dispensable, whatever they may think of it as an *ecology* text.

There are some 26 pages of references and a 35-page index. There seems to be an unnecessarily large number of typographical errors, especially in proper names; this should be taken care of in the next printing.

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Environmental Sanitation. Joseph A. Salvato, Jr. Wiley, New York; Chapman and Hall, London, 1958. xiii + 660 pp. Illus. $12.

This new text is the first, to my knowledge, that comprehensively treats the sanitation problems associated with the satellite communities that are flourishing in the rapid expansion of the suburbs. In his preface, the author acknowledges that many excellent texts are available which present the theory of sanitation practice appropriately for classroom and reference use. Most of these stress applications common to cities and towns with more than 5000 population. Others, under the general heading of "rural sanitation," lay stress on the individual farm household. First-hand experience with the activities and administration of sanitation services at the local-health-department level have added strength to the organization and content of this text.

An important aspect of this publication is the effort that is made to cover the everyday problems of the sanitary engineer and the sanitarian that arise in the course of their dealings with local government units. Such features include guidance on filling out forms for reporting on disease outbreaks, procedures for cement-grouting in the protection of wells, form letters on the design of private sewerage systems, check lists for inspection of food establishments, suggestions on how to serve as an expert witness during enforcement procedures, and information in a wide variety of administrative mechanisms.

A rather broad coverage of communicable diseases occupies the first chapter; this is followed by a brief presentation on steps to be taken in planning a facility. The remainder of the text is about equally distributed among seven chapters, covering water supply; sewage and waste treatment and disposal; swimming pools and bathing beaches; food; insects, rodents, and noxious weeds; housing; and environmental sanitation administration. The four appendixes present definitions of terms used in the text, excerpts from the "Public Health Service Drinking Water Standards" (1946), regulations relating to bottled water (California), and a most helpful grouping of miscellaneous data on weights, measures, computation of power requirements, and fluid flow and cost comparisons.

Generous use of illustrations, graphs, and charts adds to the utility of the presentation. Examples of design computations provide a ready guide to the proper use of formulae and design data. The generous number of footnotes for bibliographic reference will be of aid in more intensive study of specific items.

It is surprising that there is only passing reference throughout the text to the problems of radiation protection. As with most first editions of such a text, there are also some lesser errors of omission that will require supplementation when the book is used in teaching. An example is the reference to the advantages of positive-displacement pumps without any notation of the need for pressure-relief valves to protect such systems from excessive pressures. These defects are minor, however, and the author is to be complimented for undertaking to bring together so much material that many of us had to learn by the trial-and-error method.

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The Effects of Radiation on Materials. J. J. Harwood, Henry H. Hausner, J. G. Morse, W. G. Rauch, Eds. Reinhold, New York; Chapman and Hall, London, 1958. v + 355 pp. Illus. $10.50.

In March 1957 a colloquium on "The Effects of Radiation on Materials" was held at Johns Hopkins University, in Baltimore; sponsors were the Office of Naval Research and the Martin Company. This book is a compilation of the talks delivered at the conference, plus an extensive bibliography (nearly 800 references) concerning the effects of irradiation on solids and liquids.

It seems that the organizers of the conference have been rather successful in their aim to bring together a number of contributions which appeal to such different groups as physicists, chemists, engineers, manufacturers of structural components, and students of nuclear engineering. This does not mean that the collection is particularly homogeneous; it is obvious that bridges between the different areas of interest still have to be built.

The standard introductory article by Dienes presents the necessary theoretical background on different kinds of defects, number of displaced atoms, threshold energy, and so forth, and compares the theory with some experimental data. J. C. Wilson discusses radiation sources and experimental techniques, with emphasis on reactor facilities. The extent to which corrosion and surface properties of metals and alloys can be affected by radiation is discussed by M. T. Simnad.

Irradiation effects in different classes of solids are surveyed in three chapters, on metals and alloys (Billington), dielectrics (Smoluchowski), and semiconductors (Fan). The last two papers show clearly that an understanding of the mechanism of radiation damage in a particular material can be obtained only as a result of extensive research on the behavior of defects in such a substance (for example, alkali halides and germanium).

These papers are followed by two contributions devoted somewhat more specifically to engineering. C. E. Weber deals with the behavior and performance of core components (for example, fuel elements), while G. R. Hennig discusses radiation effects on a variety of reactor materials, including liquid and solid moderators.

The final chapters are devoted to organic substances. The status of radiation chemistry of organic compounds is reviewed by M. Burton; radiation effects on polymers and graft copolymerization induced by radiation are discussed by A. Charlesby and by A. J. Restaino, respectively.

To sum up, this collection of papers gives a reasonable picture of our present knowledge (and ignorance) in the rapidly moving field of radiation. One might hope, however, that in the near future a single author will muster the courage to review this field from a central point of view.

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Current Concepts of Positive Mental Health. Joint Commission on Mental Illness and Health, Monograph Series, No. 1. Marie Jahoda. Basic Books, New York, 1958. xxii + 136 pp. $2.75.

The first monograph resulting from the three years of intensive investigation and research of the ambitious Joint Commission on Mental Illness and Health is a noteworthy publication for two reasons. It contains as clear and authoritative a discussion of the nature of mental health as we are likely to get for several years. It also discloses the wide divergence in points of view of many psychiatrists and physicians, who think of mental health as absence of disease, and of a smaller