for the compressibilities of the ammonium and hydroxyl ions. The values obtained for the ratio K_a^P/K_a^1 were lower than those from experiment by a factor of about two over the pressure range 3000—6000 atm. This would indicate that ammonia is present in solution at these pressures almost entirely as $NH_4{\cdot}OH$.

If ΔV_h is assumed not to change appreciably with pressure at 25°, the fraction of carbon dioxide in solution present as H_2CO_3 rises from 0·259% at 1 atm. to 2·3% at 3000 atm.

It is evident therefore that the Born equation should not be used to predict the increase with pressure in the apparent ionisation constant for substances such as CO_2, SO_2, and NH_3, where a hydration step precedes ionisation.

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