

0.00521; the values for  $E_z$  should read, 0.02605, 0.06430, 0.07945 and 0.08389; the values for  $E_z - E_x$  should read, 0.02461, 0.06172, 0.07557 and 0.07868; the values for  $E'_B$  should read 0.06148, 0.09859, 0.11257 and 0.11366; the values for  $E'_B - 0.03783$  should read, 0.02365, 0.06076, 0.07474 and 0.07583.

The Role of Weight of Acyl in the Migration from Nitrogen to Oxygen. I, by L. Chas. Raiford and C. E. Greider.

P. 437. In line 1 of the Summary, instead of "O-acylaminophenol," read "ortho-acylaminophenol."

Critical Potentials of Hydrogen in the Presence of Nickel Catalyst, by A. W. Gauger.

P. 677. The cut should be inverted but the coördinate numbering retained as printed.

Adsorption and Surface Tension at Liquid-Liquid Interface, by J. Howard Mathews and Alfred J. Stamm.

P. 1071 ff. The authors write as follows.

We are indebted to Professor Van der Meulen and Mr. William Rieman, 3rd, of Rutgers College, for calling our attention to a systematic mathematical error which occurs in our paper on "Adsorption and Surface Tension at Liquid-Liquid Interface." The values given in Cols. 4 and 5, Table III, p. 1078, are to be corrected. (See accompanying table.) Due to a systematic error in calculation they have been shifted considerably, but their difference (Col. 6) remains about the same and the final results, giving the thickness and cross section (Cols. 9 and 10) of the adsorbed dimethylaniline molecules, are essentially of the same magnitude. None of the conclusions drawn in the paper need, therefore, be altered.

TABLE III (Corrected)  
THICKNESS OF DIMETHYLANILINE MOLECULES CALCULATED FROM SURFACE-TENSION DATA

Heptane-Water Interface									
No.	% Dimethyl- aniline (by vol.) in interface	$d_{25}^{25}$ interface	Moles of dimethyl- aniline per cc. $\times 10^3$			$\frac{d\sigma}{d \log C}$	Moles per sq. cm. $\times 10^{10}$	Thickness in cm. $\times 10^7$ ( $m\mu$ )	Cross section in sq. cm. $\times 10^{14}$ (Sq. $m\mu$ )
			(Sol.)	(Interface)	(Excess)				
2	16.5	0.727	0.094	1.303	1.209	2.60	1.05	0.869	0.241
3	45.0	.803	.564	3.553	2.989	4.23	1.71	.572	.365
4	57.0	.842	1.129	4.501	3.372	4.35	1.75	.520	.402
5	67.0	.870	1.974	5.291	3.317	4.46	1.80	.543	.385
6	79.7	.901	3.948	6.294	2.346	5.22	2.10	.894	..
7	90.0	.929	5.919	7.107	1.188	7.18	2.89	2.44	..
Benzene-Water Interface									
2	9.0	0.883	0.237	0.711	0.474	0.63	0.254	0.536	0.390
3	15.5	.888	.491	1.224	.733	1.00	.403	.549	.381
4	18.0	.890	.564	1.421	.857	1.15	.464	.542	.386
5	26.5	.896	.877	2.093	1.216	1.61	.650	.535	.391
6	30.5	.900	1.098	2.408	1.310	1.74	.703	.537	.389
7	34.5	.903	1.319	2.724	1.405	1.94	.783	.557	.375
8	41.0	.909	1.793	3.238	1.445	1.97	.796	.551	.379
9	50.0	.916	2.632	3.958	1.326	2.39	.965	.728	..
10	63.0	.926	3.948	4.975	1.027	5.13	2.09	2.04	..
11	67.5	.930	4.517	5.330	0.813	5.39	2.18	2.68	..
12	78.5	.938	5.646	6.199	.553	5.39	2.18	3.94	..
13	87.0	.946	6.578	6.870	.292	5.39	2.18	7.47	..

The recalculation gives values which shift the curve for heptane (Fig. 4) slightly to the right, its general shape remaining, however, the same.

On p. 1077 the value for the molecular cross section of dimethylaniline molecules at the heptane-in-water interface should read  $0.572 \times 10^{-14}$ , instead of  $0.695 \times 10^{-14}$ . We also note a typographical error, p. 1079, for the cross section of triethylamine; the proper value is  $0.41 \times 10^{-14}$ , instead of  $0.11 \times 10^{-14}$  sq. cm.

**The System, Magnesium Sulfate-Sodium Sulfate-Water and a Method for the Separation of the Salts**, by E. H. Archibald and W. A. Gale.

P. 1768. The titles for the triangular diagrams should be transposed.

Note. **The Atomic Weight of Zirconium**, by F. P. Venable and J. M. Bell.

P. 1834. In line 11, for "91.22," read "91.60," and for "91.49," read "91.76." In line 12, for "91.19," read "91.24." In line 13, for "91.34," read "91.40." In line 14, for "91.36," read "91.68," and for "91.26," read "91.32." In view of the greater accuracy of the chloride results, in line 17, for "91.2," read "91.3."

**Amine Oxides Derived from 4-bromodimethylaniline and from 3- or 4-nitrodimethylaniline**, by Lauder W. Jones and Elden B. Hartshorn.

P. 1841, Equation 7. For the formula " $O^{\pm} \mp CH_2$ ," read " $O = \dagger CH_2$ ."

P. 1843, Footnote 14. In the last line the formula " $R_3N::O$ " should read " $R_3N \vdots O$ ."

P. 1852. In the third line under "HYDRIONIDR" instead of "methylaniline oxide," read "methylaniline oxide hydrochloride."

**Hyponitrites**, by Lauder W. Jones and Alfred W. Scott.

P. 2174. In lines 3 and 4, instead of " $O=NH(OH)$ ," read " $O=N-NH(OH)$ ."

In Footnote 10, instead of " $H_2NON$ ," read " $H_2NOH$ ."

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## NEW BOOKS

**Das Leitvermögen der Lösungen.** (The Conductivity of Solutions.) By PAUL WALDEN, Professor at the University, Rostock. Akademische Verlagsgesellschaft m. b. H., Leipzig, 1924. ix + 383 pp. 25 figs. 24.5 × 16.5 cm. Price, unbound, 17 Goldmarks; bound, 21 Goldmarks.

The author of this book has evidently set for himself the task of reading and appraising with substantial completeness all of the literature dealing with the subject embraced by his title. It is a commentary on the rapid growth of knowledge that such a task is today apparently beyond the physical capacity of one man, even for a small subdivision of a science. In this book, which is volume one of a series on the same topic, there are literally many thousands of references to original articles and to books, all of which the author attempts to place in proper relation to the subject as a whole. One noticeable result is that the book lacks a guiding idea or "plot," and problems do not get solved as the reader plows through it; on the contrary, his confusion is apt to be increased. Naturally, the best part of the work deals with subject matter with which the author has been most directly concerned in his researches, namely, the conductivities and viscosities of non-aqueous solutions. Here we have, for the first time, an adequate account of the data on the subject, and of the not very precise