

BOOK REVIEW

METHODEN DER ORGANISCHEN CHEMIE (Houben-Weyl). Fourth Edition. Edited by Eugen Müller. Volume 1, Part I. Allgemeine Laboratoriumspraxis. Pp. xlii + 1048 (including Index) and 517 illustrations. Georg Thieme Verlag, Stuttgart, 1958. Moleskin, DM.198.00.

This book, as volume I of the sixteen which are to comprise this edition, provides an introduction to the series which is fundamental in its approach to the subject of methods in organic chemistry. The opening chapters on the science of materials used for the construction of laboratory apparatus provides useful information not always readily accessible elsewhere, on subjects such as the physical and chemical properties of glass, plastics and ceramics for special purposes, the structure and mechanical properties of metals, and electrolytic and non-electrolytic corrosion of metals. The information on the storage of chemicals is somewhat limited in its scope, and its inclusion seems to be of doubtful value. The same may also be said of the chapter dealing with apparatus supports. The remaining, and by far largest, section of the book is devoted to the discussion of theoretical and practical aspects of all the major handling techniques of the chemical laboratory. They range in subject matter from the simple and everyday techniques of filtration, centrifugation, crystallisation, drying and distillation to the most modern and complex as exemplified by countercurrent distribution and preparative electrophoresis. Particularly useful are small sections dealing with procedures for breaking emulsions and salting out, and the chapters on redox resins, inclusion compounds and the isolation of compounds by complex formation. An extensive and particularly well written chapter covers the theory and practice of extraction methods, with special reference to the techniques of countercurrent distribution and partition chromatography. A special feature of the latter section is a useful guide to the choice of appropriate solvent systems. As with all volumes of this series, information is clearly and concisely presented, and extensively referenced throughout.

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