the uncorrected indication of any instrument that comes to hand, but that he will want to understand the theory and operation and thus be able to make a critical analysis of the accuracy of any set of measurements. The topics listed above are discussed in a manner consistent with this viewpoint, including a description of each instrument, the history of its development, types of measurements for which it is used, the mathematical theory applicable to its various uses, description of the physical behavior under various operating conditions, definition of constants characterizing the instrument, discussion of sensitivity, stability, and the parameters influencing performance, characteristics of the commonly available commercial forms of the instrument, and factors involved in selecting the best type for a given job. The book is not a laboratory manual, however, and does not contain directions for specific experiments. Nevertheless, the instructor can readily devise his own experiments from the information given about the performance, calibration, and checking of instruments and bridges.

V. A. JOHNSON
Department of Physics, Purdue University

A Colored Atlas of Some Vertebrates from Ceylon: Fishes, Vol. I. Ceylon National Museums Pub. P. E. P. Deraniyagala. Colombo: Ceylon Govt. Press, 1952. 149 pp. and 34 color plates.

This nicely bound, black-covered volume with gold lettering measures 10½ by 12½ inches. Although it may have been intended for students of general natural history, this atlas has features that make it a work on systematic ichthyology. All the colored illustrations were prepared by the author "from living specimens and a few from freshly killed ones." Some are so intensely colored with brilliant ink that, in many instances, details are lost in the reproduction process, resulting in an unnatural appearance.

The atlas "deals with all the strictly freshwater fishes of the Island and a few marine families, [and] the scientific, local, and popular names of each species are given in the text." Among those illustrated in color, 18 are marine species.

The text consists of keys to families, genera, and species. A page is devoted to the zoogeography of Ceylon, 4 to fossil fishes (mostly teeth), and the remainder to descriptions and observations concerning the 129 species of recent fishes treated. The 60 text figures are more carefully done than the somewhat diagrammatic color plates.

From the point of view of a specialist working in systematic ichthyology, this atlas has some shortcomings. There is evidence that the author has not made extensive comparisons of the fish fauna of Ceylon with that of other related areas and, as a result, has not come to the correct conclusions in regard to certain names used. For example, he refers to *Gymnothorax fimbriatus* as a subspecies of *G. undulatus,* whereas both are distinct species. In his "schematic fish" showing external characters, and how measured, the "standard length, caudal peduncle, head [length] and origin of first dorsal" are not defined as currently used in ichthyology. There is one new ordinal name—Mastocembeli. Two new subspecies were named: *Labeo porcellus lankae* was established loosely as regards present-day standards, since it "differs from the 'forma typica' in its smaller size," whereas *Anabas testudineus kavaiya* "differs from the forma typica in showing some specimens with XV [spines]," yet no statistical tables comparing *Anabas testudineus testudineus* with the new subspecies are given.

The author points out that the fresh-water fish fauna of Ceylon was derived mostly from India, was later isolated, and that some of the species have differentiated into subspecies or full species.

Ceylon is within the tropical Indo-Pacific marine fish faunal area, the world's largest marine fish zone. The "most southerly outpost of India with several thousands of miles of ocean separating it from the nearest land masses to its east, south, and west, it is a way-station past which oceanic species, rare and unknown in Indian waters, travel periodically."

In the references to literature, 41 titles of articles by the author are given. These will be useful to students interested in the zoology of Ceylon, as will the atlas.

LEONARD P. SCHULTZ
U. S. National Museum, Washington, D. C.

Scientific Book Register

Fouriersynthese von Kristallen und ihre Anwendung in der Chemie. Werner Nowacki. Basel: Verlag Birkhäuser, 1952. 237 pp. and *Tabellen zur Bestimmung der 120 Auslöschungseinheiten.* 30.15 Sw. fr.; 34.30 Sw. fr., bound.

Metallurgy for Engineers: Casting, Welding, and Working. John Wulff, Howard F. Taylor, and Amos J. Shaler. New York: Wiley; London: Chapman & Hall, 1952. 624 pp. $6.75.

Trattato di Malattie Infettive, Vols. I and II. (In Italian.) E. Carlinfanti and F. Magrassi, Eds. Naples: Edizioni Scientifiche Italiane, 1951. 2446 pp.

The Scientific Papers of James Clerk Maxwell. Repr. W. D. Niven, Ed. New York: Dover Pub., 1952. 1488 pp. $10.00.

The Advance to Social Medicine. René Sand; R. W. Parnell, Ed.; Eng. trans. by Rita Bradshaw. New York–London: Staples Press, 1952. 655 pp. $8.50.

Principles of Chemistry. 6th ed. Joel H. Hildebrand and Richard E. Powell. New York: Macmillan, 1952. 444 pp. $4.50. (Bound with 3rd ed. of *Reference Book of Inorganic Chemistry,* $7.50.)

Backgrounds of Human Fertility in Puerto Rico: A Sociological Survey. Paul K. Hatt. Princeton, N. J.: Princeton Univ. Press, 1952. 512 pp. $5.00.

Corrosion Testing Procedures. F. A. Champion. New York: Wiley, 1952. 369 pp. $6.25.

The Auricular Arrhythmias. Myron Prinzmetal *et al.* Springfield, Ill.: Thomas, 1952. 387 pp. $16.50.

The United States Public Health Service 1798–1950. Ralph Chester Williams. Bethesda, Md.: Commissioned Officers Association of the U. S. Public Health Service, 1951. 890 pp. $7.50.