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## BOOK REVIEW

*Separation and Purification, 3rd Edition*, edited by E. S. Perry and A. Weissberger, Eastman Kodak Company, Rochester, N.Y. Wiley-Interscience, John Wiley and Sons, Inc., 605 Third Ave., New York, N.Y. 1978. xi+438 pp. 16 x 23.5 cm. \$30.00.

*Techniques in Chemistry*, edited by Arnold Weissberger, is a standard series which undoubtedly has a place in most technical libraries. Volume 12 of this series, *Separation and Purification*, edited by E. S. Perry and Arnold Weissberg, is now in its third edition. There are seven chapters in this book, only a few of which in the reviewer's opinion will be of basic interest to the readers and contributors of the Journal of Natural Products. Chapter I, purity; Concept and Reality, is a short discussion and is interesting because of the fact that many of the purity concepts are not generally known. Chapter II, Solvent Selection for Separation Processes, gives some useful information on the physical properties of a variety of solvents and solvent pairs which can be of some general use in natural products. The types of problems discussed, for the most part, are those met in industry and are less likely to be encountered during the isolation of a complex mixture of natural products. Chapter III is the longest chapter in the book, comprising about 120 pages, and deals with liquid-liquid extraction largely from the viewpoint of chemical engineers. The author of the chapter, E. C. Scheibel, has been an expert in the area for many years. There is an exhaustive theoretical and practical discussion of the Craig countercurrent distribution, a methodology initiated and practiced by the late Lyman Craig. The technique, as Scheibel states in his introduction, was useful some years ago but has been largely superseded by high pressure liquid chromatography and probably is now only of historical interest. Those readers with access to the second edition of *Separation and Purification* in this series can probably obtain all the necessary information from the older edition. Chapter IV is a useful chapter on ion exchange chromatography. The properties and uses of many ion exchangers are discussed in detail, and there is a particularly useful discussion dealing with the uses of ion exchange resins in liquid chromatography and high pressure liquid chromatography. Chapter V presents an excellent and informative account of affinity chromatography. The last two chapters, VI and VII, on centrifugation and filter media, respectively, are treated from the viewpoint of a chemical engineer and will probably be of limited interest to the readers of this journal.

Although *Separation and Purification*, along with the entire Weissberger series, belongs in every major technical library, the reviewer cannot recommend its purchase by the individual non-specialist because of the presence of so much old and highly specialized material.

MONROE E. WALL,  
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