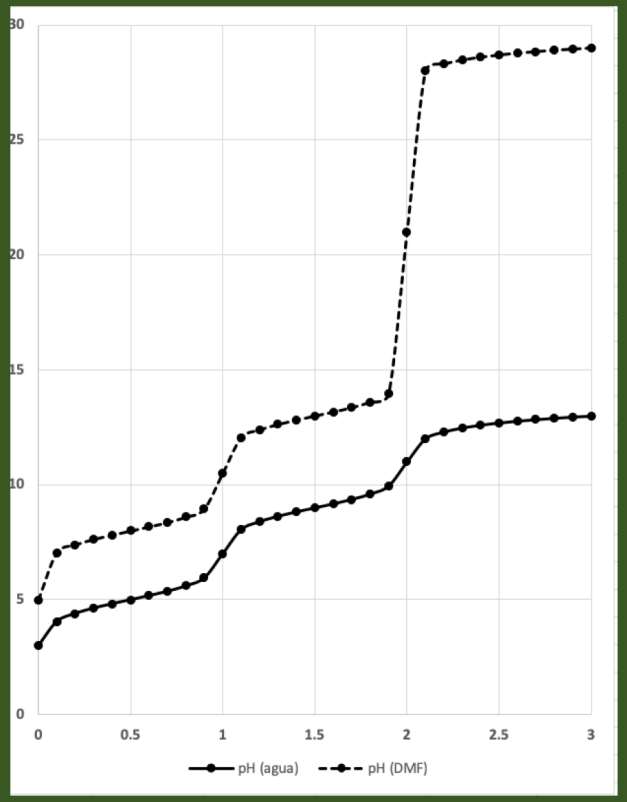
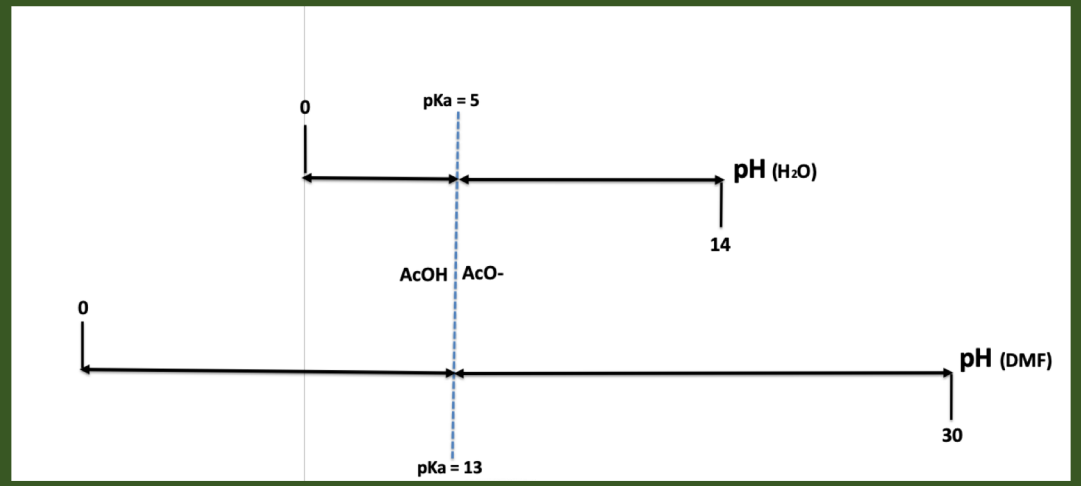
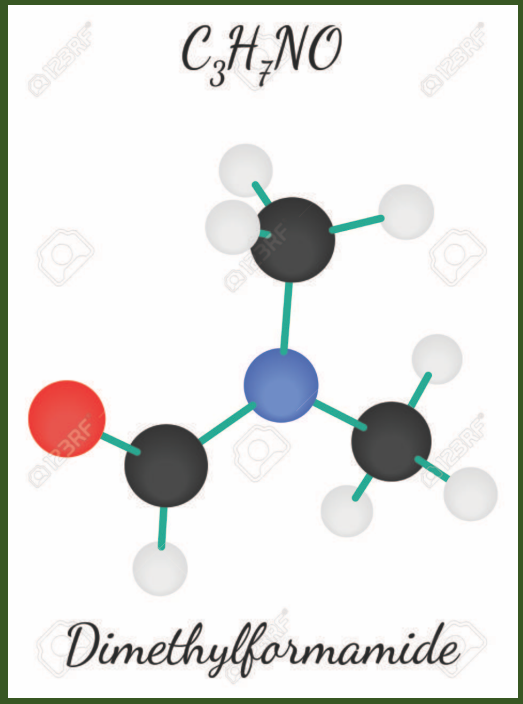
QA III
Acidez-disolventes no acuosos

