

## BOOK REVIEWS

**RADIOPHARMACY.** Manuel Tubis and Walter Wolf, editors. Wiley, New York, 1976, 911 pp, \$45.50.

The emergence of radiopharmacy as a viable, respected discipline has demanded a special text/reference book devoted to this subject. This need has been admirably fulfilled by *Radiopharmacy*. Edited by Dr. Manuel Tubis and Dr. Walter Wolf, both of whom also wrote several chapters, *Radiopharmacy* is a timely, comprehensive, authoritative contribution. Drs. Tubis and Wolf are pioneers in radiopharmaceutical science, by virtue of original work in the field, and they have produced a book which accurately reflects both the integrated multidisciplinary nature of radiopharmacy and the individual character of the scientific and medical specialties upon which it is based.

The book is divided into six main sections: history, physics and instrumentation, biology, chemistry, radiopharmaceutics, and nuclear medicine. The order and organization of these sections, the detailed outline at the beginning of each chapter, and the comprehensive index at the end of the book are all well done and very helpful to the reader. As might be expected in a work of such scope, some topics are better presented than others. A few discussions are rather superficial, lacking sufficient depth to be of serious value. Fortunately, the detailed references provided throughout serve to guide the interested reader to detailed study in a specific area.

Although one might have expected to see more of the well-known leaders in radiopharmaceutical science included among the contributors, each of the authors is well qualified in his or her field. The book is as up-to-date as its inherent publication time, coupled with the dynamic nature of radiopharmacy and nuclear medicine, has permitted. It is incumbent upon the reader to keep abreast of the current literature for information on the latest radiopharmaceuticals and techniques, many of which will undoubtedly be included in any subsequent editions of the book. Although the price of the book may seem high, it probably is not unreasonable in terms of the book's size and complexity.

In short, *Radiopharmacy* is a book which will be used by teachers for preparing lectures, by students and practitioners as a source of background material, and by research investigators as a fast, convenient reference source. It is highly recommended.

JOHN F. HARWIG, Ph.D.  
University of Southern California  
Los Angeles, California

**HOLOGRAPHY IN MEDICINE.** Proceedings of the International Symposium on Holography in Biomedical Sciences, New York, 1973. Pal Greguss, editor. Surrey, England, IPC Science and Technology Press, 1975, 149 pp, £9.00.

This book contains the papers delivered at a symposium on holography held in honor of the 25th anniversary of the publishing of the first paper on the subject. Dr. Dennis Gabor won a Nobel prize for the discovery of holography in 1948. Included in this volume are approximately 30 scientific papers of which the first seven are primarily basic tutorial introductions to the principles of holography. All of these introductory articles are written and illustrated at a level that should be readily comprehended by anyone in the scientific community. Dr. Gabor himself has written a fine "folksy" review of his 25 years in the field. Several articles in the second section, entitled "Holography as a Diagnostic Tool," will be of special interest to the radiologic scientist. Drs. Barrett, DeMeester, and Wilson describe their unique application of "coded apertures" to scintigraphic imaging. The basic principles of their "zone plate" technique are well presented. Although they admit that the clinical feasibility of this type of holography has not yet been seen, they do present some early clinical images. Jacobs and Kenney report on a "dynamic radiographic system" which they have developed to "analyze the dynamic state of biological systems using penetrating radiation as the probe." This research has led to the development of a two-channel radio-cardiograph which can be used with existing medical fluorographic equipment. A section of four papers nicely covers the application of holography to ophthalmology. The remaining third of the book is a potpourri of bioholographic adventures with special emphasis on modeling auditory and neural pathways. Several interesting papers describe how memory and, indeed, the brain may be seen as a holographic process.

This book is recommended reading for one who might wish to become introduced to current concepts in holography as applied to medical problems. The general appearance is quite pleasant and the figures are ample and quite helpful. The editor has done a good job in requiring a generous supply of references following each paper. Although I doubt if many physicians would want to add this volume to their private collections, I do believe that it would be a valuable addition to any medical library.

LLOYD G. KNOWLES, Ph.D.  
Johns Hopkins Medical Institutions  
Baltimore, Maryland