

were important at the undergraduate and graduate level as producers of humanists. The processes of educational selection and educational and occupational choice are very complex. Knapp has done a good job in presenting one part of the picture in a readable fashion. It would be a more valuable study if he had been able to analyze more of the variables that are important in the process of becoming a humanist. It may seem unfair to criticize a study for something it did not attempt, but the importance of variables like socio-economic background, ability level, and institutional quality have been demonstrated in other research. Failure to include them in this study limits to a considerable degree the importance of the findings.

JOHN FOLGER

Florida State University, Tallahassee

## Nuclear Engineering

**Numerical Methods of Reactor Analysis.** Melville Clark, Jr., and Kent F. Hansen. Academic Press, New York, 1964. xiii + 340 pp. Illus. \$10.50.

*Numerical Methods of Reactor Analysis* is a noteworthy addition to the list of textbooks available for use in educational programs in nuclear engineering. This excellent book, which assumes an intermediate-level familiarity with nuclear reactor analysis and a basic knowledge of differential equations, develops those aspects of numerical analysis most frequently encountered in reactor analysis and discusses specific applications. Emphasis is placed on problem-solving techniques and numerical methods commonly used in the application of digital computers to the solution of problems in reactor physics.

The first three chapters are devoted to matrix theory and numerical analysis. These chapters are sufficiently comprehensive and detailed to provide a self-contained course of study for the nonspecialist. Later chapters describe multigroup diffusion theory, transport theory, and the Monte Carlo method. The Boltzmann transport equation, velocity relations for nuclear events, the moments method for neutrons, and special functions are described in useful appendices. Each chapter is provided with problems that illustrate the material covered or extend the breadth

and depth of the coverage. The individual chapters are well referenced. In addition, succinct comments that accompany the reference lists direct the reader's attention to the most fruitful sources for specific topics.

The book is written in a crisp, lucid style that should appeal to the engineer who is interested in the practical aspects of reactor analysis. In general, the material is well chosen and the presentation is factual and objective. One exception is the chapter on Monte Carlo techniques. Here, in my opinion, the discussion of limitations, though appropriate, is overly severe.

*Numerical Methods of Reactor Analysis* should serve admirably as the principal text for an intermediate-level course in reactor analysis or as a supplementary text for an advanced course in reactor physics. In addition to its usefulness as a textbook, the volume will provide an informative survey for the practicing engineer or an introduction to the field for the would-be specialist in reactor computation.

GEORGE H. MINTON

Reactor Physics and Mathematics  
Section, Westinghouse Atomic Power  
Division, Pittsburgh

## Book Award

Kirtley F. Mather's *The Earth Beneath Us* (Random House, New York, 1964) has been awarded the Thomas Alva Edison Foundation's tenth Edison award for the best science book for young people. This book was reviewed in *Science* [147, 852 1965].

## New Books

### Biological and Medical Sciences

**Advances in Protein Chemistry.** vol. 20. C. B. Anfinsen, Jr., M. L. Anson, John T. Edsall, and Frederic M. Richards, Eds. Academic Press, New York, 1965. 389 pp. Illus. \$14.50. Four papers: "Thrombosthenin, the contractile protein from blood platelets and its relation to other contractile proteins" by M. Bettex-Galland and E. F. Lüscher; "Hydrolysis of proteins" by Robert L. Hill; "The unusual links and cross-links of collagen" by John J. Harding; and "The chemistry of keratins" by W. G. Crewther, R. D. B. Fraser, F. G. Lennox, and H. Lindley.

**Advances in Radiation Biology.** vol. 1. Leroy G. Augenstein, Ronald Mason, and Henry Quastler, Eds. Academic Press, New York, 1964. 295 pp. Illus. \$11. Six papers: "Recent research on the radiation

chemistry of aqueous solutions" by Harold A. Schwarz; "Physical mechanisms in photosynthesis" by Gordon Tollin; "Effects of intracellular irradiation with tritium" by Donald E. Wimber; "Effects of small doses of ionizing radiations" by Arne Forssberg; "The radiation chemistry of amino acids" by J. Liebster and J. Kopoldová; and "The relative roles of ionization and excitation processes in the radiation inactivation of enzymes" by Leroy G. Augenstein, Tor Brustad, and Ronald Mason.

**Advances in Tracer Methodology.** vol. 2. A collection of papers presented at the sixth (New York, November 1962); seventh (Los Angeles, March 1963); and eighth (Chicago, November 1963) symposia on tracer methodology plus other selected papers. Seymour Rothchild, Ed. Plenum Press, New York, 1965. 329 pp. Illus. \$12.50. Thirty-four papers: Methods for Labeling Compounds (6 papers); Special Analytical Techniques (9 papers); Biochemical Applications (5 papers); Clinical Applications (13 papers); and Health Physics (1 paper); and a paper on the early history of carbon-14.