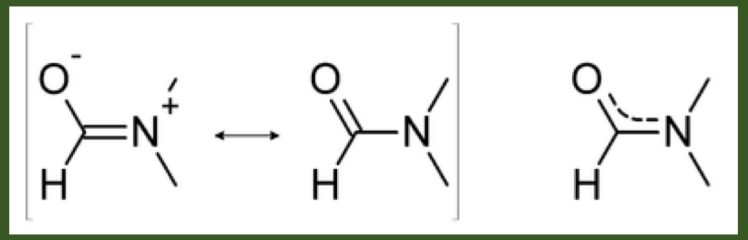


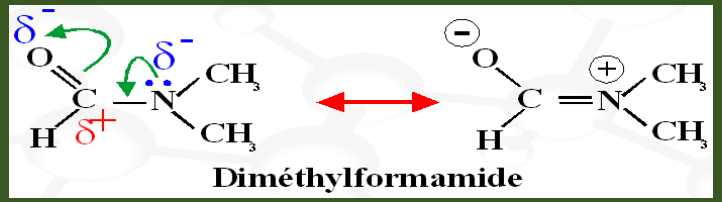




Dr. Alejandro Baeza

Titulación de acético con amoniaco en DMF

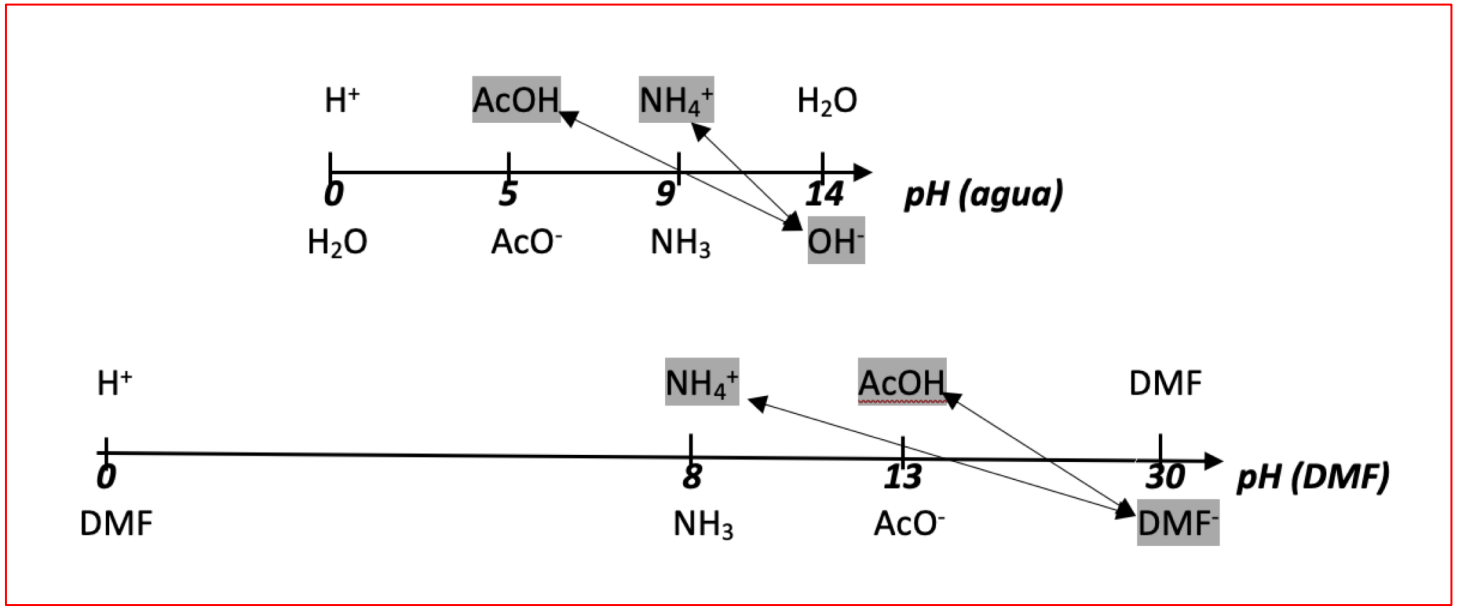




Data: H_2O , DMF : $2HD \leftrightarrows H_2D^+ + D^-$, $K_{HD} = [H_2D^+][D^-]$.

DS	ε	pK_{HD}	(pKa) acetico	(pKa) amonio	Co[mol/L]
H_2O	80	14	5	9	0.1
DMF	40	30	13	8	0.1

Escalas de reactividad:



Polinomios reducidos:

$f = 0$	$pH = \frac{1}{2} pKa_{1ro} - \frac{1}{2} log\ Co$
$0 < f < 1$	$pH = pKa_{1ro} + log \frac{f}{1-f}$
$f = 1; f' = 0$	$pH = \frac{1}{2} (pKa_{1ro} + pKa_{2do})$
$0 < f' < 1$	$pH = pKa_{2do} + log \frac{f'}{1-f'}$
$f = 2; f' = 1$	$pH = \frac{1}{2} pK_{HD} + \frac{1}{2} pKa_{2do} + \frac{1}{2} log\ Co$
$f > 2; f' > 1$	$pH = pK_{HD} + log\ Co[(f' - 1)]$

Curvas teoricas
de titulación volumétrica
en agua y en dimetilformamida