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The present work indicates that solubilization chromatography^{12,13}, a method in which varying concentrations of organic solvents are used as eluents, is superior to salting-out chromatography for the separation of water-insoluble alcohols and ketones in columns of ion-exchange resin.

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Department of Chemistry, Lafayette College,

JOSEPH SHERMA

Easton, Pa. (U.S.A.)

Department of Chemistry, Kansas St. University,

DAVID LOCKE

Manhattan, Kan. (U.S.A.)

Department of Chemistry, Lehigh University,

DAVID BASSETT

Bethlehem, Pa. (U.S.A.)

¹ WM. RIEMAN III AND A. C. BREYER, Treatise on Analytical Chemistry, Vol. 3, Pt. 1, Interscience Publishers Inc., New York, 1961, p. 1572.

- WM. RIEMAN III, J. Chem. Educ., 38 (1961) 338.
 R. SARGENT AND WM. RIEMAN III, J. Phys. Chem., 61 (1957) 354.
 R. SARGENT AND WM. RIEMAN III, Anal. Chim. Acta, 17 (1957) 408.
 R. SARGENT AND WM. RIEMAN III, Anal. Chim. Acta, 18 (1958) 197.
 T. SARGENT AND WM. RIEMAN III, Anal. Chim. Acta, 18 (1958) 197.
- ⁶ F. JAKOB, K. C. PARK, J. CIRIC AND WM. RIEMAN III, Talanta, 8 (1961) 431.
- 7 A. BREYER AND WM. RIEMAN III, Anal. Chim. Acta, 18 (1958) 204.
- ⁸ R. SARGENT AND WM. RIEMAN III, Anal. Chim. Acta, 14 (1956) 381.
- ⁹ H. ROE AND J. MITCHELL, Anal. Chem., 23 (1951) 1758.
- 10 A. J. P. MARTIN AND R. L. M. SYNGE, Biochem. J., 35 (1941) 1385.
- 11 J. BEUKENKAMP AND WM. RIEMAN III, Anal. Chem., 26 (1954) 505.
- ¹² J. SHERMA AND WM. RIEMAN III, Anal. Chim. Acta, 18 (1958) 214.
- ¹³ J. SHERMA AND WM. RIEMAN III, Anal. Chim. Acta, 19 (1958) 134.

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BOOK REVIEWS

Comprehensive Analytical Chemistry, Volume 1B, Classical Analysis, edited by CECIL L. WILSON AND DAVID W. WILSON, Elsevier Publishing Company, Amsterdam, 1960, xxii + 878 pages, price £ 7.15.0; Dfl. 82.00.

The first half of this book (398 pages) deals with inorganic titrimetric analysis. The theory and principles are dealt with by E. BISHOP from a very mathematical point of view. It is adequate in most of its aspects but ignores consistently the more recent results: for example it is inadmissible today to consider the solubility product of Ag₂S as a reaction involving only Ag⁺ and S²-ions. There is an appendix of Tables of Physical Constants, which gives, however, only a selection. Surely a "Comprehensive Analytical Chemistry" should do better than present a mere selection which can be found in every textbook! And even this selection is carelessly compiled: on page 172 (solubility products) appears a compound Hf(OH)₂(OH)₂?, while on page 176 the compound Zr(OH)₄ is mentioned! The reference list of this section has only 29 entries of which 17 are textbooks. The chapter on apparatus by W. I. Stephen (16 pages) seems to contain all essentials. The chapter on acidimetry and alkalimetry by Cora Ayers (17 pages) again contains as few as 29 references, while argentometric, oxidimetric and complexometric methods have 41, 123 and 232 references respectively. Surely some uniformity should be maintained between the various contributions. In spite of these shortcomings titrimetric analysis has been reviewed in its entirety and in much more detail than can be found in textbooks. It is a pity that the book cannot be used as a basis for a literature survey.

M. LEDERER (Rome)

The second half of this book could be described as a complete treatise of organic analysis, which already on its own could be considered as an excellent laboratory handbook. From the revolutionary changes in methods, which are characteristic of the last years, this volume selects and elaborates on the most recent discoveries in this field. Each subject is exhaustively discussed and the various methods critically illustrated with examples found in the literature. Generally for each type of determination the experimental details of the most suitable method are given. Each topic is discussed clearly and exhaustively and is completed by an extensive bibliography and a series of excellent drawings, which could be used as a basis for the construction of apparatus. The authors have dealt extensively with the determination of elements, the determination of functional groups and titration in non-aqueous solvents. The last chapter by T. S. West is particularly interesting as it includes much practical information in a well-ordered manner.

G. B. MARINI-BETTÒLO (Rome)

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Gas Chromatography 1960, edited by R. P. W. Scott, Butterworths, London, 1960, 466 pages, price 95 s.

This volume collects the proceedings of the third symposium on gas chromatography, which was held in Edinburgh in June 1960; this conference was very successful in giving a complete and general view of the present day status of gas chromatography. The volume contains 29 papers dealing with different aspects of gas chromatography and also includes the discussion, which followed each paper.