**Bacterial and Mycotic Infections of Man.** René J. Dubos and James G. Hirsch, Eds. Lippincott, Philadelphia, ed. 4, 1965. 1039 pp. Illus. \$14.50.

**Biochemical Aspects of Neurological Disorders.** John N. Cumings and Michael Kremer, Eds. Davis, Philadelphia, Pa., 1965 (second series). 336 pp. Illus. \$11. Eighteen papers contributed by J. M. Barnes, John N. Cumings, G. Curzon, P. C. Gautier-Smith, R. W. Gilliatt, R. A. Henson, Michael Kremer, Walpole Lewin, Brian McArdle, Vincent Marks, D. M. Matthews, R. J. Pennington, R. T. C. Pratt, Derek Richter, J. A. Simpson, Eliot Slater, R. H. S. Thompson, and John N. Walton.

**Biology.** Alfred M. Elliott and Charles Ray, Jr. Appleton-Century-Crofts (Meredith), New York, ed. 2, 1965. 895 pp. Illus. \$8.50.

**The Biology of Tissue Transplantation.** Paul S. Russell and Anthony P. Monaco. Little, Brown, Boston, 1965. 217 pp. Illus. \$6.75.

**The Biosynthesis of Macromolecules.** Vernon M. Ingram. Benjamin, New York, 1965. 239 pp. Illus. Paper, \$3.95; cloth, \$8. Biology Teaching Monograph Series.

**Cell Biology.** John Paul. Stanford Univ. Press, Stanford, Calif., 1965. 207 pp. Illus. \$4.75.

**Chemotaxonomie der Pflanzen.** vol. 3, *Dicotyledoneae: Acanthaceae-Cyrtaceae*. R. Hegnauer. Birkhauser, Basel, Switzerland, 1964. 743 pp. Illus. F. 123.

**Clinical Phonocardiography.** Dennis C. Deuchar. Van Nostrand, Princeton, N.J., 1965. 144 pp. Illus. \$3.75.

**Cold Spring Harbor Symposia on Quantitative Biology.** vol. 29, *Human Genetics*. Biological Laboratory, Long Island Biological Assoc., Cold Spring Harbor, N.Y., 1964. 506 pp. Illus. \$15. Forty-five papers given at the symposium; the topics included: Population Studies (13 papers); Genetics of Somatic Cells and Cells in Culture (13 papers); and Human Proteins (19 papers).

(Continued on page 554)

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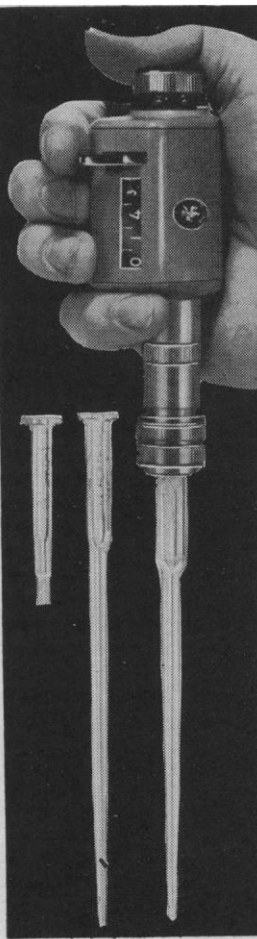
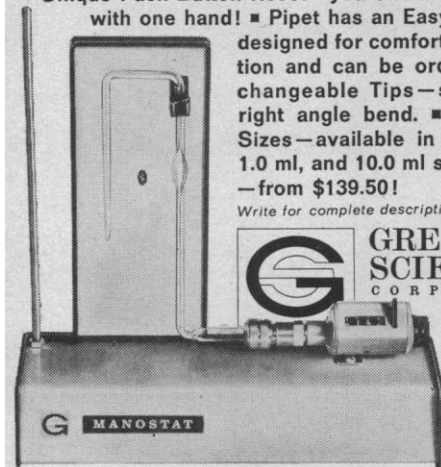
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## NEW BOOKS

(Continued from page 492)

**The Crab Spiders of California (Araneida, Thomisidae).** (Bull. Am. Mus. Nat. Hist., 129, art. 1). Robert X. Schick. American Museum of Natural History, New York, 1965. 180 pp. Illus. Paper. \$3.

**Ecology of Soil-Borne Plant Pathogens: Prelude to Biological Control.** An international symposium on factors determining the behavior of plant pathogens in soil (Berkeley, Calif.), April 1963. Kenneth F. Baker and William C. Snyder, Eds. Univ. of California Press, Berkeley, 1965. 785 pp. Illus. \$12. Forty-one papers: The Soil Microorganisms (7 papers); The Soil Environment (2 papers); The Plant Root and the Rhizosphere (8 papers); Pathogenesis and Resistance (7 papers); The Mechanisms of Antagonism (4 papers); The Soil Inoculum (2 papers); and Interactions Between Soil, Microorganisms, and Plant (9 papers); and two introductory papers.

