appear regularly each year. They "more than welcome suggestions and the submission of well-described preparations of biochemical interest for future volumes."

In this volume carefully checked methods are presented for: the isolation of two enzymes, aldolase and crystalline condensing enzyme, and the purification of another, cytochrome c; the isolation of phosphatidyl ethanolamine, and of ribo- and 5'-deoxyribonucleotides, by ion exchange chromatography after alkaline and enzymatic hydrolysis, respectively, of the appropriate nucleic acids; the enzymatic preparations of nicotinamide mononucleotide and of S-adenosylmethionine; the chemical preparations of derivatives of biochemicals, sodium phosphocreatine, S-succinyl coenzyme A, Land p-glutamine, and the formimino derivatives of glycine, L-aspartic acid and L-glutamic acid; the synthesis of adenine-8-C14, dibenzyl phosphorochloridate, p-glyceric acid 2-phosphate, 2-deoxy-pribose, cyanomethylimidazole, imidazoleacetic acid hydrochloride, DL-, L-, and D-homocystine, DL-, L-, and D-homocysteine, and the S-benzyl derivatives of DL-, L-, and D-homocysteine.

A cumulative index of volumes 1 through 5 and a listing of the compounds of biochemical interest which have appeared in *Organic Syntheses* (through volume 37) are included.

RALPH C. CORLEY

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Ion-Exchange Resins. J. A. Kitchener. Methuen, London; Wiley, New York, 1957. vii + 109 pp. Illus. \$2.

This small book appears at a time when interest in ion exchange is growing at a rapid pace. Chemists, biologists, and those in related fields seeking an introduction to the subject should find this book useful.

The organization is fairly standard. The first two-thirds of the book contain chapters on types of ion exchange materials, preparation of ion exchange resins, and the thermodynamics and kinetics of exchange processes. Discussion of chromatographic plate theory is brief but pertinent. In the last third of the book, some typical applications of synthetic ion exchangers, particularly to column separations of inorganic and organic substances, are described. Ion exchange membranes and their applications are discussed. The treatment of the various topics is necessarily brief, of course, in a book of this size, and readers already familiar with the field will not find the discussions as valuable as those found in more detailed books and review articles which have recently appeared.

The subject matter is presented in a clear and readable style. References to original literature are minimal, and those actually given should serve as an excellent starting point for a more detailed pursuit of the subject.

Frederick Nelson Chemistry Division, Oak Ridge National Laboratory

The New India. Progress through democracy. Planning Commission, Government of India. Macmillan, New York, 1958. x+412 pp. Illus. Cloth, \$5; paper, \$2.50.

This book is an abbreviated version of two recent official publications of the Government of India dealing with the achievements of the First Five Year Plan (1951-56) and the progress and objectives of the Second Five Year Plan, to be completed in 1961. It is written for the nonspecialist and is designed to give the general reader exhaustive information on what India has done, continues to do, and hopes to achieve in its efforts to improve its economic performance and the standard of living of its population. The book is written in a lively style, and since several Americans with long experience in India have collaborated with highly placed Indian officials in its composition, its contents not only have the ring of authenticity but also give due consideration to the interests of Westerners. The book is well illustrated, and some of the more important economic relationships are presented in well-designed tables. In addition, the main achievements and targets under the plans are summarized at the beginning of each chapter, under the general caption "highlights." Hence, by its presentation and its scope, the book forms an excellent introduction to the understanding of India and especially of India's efforts towards economic progress.

