4.   It has been shewn that the assumption about the independence of the partial molar volume from the concentration and the pressure for the system considered does not give rise to errors in excess of the experimental error.

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References

1.   Verschoyle, Phil. Trans. Roy. Soc. A 230, 189 (1931).

2.   Gonikberg, Fastowsky and Gurwitsch, Acta Physicochimica U.S.S.R. 11, 865 (1939).

3.   Steckel and Zin., Z. chem. Ind. (Russian) 16, 24 (1939).

4.   Freeth and Verschoyle, Proc. Roy. Soc. A 130, 435 (1931).

5.   Fastowsky and Gonikberg, Acta Physicochimica U.S.S.R. 12, 485 (1940).

6.   Lichter and Tichonowitsch, Z. techn. Phys. (Russian), 9, 1916 (1939).

7.   Lewitskaya and Prjannikow, Z. techn. Phys. (Russian), 9, 1849 (1939).

8.   Lewis and Randall, "Thermodynamics and Free Energy of Chemical Substances".

9.   Kritschewsky and Kasarnowsky, Z. physik. Chem. (Russian) 6, 1320 (1935).

10.   Gonikberg, Acta Physicochimica U.S.S.R. 12, 489 (1940).

11.   Hildebrand, "Solubility of Non-Electrolytes", (1936).

12.   In the general case v_2 denotes the molar volume of the solvent.

13.   Newton, Ind. Eng. Chem., 27, 302 (1935).

14.   Ipatjew and Lewina, Z. physik. Chem. (Russian) 6, 632 (1935).

15.   Iljinskaya, "Partial molar volumes" (Dissert. Russian) (1940).

16.   If we know the $\bar{v}_1$ value it is also possible to calculate the $a^{\frac{1}{2}}/\bar{v}_1$ values from the Van der Waals constants a when the extrapolation of $a^{\frac{1}{2}}/v$ becomes unnecessary. (See previous paper.)