**Elements of Biology.** Paul B. Weisz. McGraw-Hill, New York, ed. 2, 1965. 504 pp. Illus. \$7.95.

**Elements of Neurophysiology.** Sidney Ochs. Wiley, New York, 1965. 629 pp. Illus. \$14.

**Enzymes in Clinical Chemistry.** A symposium (Ghent), 1964. R. Ruysen and L. Vandendriessche, Eds. Elsevier, New York, 1965. 160 pp. Illus. \$9. Sixteen papers contributed by B. Entressangles and P. Desnuelle; M. Roth; A. R. Lauwers; A. de Barbieri; R. Hess; L. Bitensky; R. G. J. Willighagen; W. Th. Daems and J.-P. Persijn; G. Pfeleiderer; A. L. Latner; H. A. Zondag; A. Soetens, D. Karcher, M. van Sande and A. Lowenthal; M. D. Poulik; C. E. Dent; A. Dahlqvist; and H. G. Hers.

**Essays on Physiological Evolution.** J. W. S. Pringle, Ed. Pergamon, London; Macmillan, New York, 1965. 386 pp. Illus. \$12. Thirty-one papers dedicated to the memory of K. S. Koshtoyants.

**Evaluation and Mechanisms of Drug Toxicity** (Ann. N.Y. Acad. Sci. 123, art. 1). Harold E. Whipple, Ed. New York Acad. of Sciences, New York, 1965. 366 pp. Illus. Paper, \$9. Thirty-three papers presented at a conference held in March 1964. The topics considered were: The Basis of Selective Toxicity, Metabolic Aspects of the Toxicity of Drugs, Genetic Factors in Drug Toxicity, Drugs and the Mammalian Embryo, Applications of New Knowledge to Toxicity Tests in Animals, and Clinical Aspects of Drug Toxicity.

**The Experimental Basis of Modern Biology.** J. A. Ramsay. Cambridge Univ. Press, New York, 1965. 348 pp. Illus. \$7.50.

**Fluorescent Protein Tracing.** R. C. Nairn, Ed. Williams and Wilkins, Baltimore, ed. 2, 1964. 351 pp. Illus. \$9. The contributors are J. E. Fothergill, K. B. Fraser, M. G. McEntegart, and R. C. Nairn.

**Forest and Savanna.** An introduction to tropical plant ecology, with special reference to West Africa. Brian Hopkins. Heinemann, London, 1965. 112 pp. Illus. 18s.

**Genetics and Disease.** Alfred G. Knudson, Jr. McGraw-Hill, New York, 1965. 304 pp. Illus. \$10.50.

**Gonadotropine.** Michael Apostolakis and

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Klaus-Dieter Voigt. Thieme, Stuttgart, Germany, 1965. 152 pp. Illus. Paper, DM. 28.

**The Heart in Health and Disease.** Rustom Jal Vakil. Univ. of Bombay, Bombay, India, 1964. 152 pp. Illus. Rs. 9.50.

**Histochemistry of the Skin—Psoriasis.** A monograph on normal and parakeratotic epidermal keratinization, with special reference to psoriasis and its treatment. A. Jarrett and R. I. C. Spearman. Van Nostrand, Princeton, N.J., 1965. 127 pp. Illus. \$5.50.

**Histocompatibility Testing.** Report of a conference and workshop sponsored by the Division of Medical Science. National Academy of Sciences—National Research Council (Washington, D.C.), June 1964. Nat. Acad. Science—Nat. Research Council, Washington, D.C., 1965. 200 pp. Illus. \$6. Twenty-nine papers.

**Histological Techniques for Electron Microscopy.** Daniel C. Pease. Academic Press, New York, ed. 2, 1964. 397 pp. Illus. \$9.50.

**Histones and Other Nuclear Proteins.** Harris Busch. Academic Press, New York, 1965. 280 pp. Illus. \$9.50.

**Homeostasis and Feedback Mechanisms.** A symposium. Society for Experimental Biology (Cambridge, Mass.), September 1963. G. M. Hughes, Ed. Published for the Company of Biologists. Society for Experimental Biology, by Academic Press, New York, 1964. 468 pp. Illus. \$15.50. Twenty papers by C. F. A. Pantin; G. A. Bartholomew; J. S. Hart; T. H. Benzinger; G. M. Hughes; H. T. Andersen; P. J. Randle; B. A. Cross; I. Chester Jones and D. Bellamy; J. Shaw; A. Robertson; V. B. Wigglesworth; J. E. Harker; B. C. Goodwin; H. Frank; T. Weis-Fogh; H. Mittelstaedt; P. A. Merton; D. H. Fender; and K. E. Machin.

**Immunology.** An outline of basic principles, problems, and theories concerning the immunological behavior of man and animals. David F. Gray. Elsevier, New York, 1965. 166 pp. Illus. Paper, \$2.95.

