

sible overlapping of the phenacetin and *p*-chloroacetanilid spots, and extends the upper limit of detection and estimation of the latter. A typical chromatogram is shown in Fig. 1.

3. By allowing the solvent front to ascend at least 15 cm. from the starting line, resolution of the spots is increased.

Summarizing our results, it was found that the proposed modified procedure provides an improved technique for identifying and estimating *p*-chloroacetanilid, acetanilid, and *p*-phenetid in phenacetin with the aid of TLC.

- (1) Turi, P., and Polesuk, J., *J. Pharm. Sci.*, **56**, 1011 (1967).

PAUL TURI
JERRY POLESUK

Analytical Laboratory
Quality Control Department
Sandoz Pharmaceuticals
Hanover, NJ 07936

Received August 15, 1968.

Accepted for publication September 27, 1968.



Keyphrases

Phenacetin—impurities determination
TLC—analysis, identity
UV light—spot fluorescence

Books

REVIEWS

Atomic Absorption Spectroscopy and Analysis by Atomic Absorption Flame Photometry. By JUAN RAMEREZ MUNOZ. American Elsevier Publishing Co. Inc., 52 Vanderbilt Avenue, New York, NY 10017, 1968. xii + 493 pp. 16 × 23.8 cm. Price \$28.50.

This book is highly recommended for those interested in becoming familiar with this rapidly advancing technique and it will be of interest to the advanced student of atomic absorption. The book is divided into five sections. Part I covers the fundamentals and adequately covers the principals for a beginner. Part II on instrumentation is well written but slightly out of date which is to be expected in such a rapidly moving field. Part III covers the elements applicable to atomic absorption and the sensitivity for these elements whereas Parts IV and V cover methods and application. The book has an excellent bibliography and a very useful appendix.

Reviewed by William J. Mader
Drug Standards Laboratory
American Pharmaceutical
Association Foundation
Washington, DC 20037

A Textbook of Pharmaceutical Analysis. By KENNETH A. CONNORS. John Wiley & Sons, Inc., 605 Third Ave., New York, NY 10016, 1967. xvii + 614 pp. 15.5 × 23.5 cm. Price \$12.50.

This textbook for use in a course in pharmaceutical analysis has a somewhat new approach to the subject—it is not a commentary on the official compendia nor a catalog of assay methods for specific

drugs. It is a presentation of basic concepts with experimentation only to provide the basis for these concepts, so that the reader will understand drug analyses in principle and many in detail. In the preface the author points out that his wish is to enable students to approach with understanding not only the official compendia, but also reference works in analytical chemistry and specialized monographs. He has presented the field of pharmaceutical analysis in five parts—fundamental titrimetric analysis, physical methods of analysis, separation techniques, elemental analysis, and functional group analysis. There are many experiments included and more than 200 problems. Important new subjects included are phase solubility analysis, enzymes as analytical reagents, and decisions an analyst must make when selecting an assay method and interpreting his data.

Staff review

Introduction to Chromatography. By JAMES M. BOBBITT, ARTHUR E. SCHWARTING, and ROY J. GRITTER. Reinhold Book Corporation, 430 Park Avenue, New York, NY 10022, 1968. xii + 160 pp. 15.5 × 23 cm. Price \$3.95. Paperbound.

This is one of the books in the Reinhold Science Studies series, and although small it contains a good deal of information. As its title indicates, the book is meant only to introduce one to the subject and give a practical introduction to the more common techniques in this area. The authors have limited the book to discussions of only three chromatographic techniques: thin-layer, column, and gas. Not included is paper chromatography and although it is so well known the authors note that it is more likely that thin-layer will someday supplant