

Book Reviews

Isotopic tracers and nuclear radiations: With applications to biology and medicine. William E. Siri. New York-London: McGraw-Hill, 1949. Pp. xiii + 653. (Illustrated.) \$12.50.

This book is a completely rewritten version of "A. F. Technical Report No. 5669," originally prepared for the Army Air Forces. It is primarily a reference book for research workers and not suited as a text for students either in content or in price. Those who expect just another book on isotopes will be pleasantly surprised to find something much superior. It contains many sections which are solidly filled with useful material, concisely presented and conveniently arranged. The complete Seaborg and Perlman table of isotopes would make a lesser book top-heavy. Its inclusion here is taken for granted.

Over half of the book is devoted to physics. Here, where one expects the usual trivia, one finds instead an extremely thorough review of basic principles of nuclear physics, including a very comprehensive treatment of the interaction of ionizing radiations with matter. The method of presentation correctly ignores the historical approach and begins with the basic factors of nuclear stability. The inclusion of a section on neutron theory is perhaps to be expected, but no discussion of reactors

follows. The text is liberally sprinkled with useful graphs and tables and each chapter is concluded with many literature references. A peculiar feature is that the names of many authors are consistently misspelled.

Although Part III, on the biological and medical applications, will soon be dated, this is the difficulty which any writer on this subject faces at the present time. Many will appreciate the fine bibliography of nearly 100 pages. A certain degree of organization has been achieved in a badly cluttered field. Chapter 29, on isotopes in therapy and diagnosis, is written with laudable restraint.

A few people will feel that the book is overbalanced in favor of physics, and that the treatment of such topics as radioautographs and hot laboratory technique is thus too brief. The chapter on the theory of tracer methods is incomplete, and one misses a section on radiation chemistry. Occasional misprints are found; on page 174, F^{28} should be Fe^{58} . In spite of these points, the book will be a very useful practical tool to the investigator and will certainly be found within close reach on many desks during the next few years.

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Scientific Book Register

DOWSON, W. J. *Manual of bacterial plant diseases.* London (W.I): A. & C. Black, 1949. Pp. viii + 183. (Illustrated.) 16s. net.

FULLER, HARRY J., and TIPPO, OSWALD. *College botany.* New York: Henry Holt, 1949. Pp. xiv + 993. (Illustrated.) \$5.75.

GOODENOUGH, FLORENCE L. *Mental testing: Its history, principles, and applications.* New York: Rinehart, 1949. Pp. xix + 609. (Illustrated.) \$5.00.

HALE, WILLIAM J. *Farmer victorious: Money, mart, and mother earth.* New York: Coward-McCann, 1949. Pp. xii + 241. \$3.00.

HERRICK, JAMES B. *Memories of eighty years.* Chicago: Univ. Chicago Press, 1949. Pp. ix + 270. (Illustrated.) \$5.00.

HULL, GORDON FERRIE. *Elementary modern physics.* (Revision of *Elementary survey of modern physics.*) New York: Macmillan, 1949. Pp. xvi + 503. (Illustrated.) \$5.25.

JACOBSON, C. A. (Ed.) *Encyclopedia of chemical reactions.* (Vol. III, cobalt through iridium.) New York: Reinhold, 1949. Pp. xi + 842. \$12.00.

KRAMER, PAUL J. *Plant and soil water relationships.* New York: McGraw-Hill, 1949. Pp. xiii + 347. (Illustrated.) \$4.50.

LAWRENCE, MERLE. *Studies in human behavior: A laboratory manual in general psychology organized to stress the basic principles of individual and group behavior with emphasis on perception.* Princeton, N. J.: Princeton Univ. Press, 1949. Pp. x + 184. (Illustrated.) \$3.50.

LEVER, WALTER F. *Histopathology of the skin.* Philadelphia: J. B. Lippincott, 1949. Pp. xv + 449. (Illustrated.) \$10.00.

MARTIN, JOHN H., and LEONARD, WARREN H. *Principles of field crop production.* New York: Macmillan, 1949. Pp. ix + 1176. (Illustrated.) \$6.00.

MILLER, A. R. *The adsorption of gases on solids.* (Sequel to the Cambridge Physical Tract *Some problems in adsorption* by J. K. Roberts.) New York: Cambridge Univ. Press, 1949. Pp. viii + 133. (Illustrated.) \$2.50.

Non-linear problems in mechanics of continua. (Proceedings of Symposia in Applied Mathematics, Vol. I.) New York: American Mathematical Society, 1949. Pp. vii + 219. (Illustrated.) \$5.25.

ROBINSON, JUDITH. *Tom Cullen of Baltimore.* New York: Oxford Univ. Press, 1949. Pp. xii + 435. (Illustrated.) \$3.50.

SCOTT, MERIT. *Mechanics: statics and dynamics.* New York: McGraw-Hill, 1949. Pp. xi + 394. (Illustrated.) \$4.50.