**Indian Woods: Their Identification, Properties and Uses.** vol. 2. *Linaceae to Moringaceae*. S. S. Ghosh, K. Ramesh Rao, and S. K. Purkayastha, Eds. Forest Research Inst. and Colleges, Dehra Dun, India, 1963. 396 pp. Plates. \$11.70.

**International Review of Forestry Research.** vol. 1. John A. Romberger and Peitsa Mikola, Eds. Academic Press, New York, 1964. 416 pp. Illus. \$13. Seven papers: "History of the international science of forestry, with special consideration of Central Europe" by Kurt Mantel; "Improvement of forest growth on poorly drained peat soils" by Leo Heikurainen; "Determination of nutrient requirements of forest stands" by Carl Olof Tamm; "Evaluation of forest site productivity" by Charles W. Ralston; "Anatomy, chemistry, and physiology of bark" by Lalit M. Srivastava; "Physiological processes in forest tree seeds during maturation, storage, and germination" by Ken-ichi Hatano and Sumihiko Asakawa; and "Harmonious control of forest insects" by A. D. Voûte.

**Introduction to Thermodynamics.** D. C. Spanner. Academic Press, New York, 1964. 290 pp. Illus. \$7.50. Experimental Botany Series, vol. 1.

**Kurzlehrbuch der Histologie und mi-**



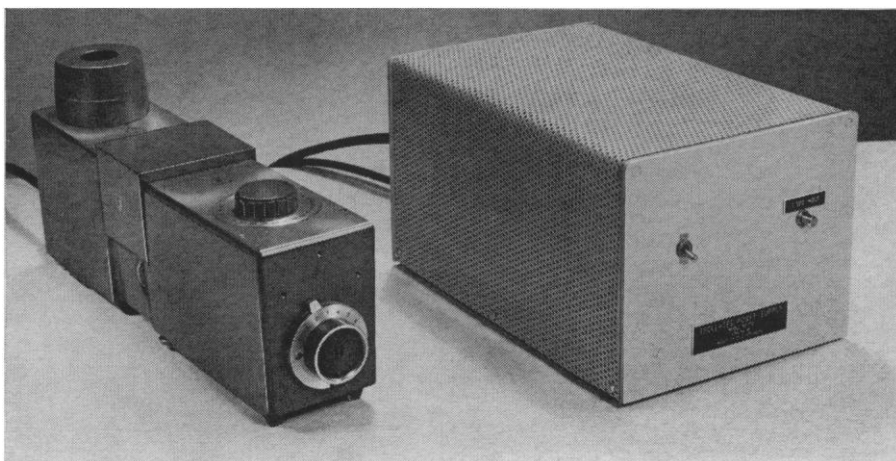
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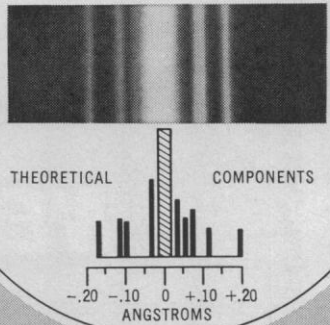
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**kroskopischen Anatomie des Menschen.** Max Watzka. Schattauer, Stuttgart, Germany, 1964. 318 pp. Illus. DM. 34.

**Metabolism of Human Gamma Globulin (γss-globulin).** Stig Bryde Andersen. Davis, Philadelphia, 1965. 149 pp. Illus. \$6.

**Methods in Hormone Research.** vol. 4, pt. B, *Steroidal Activity in Experimental Animals and Man.* Ralph I. Dorfman, Ed. Academic Press, New York, 1965. 374 pp. Illus. \$13. Ten papers: "Thermogenic properties of steroids" by Attallah Kappas and Robert H. Palmer; "Anabolic steroids" by Fred A. Kincl; "Anti-androgens" by Ralph I. Dorfman; "Anti-progestational compounds" by Tamotsu Miyake and Ralph I. Dorfman; "Steroids in reactivated prostatic cancer" by Herbert Brendler; "Steroids and tumorigenesis in experimental animals" by Robert A. Huseby; "Inhibition of tumor growth by steroids" by Ralph I. Dorfman; "Effects of steroids on the pancreas" by R. E. Haist; "Effects of corticoids and ACTH on the induction of gastric ulcers in laboratory animals" by I. L. Bonta; and "The influence of steroids on β-glucuronidase of mouse kidneys" by William H. Fishman.

**Microbiology.** Louis P. Gebhardt and Dean A. Anderson. Mosby, St. Louis, Mo., ed. 3, 1965. 488 pp. Illus. \$7.75.

**Microbiology.** Michael J. Pelczar, Jr., and Roger D. Reid. McGraw-Hill, New York, ed. 2, 1965. 672 pp. Illus. \$9.50.

**Multivariate Statistical Analysis for Biologists.** Hilary L. Seal. Wiley, New York, 1965. 219 pp. Illus. \$7.75.

**Nervous Control of the Heart.** Walter C. Randall, Ed. Williams and Wilkins, Baltimore, 1965. 271 pp. Illus. \$11.25. Chapters by Theodore Cooper, Joseph P. Gilmore, John W. Manning, Clarence N. Peiss, Donald V. Priola, Stanley J. Sarnoff, Orville A. Smith, Jr., and Andrew G. Wallace.

