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Determination of Organic Compounds: Methods and Procedures, by F. T. WEISS, Wiley, Interscience, New York, 1970, 475 pp., price £ 8.25.

The analytical approach to a problem is different depending on whether its aim is the application of an analytical method or research in a branch of analytical chemistry. The first requires a wide, lateral knowledge of analytical chemistry, while the latter, on contrary, a deep knowledge of a special branch of analytical chemistry. This book by F. T. WEISS gives valuable a help to those chemists working in the field of the application of analytical methods, as he has written in the preface of the book: "My goal has been to be of service to the busy analyst".

The author presents a detailed and critical description of the determination of organic compounds, the methods and procedures being covered in 25 chapters and on 450 pages. The book contains three principal parts, which are as follows:

1. Determination of organic compounds.
2. Analysis of materials.
3. Laboratory methodology and practice.

The methods in the first part deal with the following types of organic compounds: Different types of hydrocarbons, acids, carbonyl compounds, esters, compounds containing the hydroxyl group, polyhydroxy alcohols, phenols, ethers, the alpha-epoxide group, organic bases, non-basic nitrogen compounds and sulfur compounds.

The second part deals with the analysis of polymers, the problems of trace analysis, the analysis of surface active materials and of petroleum and its products.

In the third part, the most important aspects of chromatography, the determination of water, the preparation of common reagents, the most widely used analytical equipment and safety measures for the analytical laboratory are briefly reviewed.

The book, indeed gives valuable help "to the busy chemist" in the choice of methods for use, mainly by means of the following data:

1. Comparison of chemical and instrumental methods, as well as classical and modern methods.
2. Comparison of the accuracy of different methods.
3. The extent of the recovery in the different chemical reactions applied.
4. The interferences among different types of compound to be analysed.
5. Detailed descriptions of the most valuable methods under the headings of: Apparatus; reagents; sampling; procedure; calculations.

For the analyst who wants to obtain deeper knowledge in a certain branch of analytical chemistry the references to the special literature for different analytical fields are given.

A disadvantage, however, is that the literature cited is not recent enough and the attention paid to the chemical methods seems to be greater than their application in analytical practice.

One of the great assets of the book is the author's "personal knowledge of the validity and limitations of the methods".

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