Additions and Corrections

The Synthesis of Ajmaline [*J. Am. Chem. Soc.*, **89**, 2506 (1967)]. By S. MASAMUNE, SINING K. ANG, CHRISTIAN EGLI, NOBUO NAKATSUKA, S. K. SARKAR, and YUMIKO YASUNARI, Department of Chemistry, University of Alberta, Edmonton, Alberta, Canada.

On page 2507, a double bond (C_2–C_7) should be inserted in structure **12**.

Bicyclo[6.2.0]deca-2,4,6,9-tetraene [*J. Am. Chem. Soc.*, **89**, 4804 (1967)]. By S. MASAMUNE, CLINTON G. CHIN, KO HOJO, and READ T. SEIDNER, Department of Chemistry, University of Alberta, Edmonton, Alberta, Canada.

On page 4805, column 1, the beginning of line 30 should read $k_{46.8°} = (6.9 \pm 0.2) \times 10^{-5}$ sec^{-1}, $k_{74.8°} = (1.72 \pm 0.05) \times 10^{-3}$ sec^{-1}.

Dianion Radicals. I. Enolate and Related Systems [*J. Am. Chem. Soc.*, **89**, 5413 (1967)]. By N. L. BAULD and M. S. BROWN, Department of Chemistry, University of Texas, Austin, Texas 78712.

A *meta* splitting of 0.55 gauss (4 H) was employed in Figure 3, but was not listed in Table I.

Dianion Radicals. II. Tropenide Systems [*J. Am. Chem. Soc.*, **89**, 5417 (1967)]. By N. L. BAULD and M. S. BROWN, Department of Chemistry, University of Texas, Austin, Texas 78712.

On page 5419, for $\sum_j C_{ij}$ read $\sum_j c_{ij}$.

Structure and Reactivity of α,β-Unsaturated Ethers. The Acid-Catalyzed Hydrolysis of Alkenyl Alkyl Ethers [*J. Am. Chem. Soc.*, **89**, 5826 (1967)]. By T. OKUYAMA, T. FUENO, H. NAKATSUJI, and J. FURUKAWA, Department of Synthetic Chemistry, Kyoto University, Kyoto, Japan.

On page 5829, in footnote *d* for Table III, reference 5 should be changed to reference 7, and in footnote *e* for Table III, the value is reported by A. Ledwith and H. J. Woods [*J. Chem. Soc., Sect. B*, 753 (1966)] but not in ref 9.

On page 5830, footnote 27 should read: Also in the case of β-phenylvinyl (or styryl) ethyl ether, the *trans* isomer was found to be more stable than the *cis* isomer and, correspondingly, to be the less amenable to the acid-catalyzed hydrolysis.

The Photoisomerization of 3-Cyclooctenones [*J. Am. Chem. Soc.*, **89**, 6205 (1967)]. By LEO A. PAQUETTE and RICHARD F. EIZEMBER, Department of Chemistry, The Ohio State University, Columbus, Ohio 43210.

On page 6206, column 2, line 11, **4** should read **5**. In the same column, in the sixth line up from the bottom **9** should read **11** and in that same sentence (**11**) should read (**10**).

Aziridines XI. Nitrogen Inversion in N-Haloaziridines [*J. Am. Chem. Soc.*, **90**, 506 (1968)] and **Aziridines XII. Isolation of a Stable Nitrogen Pyramid** [*J. Am. Chem. Soc.*, **90**, 508 (1968)]. By STANLEY J. BROIS, Esso Research and Engineering Company, Linden, New Jersey.

The Figures appearing on pages 507 and 508 were interchanged in press and accordingly should be reversed. Corrected reprints are available from the author.

Book Reviews

Electroanalytical Chemistry, A Series of Advances. Volume 1. Edited by ALLEN J. BARD, Department of Chemistry, University of Texas, Austin, Texas. Marcel Dekker, Inc., 95 Madison Ave., New York, N. Y. 16 × 23.5 cm. $15.75.

The inauguration of another multi-volumed series devoted to reviews of electrochemical research topics inevitably raises the question of need. Two well-established series with similar objectives were already available when "Electroanalytical Chemistry" was begun.

Nevertheless, the appropriateness of this new series is entirely justified by the contents of its first volume. Of the four chapters (AC Polarography and Related Techniques: Theory and Practice by D. M. Smith; Applications of Chronopotentiometry to Problems in Analytical Chemistry by D. G. Davis; Photoelectrochemistry and Electro-luminescence by T. Kuwana; and The Electrical Double Layer, Part I: Elements of Double-Layer Theory by D. M. Mohilner), only one would have been likely to appear in the other two review series.