**Organization and Evolution in Plants.** C. W. Wardlaw. Longmans, Green, London, 1965. 513 pp. Illus. 60s.

**The Origins of Prebiological Systems: And of Their Molecular Matrices.** Proceedings of a conference (Wakulla Springs, Florida), October 1963. Sidney W. Fox, Ed. Academic Press, New York, 1965. 504 pp. Illus. \$8. Papers presented at a conference conducted under the auspices of the Institute for Space Biosciences, Florida State University, and the National Aeronautics and Space Administration.

**The Pharmacologic Principles of Medical Practice.** John C. Krantz, Jr., and C. Jelleff Carr. Williams and Wilkins, Baltimore, Md., ed. 6, 1965. 1002 pp. Illus. \$14.75.

**The Physical and Chemical Properties of Ribosomes.** Mary L. Petermann. Elsevier, New York, 1964. 270 pp. Illus. \$10.

**The Physiology of Insecta.** vol. 2, pts. B and C. Morris Rockstein, Ed. Academic Press, New York, 1965. xvi + 905 pp. Illus. \$33. Fourteen papers: "Physiology of insect behavior" by H. Markl and Martin Lindauer; "Social behavior and mutual communication" by Martin Lindauer; "Migration" by C. G. Johnson; "Locomotion: Terrestrial" by George M. Hughes; "Locomotion: Swimming (hydrodynamics) of aquatic insects" by Werner Nachtigall; "Locomotion: Flight" by J. W. S. Pringle; "Neural integration (central nervous sys-



tem)" by F. Huber; "Neural control of skeletal muscle" by Graham Hoyle; "The biochemistry of the contractile elements of insect muscle" by Koscak Maruyama; "Energetics and respiratory metabolism of muscular contraction" by Bertram Sacktor; "Intermediary metabolism of carbohydrates in insects" by W. Chefurka; "Intermediary metabolism of nitrogenous and lipid compounds in insects" by W. Chefurka; "Insect nutrition" by H. L. House; and "Digestion" by H. L. House.

**Physiology of Man.** L. L. Langley and E. Cherashkin, Reinhold, New York; Chapman and Hall, London, ed. 3, 1965. 670 pp. Illus. \$8.50.

**Plant Analysis and Fertilizer Problems.** vol. 4. C. Bould, P. Prevot, and J. R. Magness, Eds. American Soc. Horticultural Science, East Lansing, Mich., 1964. 440 pp. Illus. \$7.50. Twenty-nine papers. The proceedings of the Fourth Colloquium on Plant Analysis (Brussels, Belgium), September 1962.

**Practical Biology.** C. Dodds and J. B. Hurn. Arnold, London; St. Martin's Press, New York, 1965. 112 pp. Illus. \$3.

**The Principles and Practice of Hypnoanalysis.** Jerome M. Schneck. Thomas, Springfield, Ill., 1965. 236 pp. \$11.50.

**Principles of Treatments of Psychosomatic Disorders.** Proceedings of a conference (London), November 1962. Philip Hopkins and H. H. Wolff, Eds. Pergamon, London; Macmillan, New York, 1965. 128 pp. Illus. \$5. Ten papers contributed by J. M. van der Valk, P. J. Dally, C. R. B. Joyce, B. M. Mandelbrote, M. Shapiro, S. Black, P. Sainsbury, H. H. Wolff, T. F. Main, and J. P. Horder.

**Progress in Chemical Toxicology.** vol. 2. Abraham Stolman, Ed. Academic Press, New York, 1965. 426 pp. Illus. \$14. Six papers: "The absorption, distribution, and excretion of poisons and their metabolites" by A. Stolman and C. P. Stewart; "Detection of volatile organic compounds and toxic gases in humans by rapid infrared techniques" by Richard D. Stewart and Duncan S. Erley; "An approach to the analysis of biological specimens for basic drugs" by Leo R. Goldbaum and Thaddeus J. Domanski; "Rapid methods of toxicological analysis by ion-exchange paper chromatography and ionophoresis" by Harold V. Street; "Developments in spectrography: Sample preparation" by Leo A. Dal Cortivo and Michael Cefola; and "Thin layer chromatography application in toxicology" by Abraham Stolman.

