

## Reviews

PRACTICAL PHARMACEUTICAL CHEMISTRY. By F. N. APPELEYARD, B.Sc., F.I.C., Ph.C., and C. G. LYONS, M.A., Ph.D., A.I.C. 4th Edition. Pp. 174 + vii. London: Sir Isaac Pitman & Sons. 1939. Price 6s. 6d.

The appearance of a fourth edition of this useful little manual is in itself a sufficient recommendation of its value in the training of pharmacists. The previous edition was made necessary by certain alterations in the syllabus for the Chemist and Druggist Qualifying Examination, for which the book is specially written, and in this edition the new material, chiefly concerned with qualitative organic analysis, has been extended.

Nearly half the book is devoted to exercises on volumetric analysis, some of which could possibly be omitted in a future edition without detracting from the book's usefulness. In addition, there are short chapters, presumably adequate for their purpose, on gravimetric analysis, official limit tests, alkaloidal assay processes and, rather unexpectedly, the preparation of organic compounds. All the exercises are carefully selected, both for their value as a means of learning chemistry and for their interest to the future pharmacist as being carried out on substances that are of importance pharmaceutically. The final chapter, on qualitative organic analysis, contains the most recent additions and is a bold attempt to compress a difficult subject into a small space. Again the examples given are substances of pharmaceutical importance.

The book is carefully written and the instructions are clear and precise. Indeed, the only fault that can be found with the book is that it is a little too precise. Its instructions do not allow of any initiative—or of any mistakes even—and are reminiscent of the official methods of assay in the British Pharmacopoeia, to which, in a way, the book serves as an introduction. One feels that the student may finish his course with the impression that he now knows all there is to know about analytical and organic chemistry, when in effect he has learned a little about the behaviour of a few of the more important compounds that have applications in pharmacy.

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ANNUAL REPORTS OF THE PROGRESS OF APPLIED CHEMISTRY. Vol. XXIV for 1939. Issued by the Society of Chemical Industry. Pp. 756. Price to members, 7s. 6d.; to non-members, 12s. 6d.

In praise of the current volume of this well-known annual series of reports it is sufficient to say that it has all the virtues accorded by reviewers to its predecessors. The reports are arranged under the now familiar headings, and each contains the detailed account of progress in the past year required by the specialist, skilfully presented so as to form a lucid survey intelligible to the general reader.

In some of the reports progress in analytical work in a particular field is made the subject of a special section, in others it is not separated from the general subject-matter. Although there are no recorded advances in analytical procedure so outstanding as to merit special mention, the analytical chemist will find much that is applicable, either directly or with modification, to his own problems.

There are indications that many of the reports were cast into their final form some three months after the outbreak of war, and numerous references to our national needs are scattered throughout the volume. The reader will find comforting assurances that our chemical industries are fully prepared to deal with the demands that are, and will be, placed upon them.

Reports such as these must of necessity contain much highly specialised technical language. This has been used judiciously and never leads to obscurity, although there are a few brief instances of its degeneration into the cacophonous jargon associated with some industrial operations. Of the very few typographical errors (the phrase "substitutes to petrol" on p. 56 is presumably one of these), the only serious one is the appearance of "cistine" instead of "cystine" in the subject index. In one report the phrase "substituted by" affords an example of the use of "substitute" as if it were synonymous with "replace"—an error occurring with irritating frequency in contemporary scientific literature. These, however, are minor faults in a volume that presents a comprehensive survey of the work of the past year in a concise, interesting and often entertaining manner.

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