Molecular biology is the theme presented to stimulate the appetites of the intended audience of this little opus, though one wonders how young physicists oriented to the nuclear age may respond to a statement that refers to the cell as the "critical living mass." In spite of an occasional phrase following an equation, such as "$AH_2 + 1/2\ O_2$ $A + H_2O$. This is respiration," Lwoff manages to avoid leaving the "all else is stamp-collecting" impression usually ascribed to the New Biologist. In his next-to-last chapter, "Biological order and entropy," the author considers both static and dynamic aspects of the biological machine at the molecular level, and stresses the fact that, for the biologist, "information" may have different significance from the usual mechanical connotations; when the organism burns fuel, it is not merely sucking orderliness from the environment, it is producing work at the expense of the energy of the chemical bonds. "If fed with pellets of negative entropy . . . even a physicist would succumb." The concluding chapter deals, in summary form, with the material that preceded it, the interdependence of the macromolecules and macromolecular groups, and the reader is further admonished that, as such, "living substance or living matter does not exist. . . . Separated from its context . . . any structure, either a nucleic acid or a protein is just an organic molecule." Although this consideration of biological order, a fascinating presentation of a fascinating subject, is directed to the young physicist and chemist, the biologist would also do well to heed Lwoff's rejoinder that "Life can only be the appanage of the organism as a whole."

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Notes

Glossary of Drugs

The **International Dictionary of Drugs Used in Neurology and Psychiatry** (Thomas, Springfield, Ill., 1962. 168 pp. $7.50), compiled by Charles M. Poser and V. Osbourn, is a list of approximately 375 drugs that are used in psychiatry, neurology, and clinical treatment. The drugs cover 28 classes of actions, ranging from drugs used in the treatment of alcoholism, analgesics, and curare antagonists, to sedatives, thymoleptics, and tranquilizers. The generic names proposed or recommended by the World Health Organization as well as the chemical names, trade names, and other synonyms that have been used are given in the main alphabetical list. The country in which the name is used is also indicated. For example, a full page of synonyms is given for acetylsalicylic acid, with the country in which the synonyms are used listed for about half the names. There are also alphabetical lists, with references to the generic name, for trade names and other synonyms (3500), chemical names, and experimental numbers. The concluding list is of the experimental numbers and names of chemicals that have not yet been given generic names.

The authors were somewhat arbitrary in their choice of the drugs listed. For example, although many anesthetic and analgesic agents are listed, acetanilide, cincophen, neocincophen, ether, paraldehyde, and chloroform are not listed. Another example is the inclusion of approximately 12 atropine-like compounds that are used in the treatment of Parkinson's disease, whereas at least 19 other compounds that have similar chemical structures are not included.

Despite these deficiencies, the book furnishes a great number of names in these specialized fields, and, in addition, a bibliography of 31 sources.

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Mathematics

Integrals of Bessel Functions by Yudell L. Luke (McGraw-Hill, New York, 1962. 434 pp. $12.50) is a compendium of material related to Bessel functions and it is also a very timely companion to the Bateman manuscript project (two volumes of integral transforms and three volumes on higher transcendental functions).

The chapter headings are as follows: "Basic formulas including requisite materials on hypergeometric and Bessel functions," "Indefinite integrals involving products of powers of t and Bessel functions," "Representations of the preceding integrals in terms of Lommel functions," "Indefinite integrals of products of exp $(-t)$, t^a, and $K_\nu(t)$ and associated representations," "Reduction formulas for indefinite integrals of products of exp $(-tp)$, t^a, and W_ν (λt)," "Airy functions," "Incomplete gamma function and related functions," "Repeated integrals of Bessel functions," "Integrals involving Struve functions," "Schwarz functions and generalizations," "Integrals involving products of Bessel functions and Struve functions," "Miscellaneous indefinite integrals involving Bessel functions," "Definite integrals," and "Tables of Bessel functions and integrals of Bessel functions." Emphasis is on tables of indefinite integrals. There is an extensive bibliography related to both theoretical source materials and detailed references for numerical tables of Bessel and related functions.

The book, like the Bateman volumes, is clearly printed by a photo-offset process; thus, errors in printing are minimized. As a reference text this book should prove exceedingly useful to applied mathematicians, scientists, and technologists who require ready access to extensive relations involving integrals of Bessel and related functions.

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New Books

Mathematics, Physical Sciences, and Engineering

Rudiments of Algebraic Geometry. W. E. Jenner. Oxford Univ. Press, New York, 1963. 116 pp. Illus. Paper, $2.95.

Six-Language Dictionary of Electronics, Automation, and Scientific Instruments. A comprehensive dictionary in English, French, German, Italian, Spanish, and Russian. Compiled by A. F. Dorian. Iliffe Books, London, 1962; Prentice-Hall, Englewood Cliffs, N.J., 1963. 732 pp. $16.95.

Spectroscopy. vol. 1, *Atomic, Microwave, and Radio-frequency Spectroscopy* (© 1962. 287 pp. $9); vol. 2, *Ultra-violet, Visible, Infra-red, and Raman Spectroscopy* © 1961. 412 pp. $12). S. Walker and H. Straw. Macmillan, New York, 1963. Illus.

Tables of Normalized Associated Legendre Polynomials. S. L. Belousov. Translated from the Russian edition (Moscow, 1956) by D. E. Brown. Pergamon, London; Macmillan, New York, 1962. 383 pp. Illus. $20.

Topics in Engineering Logic. Morton Nadler. Pergamon, London; Macmillan, New York, 1962. 247 pp. Illus. $9.50.

Transistors. Dennis Le Croissette. Prentice-Hall, Englewood Cliffs, N.J., 1963. 288 pp. Illus. Trade ed., $9; text ed., $6.75.

Ultrasonic Technology. Richard Goldman. Reinhold, New York; Chapman and Hall, London, 1962. 318 pp. Illus. $11.

University Calculus. Howard E. Taylor and Thomas L. Wade. Wiley, New York, 1962. 787 pp. Illus. $9.95.