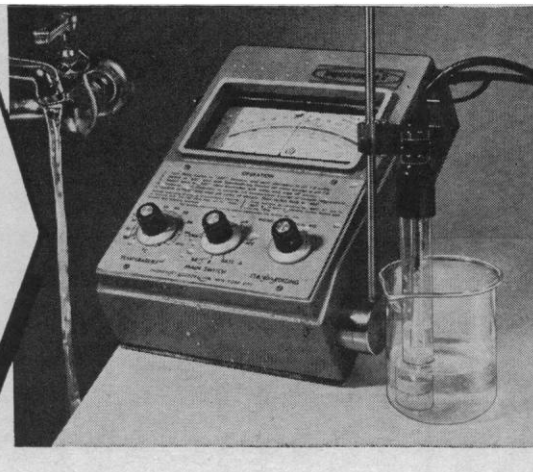
**Radiotracer Methodology in Biological Science.** C. H. Wang and David L. Willis. Prentice-Hall, Englewood Cliffs, N.J., 1965. 400 pp. Illus. \$16.

**Recent Advances in the Pharmacology of Toxins.** H. W. Raudonat and J. Vanecek, Eds. Pergamon, London; Macmillan, New York, 1965. 252 pp. Illus. \$10. Twenty-three papers: General Aspects and Venoms (7 papers); Venoms, Botulinum Toxin, Tetanus Toxin, and Streptolysin O (10 papers); and Staphylotoxin (6 papers).

**Renal Biopsy.** D. B. Brewer. Williams and Wilkins, Baltimore, 1965. 100 pp. Illus. \$7.50.

**Research Reviews 1963-64.** D. J. E. L. Carrick, Ed. Medical News, London, 1964. 247 pp. Illus. Paper, 21s. Forty-four papers, reprinted from *Medical News*, on

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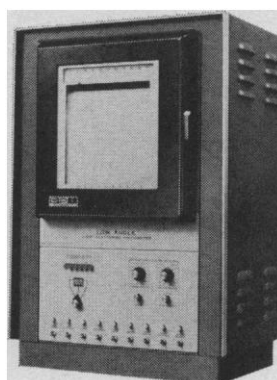
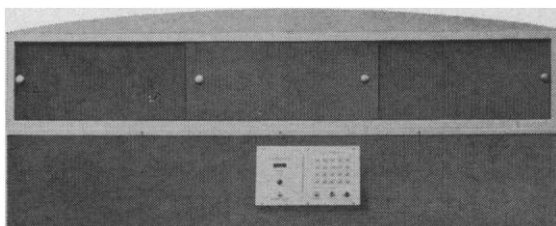
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**The Role of Psychosomatic Disorder in Adult Life.** Proceedings of conference (London), November 1961. J. O. Wisdom and H. H. Wolff, Eds. Pergamon, London; Macmillan, New York, 1965. 243 pp. Illus. \$8.50. Thirteen papers contributed by J. M. Van der Valk, J. Bastiaans, H. H. Wolff, J. Hambling, J. Kelnar, D. Hill, W. J. H. Butterfield, J. B. Brierley, P. H. Schurr, C. F. Rycroft, P. Lomas, R. F. Tredgold, and M. E. M. Herford.

**Selective Toxicity.** Adrien Albert. Methuen, London; Wiley, New York, 1965. 408 pp. Illus. \$6.

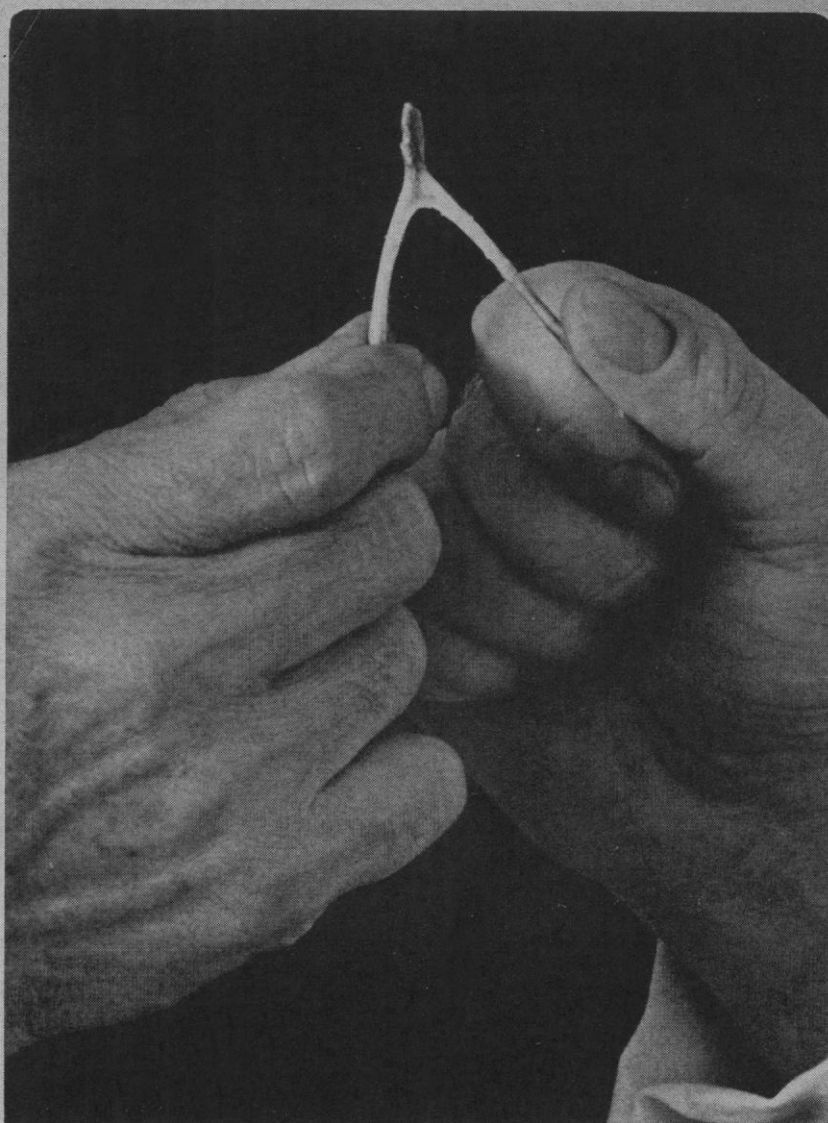
**Structure and Activity of Enzymes.** A symposium (London), March 1964. T. W. Goodwin, J. I. Harris, and B. S. Hartley, Eds. Academic Press, New York, 1964. 198 pp. Illus. \$6. Twenty-three papers on following topics: Ribonuclease (5 papers); Chymotrypsin (7 papers); Active Sites (6 papers); and Haemoglobin (5 papers).

