Physics for Medical Students. J. S. Rogers. Melbourne Univ. Press, Melbourne and Cambridge Univ. Press, New York, ed. 3, 1953. 405 pp. Illus. $5.50.

"Supplementary readings in physics for medical students" would perhaps be a more descriptive title for this book. As stated in the preface, the author proposes

> . . . to supplement those textbooks which have been written for first year university students studying for degrees of Science and Engineering. The aim has been to create interest by illustrating the principles of physics with application to physiology and medicine. . . . A somewhat full treatment has been given to those parts of the subject which appear to be of importance to a medical graduate, particularly to one interested in research where physical principles are involved.

In carrying out his purpose, the author does not "slant" the treatment of the subject so as to appeal exclusively to the medical student. The topics considered and the methods of approach stand on their own merits as sound basic physics.

The first edition of this book appeared just 20 years ago. In 16 chapters it covered an equal number of topics, including an outline of the historical development of physics. The present edition includes this early material, practically unchanged, together with 10 additional topics and chapters. The new material is concerned with the recent developments and applications of physics. Some of the chapter headings and topics taken at random are as follows: III, "Osmosis"; IV, "Surface phenomena"; VI, "Blood pressure and its measurement"; VIII, "The measurement of body temperature"; XII, "The human eye"; XVII, "Electrons, thermions, and thermionic valves"; XIX, "The electron microscope"; XXII, "Modern methods for the acceleration of ions to high energies"; XXIV, "Atomic energy"; XXVI, "Therapeutic use of x- and gamma rays."

Each chapter is a unit within itself and may be read or studied without reference to previous chapters. Mathematical considerations are simple and have been kept to a minimum. Line drawings are good and are used freely. The general layout, sectioning, type size, printing, table of contents, index, and so forth, all add up to make a favorable impression on the reader. The book is free of glaring errors, typographical errors, and ambiguous statements. The references cited (two or three per chapter) are usually to books rather than to original literature. The subject of anatomical mechanics (that is, forces, levers, stresses) is not touched upon.

The medical student may find too little medicine in parts of *Physics for Medical Students,* but on the whole the author has succeeded in his purpose. All serious-minded students and teachers of elementary physics will find this little volume interesting and helpful reading.

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Inorganic Syntheses. vol. IV. John C. Bailar, Jr., Ed. McGraw-Hill, New York, 1953. 218 pp. Illus. $5.

The present volume is an excellent addition to this series. Detailed directions are given for 58 laboratory-size preparations, some of which describe more than one compound. Most of these substances are not available commercially.

The preparations are arranged according to the periodic group of the principal element, as in earlier volumes. For the first time, however, most of the halides have been grouped together in a systematic and useful chapter. A rather large number of phosphorus compounds are also described. The subject and formula indexes include the contents of volumes I, II, and III. This is very important, since closely related compounds may be found in different volumes, owing to the random fashion in which manuscripts are obtained.

Each preparation has been offered by an author who has had experience with it, and his work has been checked in another laboratory by a different group of chemists. The precautions that are necessary are clearly indicated. With reasonable care, the procedure is quite certain to give the yield and purity figures that are claimed.

The procedures described in *Inorganic Syntheses* are surely not the only ones, and they are probably not even the best procedures, if we allow for future developments. However, the distinct advantages of this book are that the methods have been both carefully selected and sufficiently studied so that they are of known dependability. In these respects, the book is heartily recommended to chemists.

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Bailey's Text-Book of Histology. Revised by Philip E. Smith and Wilfred M. Copenhaver. Williams & Wilkins, Baltimore, ed. 13, 1953. xviii + 775 pp. Illus. + plates. $9.

This well-known and widely used textbook, planned by the authors for use by first-year medical and dental students, continues to incorporate the qualities that have determined its popularity and utility in the past. The general plan of the book remains unchanged. A consideration of the structure and functions of the cell, augmented by brief evaluations of current histological and cytological methods of study of both living and preserved material, is followed, in usual sequence, by the fundamental tissues and organ systems. The present edition has been enriched without becoming burdensome by the inclusion of much significant data and illustrations from recently developed techniques for the analysis of cell structure and function.

The authors have utilized wherever possible a functional approach to the study of structure, thereby increasing interest as well as facilitating comprehension of otherwise difficult topics. Short statements of developmental processes clarify many subjects, but per-