

## 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.

1943, Vol. 65

**Arthur Michael and Howard S. Mason.** Normal Addition of Hydrogen Bromide to 3-Butenoic, 4-Pentenoic and 5-Hexenoic Acids in Hexane.

Page 684. In the last three lines of the last column of Table I, replace  $\epsilon$  by  $\delta$ . In the second text column, third line from the end, for " $\delta$ -bromovaleric," read " $\delta$ -bromocaproic," and in the last line read "Bromocaproic" for "Bromocapric."—HOWARD S. MASON.

**H. E. Ungnade and E. F. Orwoll.** The Gattermann Reaction in the Mono-methoxydiphenyl Ethers.

Page 1738. The Authors write: "We are greatly indebted to Professor H. E. Carter for pointing out to us that the azlactone of 3-phenoxy-4-hydroxybenzaldehyde might be an acetate rather than the free hydroxy compound. The nitrogen analysis agrees with either compound within the normal tolerance. The substance is considered to be the acetate because it is insoluble in aqueous sodium hydroxide solution and does not give a positive Folin test."—H. E. UNGNADE.

**H. K. Clark and J. L. Hoard.** The Crystal Structure of Boron Carbide.

Page 2119. In the first line of column 1, for " $\alpha = 66^\circ 18'$ " read " $\alpha = 65^\circ 18'$ ."—J. L. HOARD.

1944, Vol. 66

**Robert Schuman and A. B. Garrett.** The Vapor Pressure of Beryllium at 1170–1340°K.

Page 443. The Authors write: "Our attention has been called to an error in the calculation of  $\Delta H_0^\circ$  for the vaporization of beryllium metal. This error is due to a misinterpretation of the formula for the free energy function of the gas. Values of  $\Delta H_0^\circ$  have been calculated here for each vapor pressure, instead of from the straight line curve as had been done; this method gives a better mean value of  $\Delta H_0^\circ$ .

"The corrected values of  $\Delta H_0^\circ$  for the individual vapor pressures are given in the table, which is a correction of Table II in the article.

TABLE II

TABLE FOR ALL DETERMINATIONS

T, °K.	log P (atm.)	$(F^\circ - H_0^\circ)/T, \text{ gas}$	$(F^\circ - H_0^\circ)/T, \text{ solid}$		$\Delta H_0^\circ \text{ cal./mole}$
			$(F^\circ - H_0^\circ)/T$	$(F^\circ - H_0^\circ)/T$	
1174	-8.189	-34.415	-4.95	78,590	
1187	-8.405	-34.469	-5.00	80,640	
1193	-8.313	-34.494	-5.02	80,550	
1215	-8.162	-34.585	-5.10	81,210	
1222	-7.809	-34.614	-5.13	79,700	
1227	-7.655	-34.634	-5.15	79,170	
1251	-7.473	-34.730	-5.24	79,690	
1259	-7.179	-34.762	-5.27	78,500	
1271	-7.356	-34.809	-5.31	80,290	
1273	-7.306	-34.817	-5.32	80,120	
1273	-7.206	-34.817	-5.32	79,540	
1281	-7.279	-34.848	-5.35	80,470	

1293	-6.871	-34.894	-5.40	78,800
1305	-6.935	-34.940	-5.44	79,920
1308	-7.023	-34.952	-5.45	80,640
1314	-6.842	-34.974	-5.47	79,920
1326	-6.710	-35.020	-5.51	79,850
1330	-6.614	-35.035	-5.53	79,490
1336	-6.601	-35.057	-5.55	79,790

Av. 79,840  $\pm$  600 cal./mole

"The mean corrected value of  $\Delta H_0^\circ$  is 79,840  $\pm$  600 cal./mole. The corrected values of  $\Delta H_0^\circ$  show no trend with temperature, this indicating an accommodation coefficient for beryllium of nearly unity; the value of unity was also indicated during the experiment by the fact that beryllium did not deposit behind obstructions in the tube during the runs.

"The value of the heat of vaporization at 1250°K. has been calculated using the corrected  $\Delta H_0^\circ$  value by the relation  $\Delta H(1250^\circ\text{K.}) = \Delta H_0^\circ + \int_0^{1250} \Delta C_p dT$ , and found [data on  $C_p$  from K. K. Kelley, Bureau of Mines Bulletins, 350, 15 (1932), and 371, 12 (1934)] to be 80,310  $\pm$  1000 cal./mole. This value is higher than the value of 78,800  $\pm$  2000 cal./mole given by the slope of the log vapor pressure vs.  $1/T$  curve, but is within the relatively high experimental error of the latter."—A. B. GARRETT AND ROBERT SCHUMAN.

**M. L. Wolfrom and J. V. Karabinos.** Carbonyl Reduction by Thioacetal Hydrogenolysis.

Page 910. In column 2, line 46, insert the word "pentaacetate" after "2-desoxy-(*levo*)-sorbitol."—M. L. WOLFROM.

**Richard T. Arnold and Roderick A. Barnes.** The Jacobsen Rearrangement. VIII. Cyclic Systems; Mechanism.

Page 963. In column 2, line 56, for "with one" read "without a." The next line (57) should read "Anal. Calcd. for  $C_{16}H_{17}OCl_3$ : C, 57.92; H, 5.12."—RICHARD T. ARNOLD.

**W. E. White and A. H. Bushey.** Aluminum Phosphide—Preparation and Composition.

Page 1670. In column 1, line 7 from the end, for "5.541" read "5.451."—W. E. WHITE.

**D. H. Templeton and D. D. Davies with W. A. Felsing.** The Heat Capacity of Gaseous 1,3-Butadiene from 0 to 100°.

Page 2035. The equation line 3 should read:

$$C_p^\circ = 3.32 + 0.0516T$$

W. A. FELSING

**William F. Bruce and Harry W. Coover.** Pyridine Derivatives. I. 3-Cyano-4-ethoxymethyl-6-methyl-2-pyridone and Some Related Transformation Products.

Page 2093. In column 2, line 19 from the end, for "9.6 g." read "5.9 g."

Page 2094. In line 2 of the Summary, after "... pyridone," insert, "an intermediate substance in the synthesis of the lactone of 2-methyl-3-hydroxy-4-hydroxymethyl-5-carboxypyridine."—WILLIAM F. BRUCE.

## Subject Index.

Page 2161. In column 1, line 13 from the end should begin "methylphenol."