

Advances in Protein Chemistry, Vol. XI. Edited by M. L. Anson, K. Bailey and J. T. Edsall. (Academic Press, Inc.; Asia Publishing House, Bombay), 1956. Pp. x + 665. Price \$ 12.00.

Applied Mathematics and Mechanics, Vol. II. (Jets, Wakes and Cavities.) By G. Birkhoff and E. H. Zarantonello. (Academic Press, Inc.; Asia Publishing House, Bombay), 1957. Pp. xii + 353. Price \$ 10.00.

Mercury and Its Compounds. Edited by Otto V. St. Whitelock. (Annals of the N.Y.A. Sciences, Vol. 66, Art. 5.) Pp. 357-652. Price \$ 3.50.

Second Tissue Homatransplantation Conference. Edited by Otto V. St. Whitelock. (Annals of the N.Y.A. Sciences, Vol. 64, Art. 5.) Pp. 735-1073. Price \$ 4.50.

Chromatography. By E. and M. Lederer. (Cleaver-Hume Press, Ltd., 31, Wrights Lane, London W.8), 1957. Pp. xx + 711. Price 72 sh.

Technique of Organic Chemistry—Fundamentals of Chromatography, Vol. X. By Harold Gomes Cassidy. (Interscience Publishers, Inc.), 1957. Pp. xvii + 447. Price \$ 9.75.

Methods of Biochemical Analysis, Vol. IV. Edited by David Glick. (Interscience Publishers, Inc.), 1957. Pp. ix + 362. Price \$ 8.50.

The Pharmacology of Psychotomimetic and Psychotherapeutic Drugs. By Otto V. St. Whitelock. (Annals of the N.Y.A. Sciences, Vol. 66, Art. 3, 2, East 63rd Street, New York-21), 1957. Pp. 417-840. Price \$ 5.00.

Cambridge Monographs in Experimental Biology—Parthenogenesis and Polyploidy in Mammalian Development. By R. A. Beatty. (Cambridge University Press, London N.W.1), 1957. Pp. xi + 131. Price 15 sh.

Proceedings of the Zoological Society. By J. L. Bhaduri, B. Biswas and S. P. Roy Chaudhuri. (The Zoological Society, 35, Ballygunge Circular Road, Calcutta-19), 1957. Pp. vi + 396. Price Rs. 30.

British Medical Bulletin—The Liver: Some Physiological and Clinical Aspects, Vol. 13, No. 2. (Medical Department, The British Council, 65, Davies Street, London W.1.) (India: Oxford University Press), May 1957. Price 20 sh.

Anesthesiology and Its Problems. Edited by Otto V. St. Whitelock. (Annals of the N.Y.A. Sciences, Vol. 66, Art. 4.) Pp. 841-1022. Price \$ 4.00.

Microscope—Construction, Use and Care. By Y. K. Sane. (Published by the Author, Ganeshwadi, Baroda), 1957. Pp. 24. Price 50 nP.

SCIENCE NOTES AND NEWS

New Technique in Radar

A significant improvement in radar has been announced by the Columbia University.

The new techniques do not increase the power used but, instead, employ a method of signal enhancement which raises the strength of a radar signal reflected from an aircraft "to an unprecedented high level". The equipment consists of a radar transmitter which generates a carefully controlled system and a receiver which enhances the echo system received from an aircraft, according to the announcement.

Combination Electron Microscope and X-ray Analyser

A device was recently exhibited by U.S. Steel which combines the features of an electron microscope and X-ray diffraction analysis. The electron microscope unit focussed a beam of

electrons on a spot no more than two microns in diameter. The recording X-ray analyser was then able to give a chemical analysis of the material at the spot on which the electrons impinged.

With the device it was possible to show the alloy composition of individual crystals in a metallurgical surface. Other data on display indicated the use of the device in showing the degree and rate of penetration of one metal into another, e.g., a copper deposit on a steel base. Some apparently very accurate graphs were shown indicating the depth of penetration of the one metal into the other after different times and the temperatures of annealing and with different crystalline forms of iron.

