plex. The rate constant $k_{OH^-}K_W$ measured is seawater is related to the value at infinite dilution by the equation

$$k_{OH^-}K_W = k^o_{OH^-}K_W y_{CO_2}/y^{\ddagger}_{HCO_3^-} \quad (14)$$

where $k^o_{OH^-}$ is the rate constant at infinite dilution and the activity coefficients refer to seawater. The other CO_2 hydration and dehydration rate constants in seawater are related to their values at infinite dilution by the equations

$$k_{CO_2} = k^o_{CO_2} y_{CO_2}/y^{\ddagger}_{H_2CO_3}, \quad (15)$$

$$k_d = k^o_d y_{HCO_3^-}/y^{\ddagger}_{H_2CO_3}, \quad (16)$$

and

$$k_{HCO_3^-} = k^o_{HCO_3^-}/y^{\ddagger}_{HCO_3^-}. \quad (17)$$