**Studies in Epidemiology: Selected Papers of Morris Greenberg.** Fred B. Rogers, Ed. Putnam, New York, 1965. 446 pp. Illus. \$8.50.

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**Samson Wright's Applied Physiology.** Revised by Cyril A. Keele and Eric Neil, with the collaboration of John B. Jepson. Oxford Univ. Press, New York, ed. 11, 1965. 534 pp. Illus. Paper, \$9.50; cloth, \$14.



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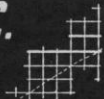
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**Advances in Heterocyclic Chemistry.** vol. 3. A. R. Katritzky, A. J. Boulton, and J. M. Lagowski, Eds. Academic Press, New York, 1964. 435 pp. Illus. \$13.50. Seven papers: "The quaternization of heterocyclic compounds" by G. F. Duffin; "The reactions of heterocyclic compounds with carbenes" by C. W. Rees and C. E. Smithen; "The carbolines" by R. A. Abramovitch and Ian D. Spenser; "Applications of the Hammett equation to heterocyclic compounds" by H. H. Jaffé and H. Lloyd Jones; "1,2,3,4-Thiaziazoles" by K. A. Jensen and C. Pedersen; "Nucleophilic heteroaromatic substitution" by G. Illuminati; and "Pentazoles" by Ivar Ugi.

**Continuous Mappings and Conditions of Monogeneity.** Yu. Yu. Trokhimchuk. Translated from the Russian edition (Moscow, 1963) by R. Mandl. Israel Program for Scientific Translations, Jerusalem; Davy, New York, 1964. 139 pp. Illus. \$10.25.

**Current Aeronautical Fatigue Problems.** Proceedings of a symposium (Rome), April 1963. J. Schijve, J. R. Heath-Smith, and E. R. Welbourne, Eds. Pergamon, London; Macmillan, New York, 1965. 507 pp. Illus. \$17.50. Seventeen papers.

**Electromagnetic Theory and Geometrical Optics.** Morris Kline and Irvin W. Kay. Interscience (Wiley), New York, 1965. 539 pp. Illus. \$15. Pure and Applied Mathematics Series, vol. 12.

**Electrons and Waves.** John R. Pierce. Doubleday, Garden City, N.Y., 1964. 240 pp. Illus. Paper, \$1.25 [revised and enlarged edition of *Electrons, Waves and Messages* (1956)].

**Elementary Calculus.** P. R. Masani, R. C. Patel, and D. J. Patil. Academic Press, New York, 1964. 351 pp. (instructor's manual, 14 pp.). Illus. \$7.50.

**The Future of Fuel Technology.** G. N. Critchley, Ed. Pergamon, London; Macmillan, New York, 1964. 237 pp. Illus. \$10. Thirteen papers given at a conference held by the Institute of Fuel and the Royal Institution of Engineers in the Netherlands.

**Knot Groups.** L. P. Neuwirth. Princeton Univ. Press, Princeton, N.J., 1965. 119 pp. Illus. Paper, \$3.50.

**Mathematical Discovery: On Understanding, Learning, and Teaching Problem Solving.** vol. 2. George Polya. Wiley, New York, 1965. 215 pp. Illus. \$5.50.

**Mathematical Theory of Reliability.** Richard E. Barlow and Frank Proschan. With contributions by Larry C. Hunter. Wiley, New York, 1965. 270 pp. Illus. \$11.