Since the book is put out by an official agency of the Indian Government its main strength consists in the facts and data it presents and not in the critical evaluation of these data. To be sure, the social and economic problems of India are well explained, but the solutions presented are only the official ones, and they are accepted without question as the best and most suitable. Thus, the picture that an ordinary reader without special firsthand knowledge about India gains is too rosy and too pat. The New India still has many facets of the Old India. In fact, India is a country in which practices and ways of acting characteristic of several different centuries coexist. There are religious practices which go back to the days of the Vedas, 3000 years ago. There are farming practices which have changed little in the last 2000 years. There are artisans who remind one of the craftsmen of the medieval world, and there are offices and shops which were up to date in the time of Queen Victoria. Next to them are buildings which foreshadow the 21st century, and factories and mills equipped with the most modern automatic machinery. In this book only these last are included in the New India, and very little is said about the tenacity and even the vigor of old institutions. This tenacity is bound up with the over-all cultural values of the Indian people, and in concentrating exclusively on the contents of the Five Year Plans and disregarding largely this cultural background, the book does not adequately convey a picture of all the forces at work in presentday India. Traditions of nonviolence, political factionalism, the caste system and its manifestations, and other forms of social behavior, many of which have deep roots in Indian life and culture, are either treated lightly or completely omitted. Yet the actual success of the plans—the meeting of the ambitious targets set out so clearly in the book-is contingent upon the changes which will occur in these cultural and social ways of behavior and not merely on the crores of rupees that will be spent on the manifold projects so clearly described in this work.

But apart from these shortcomings, which are due primarily to the official character of the work, this is an excellent, highly readable introduction to India's current economic problems and prospects.

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New Books

Loyalty and Security. Employment tests in the United States. Ralph S. Brown, Jr. Yale Univ. Press, New Haven, Conn., 1958. 541 pp. \$8.

Le Volcanisme Lunaire et Terrestre. Origine des continents, des océans et des atmosphères; l'énergie géothermique. Alexandre Dauviller. Michel, Paris, 1958. 300 pp. Paper, F. 1200.

Nuclear Reactor Experiments. Staff of Argonne National Laboratory. J. Barton Hoag, Ed. Van Nostrand, Princeton, N.J., 1958. 495 pp. \$6.75.

Standard Methods of Clinical Chemistry. vol. II. American Assoc. of Clinical Chemists. David Seligson, Ed. Academic Press, New York, 1958. 229 pp. \$5.50.

A Comprehensive Dictionary of Psychological and Psychoanalytical Terms. A guide to usage. Horace B. English and Ava Champney English. Longmans, Green, New York, 1958. 608 pp. \$10.75.

The Story of Archaeology. Agnes Allen. Philosophical Library, New York, 1958. 245 pp. \$4.75.

Functional Bracing of the Upper Extremities. Miles H. Anderson. Raymond E. Sollars, Ed. Thomas, Springfield, Ill., 1958. 478 pp. \$9.50.

Biology, a Basic Science. Elwood D. Heiss and Richard H. Lape. Van Nostrand, Princeton, N.J., 1958. 659 pp.

College Physical Science. Wendell H. Salbaugh and Alfred B. Butler. Prentice-Hall, Englewood Cliffs, N.J., 1958. 508 pp. \$7.95.

The Brain and Human Behavior. Proceedings of the Association, 7-8 Dec. 1956. vol. XXXVI, Research Publ., Assoc. for Research in Nervous and Mental Disease. Williams & Wilkins, Baltimore, Md., 1958. 575 pp. \$15.

A Search for Man's Sanity. The selected letters of Trigant Burrow, with biographical notes. Editorial Committee, Lifwynn Foundation. Oxford Univ. Press, New York, 1958. 639 pp. \$8.75.

Strategic Surrender. The politics of victory and defeat. Paul Kecskemeti. Stanford Univ. Press, Stanford, Calif., 1958. 296 pp. \$5.

Physics Problems. College Outline Series. Clarence E. Bennett. Barnes & Noble, New York, 1958. 255 pp. \$1.75.

Cloud Study. A pictorial guide. F. H. Ludlam and R. S. Scorer. Macmillan, New York, 1958. 80 pp. \$2.95.

Analyzing Psychotherapy. Solomon Katzenelbogen. Philosophical Library, New York, 1958. 126 pp. \$3.

Basic Mathematics. H. S. Kaltenborn, Samuel A. Anderson, Helen H. Kaltenborn. Ronald, New York, 1958. 401 pp. **\$**4.75.

The Motility of Muscle and Cells. Hans H. Weber. Harvard Univ. Press, Cambridge, Mass., 1958. 69 pp. \$3.50.

Pollen and Spore Morphology/Plant Taxonomy. Gymnospermae, Pteridophyta, Bryophyta. G. Erdtman. Almquist & Wiksell, Stockholm; Ronald, New York, 1957. 151 pp. \$8.

