

tion; III. Physiology of Reproduction; and IV. Growth Hormone and Metabolism. There are three to five papers in each section and of them all, Section I is the most highly technical and least likely to appeal to the general reader. I was most interested in Section II and grateful for the opportunity to sit on the sidelines, so to speak, and watch a new and, to be sure, incomplete concept of disease being hammered out in the discussion.

Some new advances are recorded, particularly in Sections III and IV. The paper on relaxin was welcome as well as stimulating, as was the discussion of the growth hormone and its possible relation to diabetes. Their inclusion was timely and added considerably to the value of the book. As a paper on fetal endocrinology was included in this volume, perhaps it is not too much to expect something on invertebrate endocrinology or comparative vertebrate endocrinology in the near future.

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***Probability and Information Theory, with Applications to Radar.*** P. M. Woodward. McGraw-Hill, New York; Pergamon Press, London, 1953. 128 pp. Illus. \$4.50.

This attractively printed and charmingly written little book lives up to the promise of its prefaces (editor's and author's), but the description on the dust cover is somewhat misleading, for, quoting the latter, "It is directed toward the reader who, without any highly advanced mathematical knowledge, wishes to link his practical intuition and experience with precise mathematical theory." Such a reader, if he has no knowledge of probability, complex variable, Fourier transforms, and advanced circuit theory, will capitulate early. The superior senior undergraduate in engineering or physics, the graduate student, and the specialist should enjoy this succinct treatment of the field.

The first chapter, on probability, discusses the basic concepts, Bernoulli's theorem, moments, generating functions, characteristic functions, the convolution integral, Poisson and normal distributions and entropy as a measure of spread—all this and more in 25 pages. Twenty pages cover wave-form analysis and noise (including Parseval's theorem and the sampling theorem); approximately the same space is devoted to information theory. The remaining four of the seven chapters deal with the statistical problem of reception, theory of radar reception, the mathematical analysis of radar information, and the transmitted radar signal. These are based, for the most part, on several articles by the author and I. L. Davies and will interest the specialist.

In my opinion, the book would benefit from (i) a more extensive bibliography (only nine references are given—none to Wiener and many other important contributors); (ii) inclusion of a discussion of important relevant topics, for example, filtering and pre-

diction, which are touched on too briefly or entirely omitted; and (iii) more detailed development (the book would be short and still concise at twice its present length). It is to be hoped that the author will attempt this in a future edition, the more so as his expository skill is clearly high.

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## New Books

***Psychische Komponenten der Sinnesorgane.*** Eine Psychophysische Hypothese. Bernhard Rensch. Georg Thieme Verlag, Stuttgart, Germany, 1952. 200 pp. Illus. DM 22.50.

***Soil and Fertilizer Phosphorus in Crop Nutrition.*** Agronomy Ser. Vol. IV. W. H. Pierre and A. G. Norman, Eds. Academic Press, New York, 1953. 492 pp. Illus. \$9.

***Elementary Introduction to Molecular Spectra.*** Børge Bak. North-Holland, Amsterdam; Interscience, New York, 1954. 125 pp. Illus.

***Organic Chemistry.*** A brief course. Robert Ward Getchell. McGraw-Hill, New York, 1954. 278 pp. \$4.

***Soft Magnetic Materials for Telecommunications.*** A symposium held at the Post Office Engineering Research Station in April, 1952. C. E. Richards and A. C. Lynch, Eds. Interscience, New York; Pergamon Press, London, 1953. 346 pp. Illus. + plates. \$9.

***An Introduction to Laboratory Technique in Bacteriology.*** ed. 3. Max Levine. Macmillan, New York, 1954. 413 pp. Illus. + plate. \$4.50.

***Television Receiver Design.*** Monograph 2. Flywheel Synchronization of Saw-tooth Generators. Electronic Valves, Book VIII B. P. A. Neeteson. Philips' Technical Library, Eindhoven, Netherlands, 1953. U.S. distr.: Elsevier Press, Houston. 156 pp. Illus.

***Connective Tissues.*** Transactions of the Fourth Conference, Feb. 18–20, 1953. Charles Ragan, Ed. Josiah Macy, Jr. Foundation, New York, 1953. 197 pp. Illus. \$3.75.

***Complex Variable Theory and Transform Calculus.*** ed. 2. With technical applications. N. W. McLachland. Cambridge Univ. Press, New York, 1953. 388 pp. Illus. \$10.

***II Cancro:*** Cause e meccanismo delle proliferazioni. Vol. I. Camillo Brioschi Editore, Milan, 1953. 421 pp.

***II Cancro:*** Biologia del tessuto neoplastico. Vol. II. Camillo Brioschi Editore, Milan, 1953. 743 pp.

***Soils and Fertilizers.*** ed. 4. Firman E. Bear. Wiley, New York; Chapman & Hall, London, 1953. 420 pp. Illus. \$6.

***Biochemistry and Physiology of Nutrition,*** Vol. I. Geoffrey H. Bourne and George W. Kidder, Eds. Academic Press, New York, 1953. 569 pp. Illus. \$13.

***Renal Function.*** Transactions of the Fourth Conference, Oct. 22–24, 1952. Stanley E. Bradley, Ed. Josiah Macy, Jr. Foundation, New York, 1953. 189 pp. Illus. \$3.50.

***Bakteriologische Nährboden.*** Ausgewählte Nährbodenrezepturen für das Medizinisch-Bakteriologische Laboratorium. Lothar Hallmann. Georg Thieme Verlag, Stuttgart, Germany, 1953. 252 pp. Illus. DM 19.80.

***Intertidal Invertebrates of the Central California Coast.*** S. F. Light's *Laboratory and Field Text in Invertebrate Zoology*, rev. by Ralph I. Smith *et al.* Univ. of California Press, Berkeley, 1954. 446 pp. Illus. \$5.