**Nonlinear Problems of Engineering.** William F. Ames, Ed. Academic Press, New York, 1964. 266 pp. Illus. \$10.75. Fifteen papers by Richard Bellman; Hilda Geiringer; A. T. Bharucha-Reid; T. M. Cherry; R. S. Rivlin; Stefan Bergman; W. G. Bickley; E. M. Sparrow and E. R. G. Eckert; J. M. Burgers; Simon Ostrach; S. I. Pai; E. V. Laitone; Preston C. Hammer; Charles H. Murphy; and David M. Young and Mary Fanett Wheeler.

**Nuclear Reactor Kinetics.** Milton Ash. McGraw-Hill, New York, 1965. 429 pp. Illus. \$19.50.

**Optical Masers.** George Birnbaum. Academic Press, New York, 1964. 318 pp. Illus. \$9.50. Supplement 2, *Advances in Electronics and Electron Physics*, edited by L. Marton.

**Plasticizer Technology.** vol. 1. Paul F. Bruins, Ed. Reinhold, New York; Chapman and Hall, London, 1965. 256 pp. Illus. \$12.75. Four papers: "Mechanism of plasticization" by Arthur K. Doolittle; "Plasticizers for rubber and related polymers" by S. S. Kurtz, Jr., J. S. Sweely, and W. J. Stout; "Plasticizers for the celluloses" by W. M. Gearhart and F. M. Ball; and "Plasticizers for acrylic resins" by Joseph L. O'Brien and John O. Van Hook.

**Principles of Dynamics.** Donald T. Greenwood. Prentice-Hall, Englewood Cliffs, N.J., 1965. 528 pp. Illus. \$14.

**Rare Earth Research II.** Proceedings, Third Conference on Rare Earth Research (Clearwater, Fla.), April 1963. Karl S. Vorres, Ed. Gordon and Breach, New York, 1964. 637 pp. Illus. \$29.50. Fifty papers presented at the symposium sponsored by the Department of Chemistry, Purdue University.

**Recreations in the Theory of Numbers: The Queen of Mathematics Entertains.** Albert H. Beiler. Dover, New York, 1964. 367 pp. Illus. Paper, \$2.

**Semiconductor Controlled Rectifiers: Principles and Applications of p-n-p-n Devices.** F. E. Gentry, F. W. Gutzwiller, Nick Holonyak, Jr., and E. E. Von Zastrow. Prentice-Hall, Englewood Cliffs, N.J., 1964. 399 pp. Illus. \$15.

**Theoretical Hydromechanics.** N. E. Kochin, I. A. Kibel' and N. V. Roze. Translated from the fifth Russian edition (Moscow, 1955) by D. Boyanovitch. J. R. M. Radok, Translation Ed. Interscience (Wiley), New York, 1964. 583 pp. Illus. \$20.

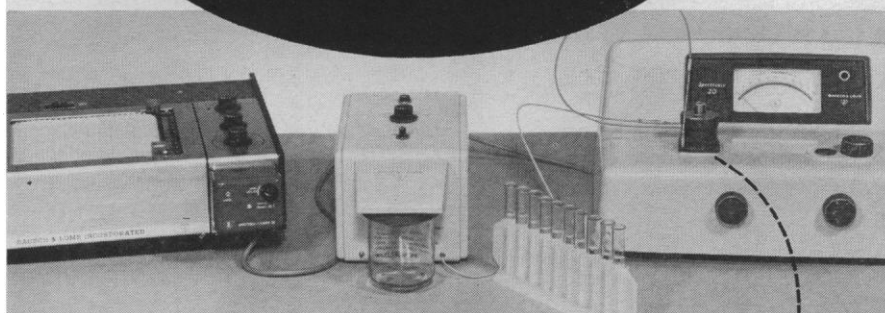
**A Treatise on Trigonometric Series.** vols. 1 and 2. N. K. Bary. Translated from the Russian edition (Moscow, 1961) by Margaret F. Mullins. Pergamon, London; Macmillan, New York, 1964. vol. 1, 577 pp., \$12; vol. 2, 528 pp., \$15. Illus.

**Two-Dimensional Problems in Hydrodynamics and Aerodynamics.** L. I. Sedov. Translated from the Russian edition (Moscow, 1950) by C. K. Chu, H. Cohen, and B. Seckler. Interscience (Wiley), New York, 1965. 443 pp. Illus. \$16.50.

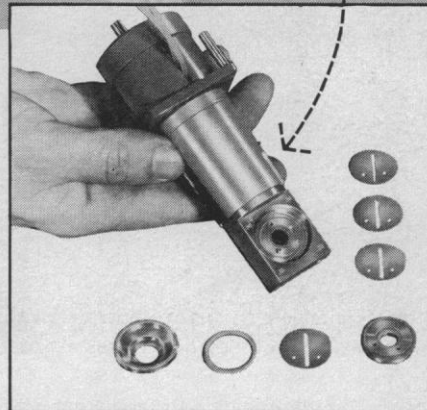
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