## Additions and Corrections

Notice to Readers.—For the convenience of those who wish to cut out the corrections and attach them to the margins of the articles corrected, they have been printed upon one side of the page only.

# 1937, Vol. 59

Glenn S. Skinner. Conditions Affecting the Formation of Malonates and Barbiturates, Halogenalkyl Derivatives.

Page 324. Column 1, line 9, for "0.120 mol" read "0.20 mol" of lactone.—GLENN S. SKINNER.

#### 1939, Vol. 61

Louis F. Fieser, Lloyd M. Joshel and Arnold M. Seligman. Synthetic Experiments in the Chrysene Series.

Page 2134. In formula II, the side chain should OH OH

be CH<sub>3</sub>CCH<sub>2</sub>OCH<sub>3</sub> instead of CH<sub>3</sub>CH<sub>2</sub>OCH<sub>3</sub>.—Lloyd M. Toshel.

#### 1941, Vol. 63

Donald C. Grove and George L. Keenan. The Dimorphism of Sulfathiazole.

Page 97. The authors write "... the refractive index,  $n_{\beta}$ , for the hexagonal prisms, ... reported, 1.733, was that of the intermediate index,  $n_{i}$ . The correct  $n_{\beta}$  is 1.685. The values for  $n_{\alpha}$  and  $n_{\gamma}$  are correct as given. ... We wish to thank Dr. Charles Maresh of the Calco Chemical Co. for calling this error to our attention.—Donald C. Grove and George L. Keenan.

Boyd E. Hudson, Jr., and Charles R. Hauser. The Synthesis of Ketones of the Type RCOCHR<sub>2</sub> from  $\alpha,\alpha$ -Disubstituted  $\beta$ -Keto Esters. An Extension of the Acetoacetic Ester Type of Ketone Synthesis.

Page 3163. In Table I, the second name should be Propionylmethylethylacetate.—C. R. HAUSER.

**Lloyd M. Joshel and Lewis W. Butz.** The Synthesis of Condensed Ring Compounds. VII. The Successful Use of Ethylene in the Diels-Alder Reaction.

Page 3350. In formula III, V, read  $CH_2$ =CR-CR= $CH_2$ , instead of  $CH_2$ =CHR-CHR= $CH_2$ .—LLOYD M. JOSHEL.

### 1942, Vol. 64

W. R. Forsythe and W. F. Giauque. The Entropies of Nitric Acid and its Mono- and Tri-hydrates. Their Heat Capacities from 15 to 300 °K. The Heats of Dilution at 298.1 °K. The Internal Rotation and Free Energy of Nitric Acid Gas. The Partial Pressures over its Aqueous Solutions.

Pages 59 to 61 and 3069 (Corrn.). Several arithmetical errors have been called to the attention of the authors.

On page 59 the entropy of nitric oxide due to Johnston and Chapman was misquoted and used as 50.53, instead of the correct value 50.35 cal. mole<sup>-1</sup> deg.<sup>-1</sup>; correction leads to the following values for the reaction (equation 19)

$$3NO_2(g) + H_2O(g) = NO(g) + 2HNO_3(g)$$

 $\Delta S_{298.1}^0 = -39.95$  cal. deg.<sup>-1</sup> mole instead of -39.77

 $\Delta F_{298.1}^0 = 2,725 \text{ cal. mole}^{-1} \text{ instead of } 2,671$ 

 $\Delta H_0^0 = -7,205 \text{ cal. mole}^{-1} \text{ instead of } -7,259$ 

This value of  $\Delta H_0^0$  is now in even better agreement with the value  $\Delta H_0^0 = -7,199$  cal. mole<sup>-1</sup> based on equilibrium measurements. The average of these values is -7,203 instead of the previous average -7,230 cal. mole<sup>-1</sup>. For the two additional reactions involved the values of  $\Delta H_0^0$  have been recalculated.

$$H_2O(g) + 2NO_2 + \frac{1}{2}O_2 = 2HNO_3(g)$$

 $\Delta H_0^0 = -19,998 \text{ cal. mole}^{-1} \text{ instead of } -20,025$ 

 $H_2O(g) + {}^3/{}_2O_2 + 2NO = 2HNO_3(g)$ 

 $\Delta H_0^0 = -45,588$  cal. mole<sup>-1</sup> instead of -45,543

Publication of a recalculation of values of the equilibrium constants for the above reactions given in Tables XVIII, XIX and XX, is not justified because the above changes are within the limits of error of the data on which they are based.

There is an additional error relating to equation 25  $HNO_3(l) = HNO_3(g)$ 

 $\Delta F_{298\cdot1}=RT\ln760/62.9=1,476$  cal. mole<sup>-1</sup> instead of the value 1,082. This correction also applies to the reaction given as equation 26.

$$^{1}/_{2}N_{2} + ^{3}/_{2}O_{2} + ^{1}/_{2}H_{2} = HNO_{3}(g)$$

 $\Delta f_{208.1}^0 = -17,554$  cal. mole  $^{-1}$  instead of -17,948, a value also given in the summary. —W. R. Forsythe and W. F. Giauque.

Lewis W. Butz and Lloyd M. Joshel. The Synthesis of Condensed Ring Compounds. VIII. Further Applications of the Dienyne Double Addition Reaction.

Page 1312. In formula III one of the anhydride groups should be attached at carbons 11 and 12 instead of carbons 12 and 18. In formula VII the carbomethoxyl group should be connected to carbon 7 of the nucleus with a solid line instead of a broken line. (See footnote 4, page 1311, for the numbering system used.)—Lloyd M. Joshel.

James G. Baxter and Charles D. Robeson. Crystalline Vitamin A.

Pages 2411, ff. The L values reported in the paper are incorrect because of error in calculation.

The values  $L_{1\,\mathrm{cm}}^{1\%}$  622 m $\mu$  for vitamin A in Table IIa, column 3 should be, reading from top to bottom: 4270, 4310, 4265, 4285, 4225, 4180, 4245, 4105, 4075, 4100, 4110. Similarly, for vitamin A acetate, Table IIb; 3960, 3920, 4000, 3920, 3895, 3935, 3860, 3800, 3800, 3715.

On page 2414, column 2, line 22, read  $4250 \pm 42$  for  $3865 \pm 39$ ; line 24,  $3930 \pm 35$  for  $3570 \pm 40$ ; line 28  $\pm 2.0\%$  for  $\pm 2.2\%$ ; line 32, 4390 for 3990; line 34, 4505 for 4090; line 35, 4400 for 4000; line 43,  $(0.41 \pm 0.004)$  for (0.45 + 0.005); line 44,  $(0.37 \pm 0.004)$  for  $(0.41 \pm 0.005)$ ; lines 47–49, read "is in good agreement with the value of  $0.41 \pm 0.05$  reported by Dann and Evelyn" for "lies between the value of  $0.41 \pm 0.05$  reported by Dann and Evelyn and the value  $0.50 \pm 0.01$  reported by McFarland and Sutherland."

On page 2416, column 2, line 17 of the Summary read 4390 for 3990.—James G. Baxter.

E. H. Woodruff. Phenethylamines. IV. Dimethoxyand Dihydroxyphenyl-n-propylamines ( $\beta$ -Methyl- $\beta$ -phenethylamines).

Page 2860. In Table I, footnote e, for ref. 34, read 25. Page 2861. In Table II, footnote b for ref. 34 read 25. Also, in Tables II, III and IV, for ref. 5, read ref. 28.— E. H. WOODRUFF.