Book Section

New Publications

Plasmas—Laboratory and Cosmic, by F. I. Boley, published by Van Nostrand Reinhold/Affiliated East-West Press P. Ltd., New Delhi, 1970, 154 pages, Rs. 2-75.

The Physics Exhibition Handbook 1970, published by the Institute of Physics and the Physical Society, London, 7sh. 6d.

Nuclar Reactions, by I. E. McCarthy, published by Pergamon Press, Oxford, 1970, 342 pages, 45sh.

Elsevier's Dictionary of Nuclear Science and Technology, by W. E. Clason, published by Elsevier Publishing Co. Ltd., Barking, Essex, England, 1970, 783 pages, £11, sh5.

Nuclear Desalination, published for the International Atomic Energy Agency by Elsevier Publishing Co. Ltd., Barking, 1969, 941 pages, £13,

Proceedings—Conference on Education Training and Communication in Corrosion Control in Engineering, Sheffield, 1969; published by British Joint Corrosion Group, London, 30sh.

Proceedings of Seminar on "Engineering Industries and Their Development", Ahmedabad, 1968; published by the Institution of Engineers (India), Calcutta, Rs. 15.

International Metal Statistics—Yearbook of the American Bureau of Metal Statistics, 48th Annual Issue, published by the Bureau, New York, $6.

Edited proceedings—Third International Conference on Lead, Venice, 1968; published by Pargamon Press, Oxford, 462 pages, £7.

Chemical Applications of Far Infrared Spectroscopy, by A. Finch and others, published by Academic Press, London-New York, 1970, 278 pages, £5.

Thermochemistry of Transition Metal Complexes, by S. J. Ashcroft and C. T. Mortimer, published by Academic Press, 1970, 478 pages, £6.50.

Introduction to Magnetochemistry, by A. Earnshaw, published by Academic Press, 1968, 116 pages, 37sh 6d.

Research in the Chemical Industry-The Environment, Objectives and Strategy, by A. Baines, F. R. Bradbury and C. W. Suckling, published by Elsevier, Amsterdam, 1969, 298 pages, 80sh.

Computer Programs for Chemistry, Volume 3, by D. F. Datar, published by Benjamin, New York, 1969, 270 pages, $15.75.

Lead and Lead Alloys, by W. Hofmann, published by Springer-Verlag, Berlin-Heidelberg-New York, revised and enlarged English Edition, 1970,560 pages, approx, $24.50.

Manual of Safety with Special Reference to the Chemical Industry, published by Indian Chemical Manufacturers' Association, Bombay, 263 pages, Rs. 30.

Engineering Properties of Thermoplastics, by R. M. Ogorkiewicz (Ed.), published by John Wiley, London, 1970, 318 pages, £6.

Materials Science,by J.C. Anderson and K. D. Leaver, published by Nelson, London, 1969, 276 pages, £2.

Metal Progress Databook,2nd Ed., published by American Society for Metals, Metals Park, Ohio, 164 pages, $.27.

Second Australian Conference on Electrochemistry, Melbourne, 1968; by R. M. Cattrall and others, published by the Butterworth Group, London, 188 pages, 90sh.

Nickel plating, by R. Brugger, published by Robert Draper Ltd., Teddington, Middx., England, English Translation, 1970, about 363 pages, £9 sh5.

Lead Cladding, published by Lead Development Association, London, Lead in Architecture Bulletin, 1969, 12 pages.

Lead—A Metal for the Future, published by St. Joseph Lead Co., 1969, 83 pages.

Atomic Theory for Students of Metallurgy, by W. Hume-Rothery and B. R. Coles, published by the Institute of Metals, London, 5th revised reprint, IOM Monograph 3, £3 sh10.

Electrophoretic Paint Deposition, by R. H. Chandler, published by R.H. Chandler Ltd.,London, 1970.

Photomicrography–a Comprehensive Treatise, R. P. Loveland, published by John Wiley & Sons, Inc., New York, Volume I, 544 pages; Volume II, 552 pages, 370 sh.

