Erratum: Standard Electrode Potential of the Silver, Silver Chloride Electrode

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The only assumption made here is that $\mathcal{H}_0$ and $\mathcal{H}_2$ commute and since this assumption was used in converting $(\mathcal{H}_2[\mathcal{H}_0,\mathcal{H}_1])_\lambda$ to the form given in Eq. (17) we see that this equation will in general yield an infinite answer.

It should perhaps be pointed out, also, that there is an arithmetical error in Eq. (14). The number 12 in the second term should be replaced by a minus 4.

The author of this letter has modified the treatment of Hornig and Hirschfelder by using as a variation function the equation

$$\psi=(1+\beta H\mathcal{H}_2)\psi_0, \tag{5}$$

obtaining for the shielding σ, the expression

$$\sigma=(\mathcal{H}_3)_{Av}-\mathrm{Av}_\lambda\frac{2(\mathcal{H}_2\mathcal{H}_1)_\lambda(\mathcal{H}_2\mathcal{H}_2)_\lambda}{(\mathcal{H}_2[\mathcal{H}_0,\mathcal{H}_2])_\lambda}. \tag{6}$$

For the hydrogen molecule this yields the values 2.63×10^{-5}, 2.70×10^{-5}, and 2.74×10^{-5} using the Heitler-London,[2] Molecular Orbital, and Wang[3] functions respectively. This is to be compared with the value 2.66×10^{-5} found from a combination of theory and experiment by Ramsey[4] and Newell.[5] Details of this calculation plus similar calculations for the hydrogen halides will be published later.

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[5] G. F. Newell, Phys. Rev. **80**, 476 (1950).

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THE name of one of the authors, J. E. Prue, was inadvertently omitted in the foregoing Letter to the Editor.