Radiometer for Prospecting Uranium

Soviet engineers have all but completed the development of a light and cheap radiometer

for prospecting uranium deposits. It is a version of the aerographic station known as the ASG-38 and extensively used for prospecting uranium.

The 'heart' of the station consists of sodium iodide crystals activated by thallium. It reacts to the presence of uranium or thorium ores, while an amplitude discriminator determines the radioactive element discovered by the prospecting plane.

The ASG-38 has been tested in different regions of the U.S.S.R. and has proved its high dependability. Already the first prospecting flights with the ASG-38 station have resulted in the discovery of industrial deposits of uranium ore.

"Hypalon," A New Elastomer

The Du Pont Laboratories at Wilmington, U.S.A., brought out a few years ago a new type of synthetic rubber which they named Hypalon. It is reported that since then the material has been distributed for test purposes and that it is gaining widespread acceptance. Like neoprene, hypalon was created with a specific quality in mind, in this particular case, the resistance of the material to attacks by oxygen, ozone and heat. Other valuable qualities of the new material to which attention is drawn are its ease of formulation and its ability to hold colours varying from pastels to deep shades. A circular recently issued contains details regarding the resistance of hypalon to sunlight and chemical attack as also its ability to stand up to high temperatures. Data are furnished regarding its tensile strength, its electrical properties and its flexibility for various compositions. The characteristic properties of hypalon indicate that in the coating field its applications will be of primary importance.

Second World Metallurgical Congress

The above Congress sponsored by the American Society for Metals will be held in Chicago, Illinois, U.S.A., from 2nd to 8th November 1957.

About 500 metal scientists from 36 different nations are expected to take part in the Congress. A two-week tour, starting in mid-October in New York City and terminating in Chicago, has been arranged by the Society so that the scientists attending the Congress might inspect many of the major metal working plants of the country and study their working carefully and discuss the confronting problems at the Congress with each other.

It is estimated that about 50,000 American industrial leaders will attend the world gathering when various sessions of the Thirty-Ninth

National Metals Exposition and Congress will be held simultaneously and in conjunction with the World Congress.

Further information regarding the Congress can be had of: The American Society of Metals, 7,301, Euclid Avenue, Cleveland-3, Ohio, U.S.A.

World Forestry Congress in 1960

It has been decided to hold the Fifth World Forestry Congress in the United States in 1960 in the State of Washington or in Oregon. The Pacific Northwest is outstanding for its great forest wealth, complex and variety of forest industries, national forests, research centers, forest schools and other forest institutions. The regional tours and field excursions to be arranged will provide an unparalleled opportunity to observe at first hand the advance of technological development that have taken place in the United States in recent years. The meetings will be of individuals rather than of government representatives. The responsibility for the technical and financial arrangements has been accepted by the host country.

The Canadian Journal of Chemical Engineering

By agreement between the National Research Council and the Chemical Institute of Canada, *The Canadian Journal of Technology* has been taken over by the Chemical Institute and now appears in a new format under the title, *The Canadian Journal of Chemical Engineering*. The issue for June 1957, is the first number of the new Journal. It will be published every second month. Subscription rates are \$3.00 per year; U.K. and U.S. \$4.00; Foreign \$4.50. Single copies can be had at 75 cents each. These are to be addressed to the Chemical Institute of Canada, 18, Rideau Street, Ottawa-2, Ontario.

Award of Research Degrees

The Andhra University has awarded the D.Sc. Degree in Physics to Shri K. Subba Rao for his thesis entitled, "Ultrasonic Studies in Solid and Liquid Media by New Methods", and the D.Sc. Degree in Chemistry to Shri B. V. Sreeramachandramurthy for his thesis entitled, "Some Aspects of Vandametry".

The University of Poona has awarded the Ph.D. Degree in Chemistry to Shri K. G. Divekar for his thesis entitled, "Spectrophotometric Studies of Ferric Phenol Complexes".

Dr. K. Venkataraman

Dr. K. Venkataraman, Director, Department of Chemical Technology, Bombay University, has been appointed Director, National Chemical Laboratory, Poona, from August 1, 1957.