Industrial Solvents Handbook, by J. Mellan, published by Noyes Data Corp., Park Ridge, N. J., U. S. A., 1970, 478 pages, $25.

Copper–Nickel–Chromium : a Guide to Quality Metal Finishing, published by Metal Finishing Suppliers' Association, Birmingham, Mich., U. S. A., 28 pages.

Year Book of surface Technology, 1970, by J. Elze and H. W. Lieber, published by Metall Verlag G. M. b. H., Volume 26, 568 pages; in German.

Review of the Protection of Zinc and Its Alloys by Paint Coatings, by M. L. Gupta, Report, University of London, 1969, 137 pages.

Five Language Dictionary of Surface Coatings—Plating, Products Finishing, Corrosion, Plastics and Rubber, by R. W. Sanrtholzer published by Pergamon Press, Oxford, 1969, 580 pages, £8.

Spannungsrisskorrosion,published by Verlag Chemie, Weinheim, Germany, 128 pages, DM 44; No. 22 in a Series on Corrosion; Report on a Discussion Meeting, Frankfurt/Main, 1968.

Proceedings of Third International Congress on Metallic Corrosion, Volume 1, published by Swets and Zeitlinger N. V., Amsterdam, 568 pages; English presentation of Sections 1 and 2 of the Congress, Moscow, 1966.

Heavy Chemical and Electro–Deposition,by J.D. Greenwood, published by Robert Draper Ltd, Teddington, 1970, 216 pages, £5.

International Red Hand Marine Coatings, published by the International Paint Co. Ltd., London, 80 pages.

Stainless Steel Tube Technical Manual, published by T. I. Stainless Steel Tubes Ltd., Oldbury, Warley, Worcestershire, England, £5.

Finishing Handbook and Directory 1970, published by Sawell Publications, Ltd., London, about 650 pages, £3 including subscription to Product Finishing.

Automatic Process Control for Chemical Engineers, by N. H. Ceaglske, published by Wiley Eastern P. Ltd, New Delhi, reprint of 1956 U. S. edition, 228 pages, Rs. 10-50.

Chemical Reaction Engineering, by O. Levenspiel, published by Wiley Eastern P. Ltd, New Delhi, reprint of 1962 corrected edition by Wiley–Interscience, New York, 501 pages, Rs. 21.

Wiley–Interscience : (1) Advances in Electrochemistry, Volume 7, by Delahay, $18-50; (2) Advances in materials Research, Volume 4, by Herman, $19.95; (3) Chemical and Mechanical Behaviour of inorganic Materials, Searcy *etal.*, $27.50.

Chemical Reactions in Electrical Discharges, by R. F. Gould (Ed.), published by American Chemical Society, Washington, 1969, 514 pages, $15.

Chemical Plant and Its Operation, by T. M. Cook and D.J. Cullen, published by Pergamon Press, Oxford, 1969, 148 pages, 18sh.

Electrophoresis–Technical Applications. A Bibliography of Abstracts, by B. J. Haywood, published by Ann Arbor and Humphrey Science Publishers, Inc., Ann Arbor and London, 1969, 440 pages, £5.

The Modern Electroplating Laboratory Manual, by R. Armet, published by Robert Draper Ltd., Teddington, 382 pages, 118sh.

Metal Finishing Guidebook and Directory for 1970, published by Metals and Plastics Publications Inc., Westwood, N. J., U. S. A. 38th Annual Ed., 900 pages.

Advances in Physical Organic Chemistry, Volume 8, by V. Gold (Ed.), published by Academic Press, London, and New York, 1970, 425 pages, £6.75.

Essays in Chemistry, Volume 1, by J. N. Bradley, R. D. Gillard and R. F. Hudson (Ed.), published by Academic Press, London and New York, 1970, 116 pages, 20sh.

Electrochemical Techniques for Inorganic Chemist, by J. B. Headridge, published by Academic Press, London and New York, 1969, 124 pages, 35sh.

