terms and laboratory jargon sprung on him in later chapters without further explanation. Finally, it is slightly disturbing to find in one or two places that the author has not really understood everything he is writing about, as in the rather mixed-up discussion of chromosome replication. But these criticisms should not weigh heavily against the fact that so far this is the only book available in which all these important matters are well-presented together. I, therefore, recommend "The Molecular Basis of Evolution" to the general scientific audience, for after spending a few pleasurable hours with this book almost everyone will be sure to get a pretty fair idea of what molecular biology (though not evolution) is all about.

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GUNTHER S. STENT

Chemistry of Carbon Compounds. Volume IV, Part B. Heterocyclic Compounds. Edited by E. H. Rodd, D.I.C., D.Sc., F.C.G.I., F.R.I.C. D. Van Nostrand Company, Inc., 120 Alexander Street, Princeton, New Jersey. 1959. xviii + 654 pp. 15.5 × 23 cm. Price, \$24.00.

Part B of the heterocyclic section, Volume IV, of what has come to be known as Rodd, has now appeared, and treats compounds with six-membered rings containing oxygen and sulfur and related natural products, compounds containing two fused five or six-membered rings each containing one hetero atom, cyanine dyes, compounds of the indigo group, pyrrole pigments, compounds containing unusual hetero atoms and, finally, compounds with six-membered rings containing two nitrogen atoms.

It is the second volume of the series to contain a chapter by one of its distinguished advisors, the chapter on Brazilian and Haematoxylin having been prepared by Sir Robert Robinson. Other contributors are G. de W. Anderson, Ishbel G. M. Campbell, N. Campbell, J. K. Landquist, G. R. Ramage and T. S. Stevens.

Rodd is the authoritative text in the English language, and the appearance of this penultimate volume is welcome.

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MARSHALL GATES

Methoden der Organischen Chemie (Houben-Weyl). Vierte, Völlig Neu Gestaltete Auflage. Band I. Allgemeine Laboratoriumspraxis. Teil 2. Edited by Eugen Müller, Tübingen. With O. Bayer, Leverkusen, H. Meerwein, Marburg, and K. Ziegler, Mülleim. Georg Thieme Verlag, Herdweg 63, Stuttgart, Germany. 1959. xiv + 1017 pp. 18 × 26 cm. Price, \$46.65; subscription price, \$42.00.

In 1953, it was my privilege to welcome, on behalf of the Journal, the fourth edition of the great compendium under review, and the reader is referred to those pages for a general appraisal of the series.

The volume at hand completes the section devoted to "General Laboratory Practice" and again covers operations ranging from work in laboratory glassware to pilot-plant preparations. The first section deals with comminution of solids, and mixing of phases, as in emulsions or as in foams. The American chemist or chemical engineer may find this section interesting but of limited value because, naturally, it is addressed to an audience accustomed to the use of Central European machinery.

Central European machinery.

Under the heading "General Laboratory Methods" we lear about operations which are not routine laboratory occurrences, but a discussion of which will be found helpful by all those who suddenly face one of these situations. The material deals with the accurate measurement of liquid and gaseous flow, preparation and purification of gases, operations under exclusion of air and moisture, handling of explosives, working under pressure or in vacuo, temperature control and measurement, and finally micro-preparative methods. The American reader may find suggestions unfamiliar to him among the wealth of arts and crafts compiled here, and he may welcome the convenience of having them available in one volume.

There follow two excellent and useful sections treating common solvents and their purification and the properties of laboratory drying agents.

Another chapter deals with the prevention and first aid in case of accidents, by such agencies as mechanical means, fire, explosions, corrosive substances, poisons, electricity, and radioactive compounds. A table of dangerous compounds concludes the section, perusal of which can be recommended to every chemist. The final and unique chapter describes known chemical carcinogens, and endeavors to guide the practicing chemist to exercise reasonable care in handling those insidious substances that are lacking "acute toxicity" in doses capable of triggering malignant growth long after exposure.

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