Basic Principles of Chemistry. J. Rae Schwenck and Raymond M. Martin. Prentice-Hall, Englewood Cliffs, N.J., 1958. 411 pp. \$6.75.

Nature Is Your Guide. How to find your way on land and sea by observing nature. Harold Gatty. Dutton, New York, 1958. 287 pp. \$4.95.

Advances in Applied Mechanics. vol. 5. H. L. Dryden and Th. von Karman, Eds. Academic Press, New York, 1958. 469 pp.

Graphic Methods in Structural Geology. William L. Donn and John A. Shimer. Appleton-Century-Crofts, New York, 1958. 188 pp. \$4.

Principles of Research in Biology and Medicine. Dwight J. Ingle. Lippincott, Philadelphia, Pa., 123 pp. \$4.75.

General Zoology. Gairdner B. Moment. Houghton Mifflin, Boston, 1958. 644 pp. **\$**7.50.

The Mushroom Hunter's Field Guide. Alexander H. Smith. Univ. of Michigan Press, Ann Arbor, 1958. 197 pp. \$4.95.

Ward 4. The Mallinckrodt Research Ward of the Massachusetts General Hospital. James Howard Means. Harvard Univ. Press, Cambridge, Mass., 1958. 202 pp. \$4.50.

Principles of Electricity. An intermedi-

ate text in electricity and magnetism. Leigh Page and Norman Ilsley Adams, Jr. Van Nostrand, Princeton, N.J., ed. 3, 1958. 545 pp. \$7.50.

The Pattern of Asia. Norton Ginsburg, Ed. Prentice-Hall, Englewood Cliffs, N.J.,

1958. 943 pp. \$11.65.

Principles of Physical Chemistry. Samuel H. Maron and Carl F. Prutton. Macmillan, New York, ed. 3, 1958. 797 pp. \$8.50.

Quantitative Analysis. Willis Conway Pierce and Donald Turner Sawyer. Wiley, New York, ed. 4, 1958. 510 pp. \$5.75.

The Strategy of Chemotherapy. Eighth symposium of the Society for General Microbiology held at the Royal Institution, London, April 1958. Cambridge Univ. Press, London, 1958 (for the Soc. for General Microbiology). ix + 360 pp.

Contributions to Embryology. vol. XXXVI, Nos. 242 to 251. Carnegie Institution of Washington, Washington, 1957. 210 pp. Paper, \$13.75; cloth, \$14.75.

Laboratory Exercises in General Zoology. Harvey I. Fisher and James B. Kitzmiller. Saunders, Philadelphia, Pa., 1958. 227 pp. \$4.

Proceedings of the Sixth International Conference on Spectroscopy. Held at Amsterdam in May 1956. W. van Tongeren and F. Freese, Eds. Pergamon, New York and London, 1957. 672 pp. \$25.

Theoretical Astrophysics. V. A. Ambartsumyan, Ed. Translated from the Russian by J. B. Sykes. Pergamon, New York and London, 1958. 660 pp. \$22.50.

Aliphatic Fluorine Compounds. A. M. Lovelace, Douglas A. Rausch, William Postelnek. Reinhold, New York; Chapman & Hall, London, 1958. 380 pp. \$12.50.

Introduction to the Theory of Sets. Joseph Breuer. Translated by Howard F. Fehr. Prentice-Hall, Englewood Cliffs, N.J., 1958. 116 pp. \$4.25.

Introduction to the Bacteria. C. E. Clifton. McGraw-Hill, New York, ed. 2, 1958. 572 pp. \$7.50.

Anatomy of the Chordates. Charles K. Weichert. McGraw-Hill, New York, ed. 2, 1958. 906 pp. \$9.50.

Polysaccharides in Biology. Transactions of the Second Conference, 25-27 April 1956, Princeton, N.J. George F. Springer, Ed. Josiah Macy, Jr. Foundation, New York, 1958. 328 pp. \$5.

Methods of Biochemical Analysis. vol. VI. David Glick, Ed. Interscience, New York, 1958. 367 pp. \$8.50.