Applied Chemistry for Engineers, by R. M. E. Diamant, published by Pitman, London, 2nd. Ed., 1970, 343 pages, 40sh.

Dissociation Constants of Inorganic Acids and Bases in Aqueous Solution–Report of the IUPAC Commission on Electroanalytical Chemistry, by D. D. Perrin, published by Butterworths, London, 1969, pages, 133 plus 236, £2 sh 4.

Affiliated East-West Press P. Ltd., New Delhi : (1) A Handbook of Chemistry and Physics, by C. N. R. Rao, M. V. George, J. Mahanty and P. T. Narasimhan (Ed.), 2nd Edition, 388 pages, Rs. 15.00; (2) Experiments in General Chemistry : A Laboratory Text, by C. N. R. Rao and U. C. Aggarwala, 3rd edition, 232 pages, Rs. 12-00; (3) Basic Physical and Chemical Data,with Mathematical Tables, by L. S. Kothari and C. N. R. Rao, 1970, 104 pages, Rs. 1.80.

Research Techniques in Nondestructive Testing, by R. S. Sharpe (Ed.), published by Academic Press, London-New York, 1970, 492 pages, £8.

Cavitation, by Late R. T. Knapp, J. W. Daily and F. G. Hammit, published by McGraw - Hill Book Co., New York, 1970, 728 pages, $16.50.

Nuclear Energy Glossary—First Series of Terms, published by International Organization for Standardization, Geneva, ISO/R 921, 1969, 43 pages.

Publications Received :

Metal Finishing, Vol. 68, No. 3-7 1970, Metals and Plastics, Publications, Inc, Westwood, N. J., U. S. A.

Zinc Abstracts, Vol. 28, No. 2-5, 1970, ZDA London through Indian Lead Zinc Information Centre, Calcutta.

CSIR News, Vol. 20, No. 10-17, 1970, New Delhi.

American Reporter, Vol. 20, No. 11-17, 1970, US Information Service, New Delhi.

Inco Nickel, No. 27, 18, 1970, International Nickel, London through International Nickel (India) P. Ltd., Bombay.

UN Weekly Newsletter, Vol. 18, No. 23-39, 1970, UN Information Centre, New Delhi.

British Patents, Division H1, Patent Office, London.

Electroplating and Metal Finishing, Vol. 23, No. 2-6, 1970, Wheatland Journals Ltd., London.

Journal of the Electrochemical Society of Japan, Vol. 37, No. 4, 1969, Tokyo.

Chemistry of Complex Equilibria, by M. T. Beck, published by Van Nostrand Reinhold Co, London, Translation Editor : R. A. Chalmers, 1970, 285 pages, £4, sh10

Chemical Age of India, Vol. 21, No. 5-8, 1970, Technical Press Publications, Bombay.

Industrial Finishing, Vol. 22, No. 261-264, Wheatland Journals Ltd., London.

Metal Finishing Journal, Vol. 16, No. 183-186, 1970, Fuel and Metallurgical Journals Ltd., London.

Monthly Newsletter, Australasian Institute of Metal Finishing, Melbourne Branch, May-August, 1970, Parkville, Victoria.

Australasian Chemical Engineering, Vol. 11, No. 3-6, 1970, North Sydney, N. S. W.

ISI Bulletin, Vol. 22, No. 6-9, 1970, New Delhi.

Anti-Corrosion Methods and Materials, Vol. 17, No. 3-6, 1970, Sawell Publications Ltd, London.

Stainless Steel, No. 14, 1970, Stainless Steel Development Association, London.

Australasian Corrosion Engineering, Vol. 14, No. 4-6, 1970, North Sydney, N. S. W.

Products Finishing, Vol. 34, No. 7,8, 1970, Gardner Publications, Cincinnati, Ohio, U.S.A.

Corrosion prevention and Control, Vol. 17, No. 1, 2, 1970, Scientific Surveys Ltd, Lodon.

Cuba, No. 15-19, 1970, Embassy of Cuba, New Delhi.