The distinction between electroanalytical chemists and electrochemists is typically in their training and viewpoint rather than in the kinds of problems they attack or the experimental methods they employ. The existing review series have helped electroanalytical chemists to avoid parochialism by supplying them with large doses of the electrochemists' viewpoint. This new series should serve a similar useful function for electrochemists.

The editor stresses in his preface that one intent of the series is to provide enough space so that self-contained chapters can be pre-

sented with adequate background, experimental details, and derivations of equations to make repeated reference to the original literature unnecessary. This praiseworthy objective is well served by the authors of the first volume: Smith's chapter on AC Polarography is authoritative, comprehensive, and well written. This reader's only disappointment was the relative paucity of real experimental examples of the numerous categories of possible complex electrode reactions discussed. The chapter on analytical applications of chronopotentiometry is relatively brief in keeping with its subject matter. It contains a helpful three-page table summarizing most of the published work on analytically oriented chronopotentiometric experiments. Kuwana covers a rather large amount of ground (elementary theory, photopotentials, photopolarography, electrode irradiation, electrochemiluminescence) in 38 pages and thus does not come as close to meeting the editor's plan for self-contained presentations. Mohilner's chapter on the electrical double layer is a real gem. Not since David Grahame's classic review of 1947 have the elementary aspects of double-layer theory been as clearly and thoughtfully developed. This chapter will doubtless become the standard starting point for discussions of double-layer theory in courses on electrochemistry.

The book is nicely printed, pleasingly laid out, and not overpriced. It is a good beginning to what promises to be an important new review series.

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Technique of Inorganic Chemistry. Volume VI. Edited by HANS B. JONASSEN and ARNOLD WEISSBERGER. Interscience Publishers, John Wiley and Sons, Inc., 605 Third Ave., New York, N. Y. 1966. 271 pp. 15.5 × 23.5 cm. $10.75

The sophisticated techniques of modern chemical research are frequently not clearly described in the literature because of the compact style employed in most journal articles. This has created a great need for authoritative reviews of experimental technique, which is largely met by two series of companion volumes, "Technique of Organic Chemistry" and "Technique of Inorganic Chemistry." The sixth volume in the latter series presents two articles: Vapor Pressure Measurements by R. Cooper and D. R. Stranks, and Techniques of High-Pressure Experimentation by S. E. Babb, Jr.

Cooper and Strank's article is devoted to the measurement of vapor pressures for reactive and corrosive compounds from 0.1 to 760 mm, and also general techniques for the 0.1- to *ca.* 10^{-2}-mm range. No details are given on mercury manometers, ebulliometers, and related apparatus for measurements from 10 to 760 mm on inert compounds, since these have been discussed by G. W. Thompson in Volume I of "Technique of Organic Chemistry." The range of techniques covered is quite broad and includes both static and dynamic methods. This survey should provide an excellent perspective which will be of use in the choice of a favorable technique. In addition, sound advice is offered on topics such as the precision of temperature control required for various degrees of accuracy in the vapor pressure measurement. However, there are significant weaknesses in this presentation which in part stem from brevity. Perhaps the most important is the failure to cite some of the general references in pressure measurements (*e.g.*, Leck's and Dushman's books). Also, direct reading gauges of the metal Bourdon, diaphragm, and quartz spiral type are not adequately covered, presumably because their construction would be excessively tedious. However, these are commercially available and widely used.

Several erroneous ideas are presented. For example, contrary to their statement, kT is not less than the lowest level in the vibrational spectrum for many of the inorganic systems of interest. Also, in the discussion of the complexity of molecular vapors the impression is given that with increasing temperature vapor molecules will decrease in complexity. Actually, when a condensed phase is present the opposite is generally true (Brewer's paradox).

The chapter on high-pressure techniques covers a topic outside this reviewer's area of competence, so the comments here are necessarily descriptive and not critical. The techniques described are those used in work above 1000 bars with emphasis on the properties of cylinders under pressure, production of high pressures, and measurement of high pressures. Many details of shop and laboratory practice are presented and the author freely expresses his opinion on the merits of various techniques. Thus, the chapter appears to offer a working guide as well as a perspective.

The worth of this volume could have been enhanced by more prompt publication (neither review contains references later than 1964) and by a better grouping of topics. In the first connection much of the material in Cooper and Strank's chapter is covered in more detail in a recent edited volume ("The Characterization of High Temperature Vapors," J. L. Margrave, Ed., John Wiley and Sons, Inc., New York, N. Y., 1967). And in the second connection the presentation of two such divergent fields will limit the appeal of this book to individuals. However, every chemical library of significant size should own the series including this volume.

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FRED BASOLO and RALPH G. PEARSON. "Mechanisms of Inorganic Reactions. A Study of Metal Complexes in Solution." Second Edition. John Wiley and Sons, Inc., 605 Third Ave., New York, N. Y. 1967. 701 pp. $17.95.

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