Blacklock and Southwell, a Guide to Human Parasitology for Medical Practitioners. Revised by T. H. Davey. Williams & Wilkins, Baltimore, Md., ed. 6, 1958.

Handbook of Basic Microtechnique. Peter Gray. McGraw-Hill, New York, ed. 2, 1958. 261 pp. \$6.

Qualitative Analysis. An introduction to equilibrium and solution chemistry. Therald Moeller. McGraw-Hill, New York, 1958. 560 pp. \$6.50.

L'Enfant Neanderthalien du Pech de l'Aze. Etienne Patte. Masson, Paris. 1957. 234 pp. Paper, F. 2500.

Engineering Surveys: Elementary and Applied. Harry Rubey, George Edward Lommel, Marion Wesley Todd. Macmillan, New York, ed. 2, 1958. 191 pp. \$6.75.

Physics of Nuclear Fission. Supplement No. 1 of the Soviet Journal Atomnaya Energiya. Translated by J. E. S. Bradley. Pergamon, New York and London, 1958. 188 pp. \$9.

Timber Resources for America's Future. Forest Resource Rept. No. 14. Forest Service, U.S. Dept. of Agriculture, Washington, D.C., 1958 (order from Supt. of Documents, GPO, Washington 25). 722

A Guide to Engineering Education. Frank W. Eller. Teachers College, Columbia Univ., New York, 1958. 55 pp. \$1. Nuclear Radiation Detection, William

J. Price. McGraw-Hill, New York, 1958.

389 pp. \$9.

Industrial Uses of Nitrogen in the United States. Organisation for European Economic Co-operation, Paris, 1958. 132

College Mathematics. Kaj L. Nielsen. Barnes & Noble, New York, 1958. 320 pp. \$1.95.

Function Fluctuation. Monograph supplements, Brit. J. Psychol., XXX. Charles C. Anderson. Cambridge Univ. Press, New York, 1958. 105 pp. \$4.

The Extra Pharmacopoeia. vol. I. Pharmaceutical Press, London, ed. 24, 1958 (order from Rittenhouse Book Store, Philadelphia). 1725 pp. £3 5s.

The Atomic Age and Our Biological Future. H. V. Brøndsted. Translated by E. M. Huggard. Philosophical Library, New York, 1957. 94 pp. \$2.75.

Symposium on Latency and Masking in Viral and Rickettsial Infections. The proceedings of a conference held at the University of Wisconsin Medical School, 4-6 Sept. 1957. Duard L. Walker, Robert P. Hanson, Alfred S. Evans. Burgess, Minneapolis, Minn., 1958. 211 pp. \$4.75.

The Problem of Scientific and Technical Manpower in Western Europe, Canada and the United States. 2nd report. Organisation for European Economic Cooperation, Paris, 1958. 221 pp. \$2.

A Guide to Plastics. C. A. Redfarn. Iliffe, London; Philosophical Library, New York, 1958. 160 pp. \$7.50.

Progress in Plastics 1957. Papers and discussions at the British Plastics Convention 1957. Phillip Morgan, Ed. Iliffe, London; Philosophical Library, New York, 1958. 402 pp. \$22.50.

Analytical Mechanics for Engineers. Fred B. Seely, Newton E. Ensign, Paul G. Jones. Wiley, New York; Chapman & Hall, London, ed. 5, 1958. 491 pp. \$7.25.

Progress in Stereochemistry. vol. 2. W. Klyne and P. B. D. de la Mare, Eds. Academic Press, New York; Butterworths, London, 1958. 330 pp. \$8.80.

Our Nuclear Adventure. Its possibilities and perils. D. G. Arnott. Philosophical Library, New York, 1958. 181 pp. \$6.

Modern Electroanalytical Methods.Proceedings of the International Symposium on Modern Electrochemical Methods of Analysis, Paris, 1957. Sponsored by the I.U.P.A.C.'s Section on Analytical and Physical Chemistry. G. Charlot, Ed. Elsevier, Amsterdam, 1958. 195 pp. \$4.95.

Seals, Sea Lions, and Walruses. A review of Pinnipedia. Victor B. Scheffer. Stanford Univ. Press, Stanford, Calif.; Oxford Univ. Press, London, 1958. 189 pp. \$5.