Science and Engineering, Vol. 23, No. 5-7, 1970, India Society of Engineers, Calcutta.

Abridgments of Patent Specifications 1,150,001 — 1,175,000, Part A, Division H1, Circuit Elements, Patent Office,London.

Plastics as Metal Replacements, by P. I. Smith, published by Scientific Publications (G. B.) Ltd, Broseley, Shropshire, England, 1968, 282 pages, 65sh.

Galvanotechnic, Vol. 61, No. 4-6, 1970, Eugen G. Leuze Verlag, Saulgau/Wurtt, Germany.

Platinum metals Review, Vol. 14, No. 2, 31, 1970, Johnson Matthey & Co. Ltd, London.

Cobalt, No. 46, 1970, Cobalt Information Centre, Brussels.

Centre Calling, Vol. 5, No. 3–7, 1970.Govt. of India.New Delhi.

India Builds, published by United States Information Service, New Delhi.

OSU Research Review, Vol. 6, No. 7, 9, 1970, Research Foundation, Ohio State University, Columbus, Ohio.

Information News Letter, Industrial Liaison and Extension Services, Vol. 9, No. 1, 2, 1970, CSIR, New Delhi.

Lead—Modern Applications of a Traditional Metal, published by Indian Lead Zinc Information Centre, Calcutta. 1970, 17 pages.

The Modern World of Zinc, published by Indian Lead Zinc Information Centre, Calcutta, 1970, 19 pages.

Lead Abstracts, Vol. 10, No. 2–5, 1970, LDA London through Indian Lead Zinc Information Centre, Calcutta.

Zinc Alloy Die Casting News, No. 11, 12, 1970, Zinc Alloy Die Casting Society, Calcutta.

Penguin Library of Physical Sciences : Chemistry–(1) Inorganic Energetics, by W. E. Dasent, 103 pages, £1, (2) Orbitals and Symmetry, by D. S. Urch, 256 pages, £1.25, published by Penguin Books Ltd, Harmondsworth, Middx., England, 1970.

Nuffield Combined Science : (1) Teachers' Guide I, 411 pages; (2) Teachers' Guide III, 266 pages; (3) Part I–Activities, published for the Nuffield Foundation by Longman, London–Penguin Books Ltd, Harmondsworth, 1970.

Engineering Index of India, Vol. 1, No. 1–2, 1970, Malaviya Regional Engineering College, Jaipur.

Current Titles in Electrochemistry, Vol. 2, No. 7–9, 1970, SAEST, Karaikudi.

Materials Engineering Quarterly, Vol. 10, No. 2, 1970, American Society for Metals, Metals Park, Ohio.

Compass, Vol. 5, No. 1, 1970, Madras.

British Steel, No. 9, 1970, British Steel Corporation, London.

Wrought Zinc and Its Applications, by M. N. Parthasarathi and N. Srinivasan, published by Indian Lead Zinc Information Centre, Calcutta; reprinted from The Eastern Metals Review, mid-year number,1968.

Papers presented at the Conference on Education, Training and Communication in Corrosion Control in Engineering–University of Sheffiled, April 1969; published by the British Joint Corrosion Group, London, 61 pages, £1 sh10.

Plasmas-Laboratory and Cosmic, by F. I. Boley, published for the Commission on College Physics by Van Nostrand Reinhold Co/ Affiliated East-West Press, P. Ltd, 1970, 154 pages, Rs. 2-75.

Finish, Vol. 17, No. 4, Eugen G. Leuze Verlag, Saulgau/Wurtt.

Navosti Press Agency Publishing House, Moscow : (1) Industrial Management,Soviet Experience, by B. Zabelin, 119 pages ; (2) Training Specialists, Soviet Experience, by N. Katuntseva, 29 pages: through Information Department of the USSR Embassy in India, New Delhi.

World Mining, Vol. 23, No. 5, 6, 1970, Miller Freeman Publications, San Fransisco.

Family Planning Quarterly : Report for Fourth Quarter of 1969–70, Govt. of India, New Delhi.

