

pH of 0.08 mol dm^{-3} HOC1 solution is 2.85. Calculate its ionization constant.

Sol: pH of HOC1 = 2.85

$-\text{pH} = \log [\text{H}^+]$ or $-2.85 = \log [\text{H}^+]$

$\Rightarrow [\text{H}^+] = 1.413 \times 10^{-3}$