Endeavour, Vol. 29, No. 107, 1970, ICI Ltd, London.

You, Vol. 1, No. 1, 1970, New Delhi.

Transactions of the SAEST, Vol. 5, No. 2, 1970, Karaikudi.

Wiggin Nickel Alloys, No. 96, 1970, Henry Wiggin & Co. Ltd, Hereford, England.

Corrosion by Liquid Metals, by J. E. Draley and J. R. Weeks (Ed.), published by Plenum Press, New York-London, 1970 615 pages, $29.

Annual Report 1969, Council of Scientific and Industrial Research, New Delhi, 173 pages.

Solution Conductivity Handbook, Compiled and edited by R. Rosenthal and R. J. Kidder, published by Beckman Instruments International S. A., Geneva, Process Bulletin No. 4090, 1969, 25 pages, $2.

Instruments News, Vol. 5, No. 2, 1970, CSIR, Chandigarh.

Corrosion by Liquid Metals, edited by J. E. Draley and J. R. Weeks, published by Plenum Press, New York, 1970, 615 pages. $29.00.

This is the proceedings of the Sessions on Corrosion by Liquid Metals of the 1969 Fall Meeting of the Metallurgical Society of AIME, October 13—16, 1969, Philadelphia, Pennsylvania. There are four main sections: corrosion of steels by sodium, alkali-refractory metal interactions, corrosion by non-alkali metals, and analysis of solid-liquid metal interactions (two sub-sections); this is followed by an index. Altogether there are 34 papers written by distinguished scientists active in the field of liquid metal corrosion. The topics covered are timely, and of immense importance to those engaged in the developments of fast breeder reactors and special types of heat and power sources based on liquid metals. In addition, the papers deal with more fundamental aspects of the compatibility problems involved in several types of molten metal environments. The reproductions of the papers and the figures are excellent and mistakes are rare. Editors have done a wonderful job in coordinating the style and contents of the several papers. The book would be of great use to all libraries, institutions and corrosion scientists.

—K. I. V.

Corrosion in Chemical Industry, by K. N. P. Rao and A. K. Lahiri (Ed.), Proceedings of a Seminar—Corrosion Advisory Bureau, CSIR and Indian Chemical Manufacturers' Association, Bombay, February 1970, published by the Bureau, Jamshedpur, Rs. 20.

There is a fund of information, of interest to corrosion scientists and technologists, in this publication—although details are not available in some cases. The many facets of corrosion and its control are covered here: corrosion damage, materials including aluminium and lead, design aspects, corrosion in specific industries, corrosion failures, case studies, role of the corrosion engineer, and prevention by protective coatings, inhibitors and cathodic protection. A heartening feature is that the problem of metallic corrosion is being taken more seriously in India. The proceedings of the Seminar will doubtless be valuable as a reference source in the field of corrosion and its prevention, with emphasis on the chemical industry.

—T. L. R.

Marine Painting Specifications and Product Data, published by the International Paint Company Limited (International Red Hand Marine Coatings), London, 1970.

This data handbook describes the type of marine finishes marketed under the name International Red Hand marine coatings' by the International Paints Company Limited. It is divided into six main sections—Painting Specifications for New Construction, Cargo Resistance List, Summary of one and Two Pack Product Data, and Drydocks suitable for 100,000 dwt vessels. The publication gives a good guidance for finishing systems for ship building surfaces—keel to deck and recommends different grades of paints, manufactured by the firm, depending on the surface to be protected. The guide on cargo resistence to various chemical substances is useful. In the product data on one pack and two pack systems details like weight, flash point, recommended film thickness, and suitable type of application useful for a finishing expert, are given. Metric conversion tables are given. This data book will be handy for those connected with finishing of marine vessels.

—S. K.

Surface Coatings in the Seventies—Proceedings 1970 Annual Conference, Australasian Institute of Metal Finishing, Adelaide S.A., October 1970, 67 pages.

The volume contains 8 papers (1) metal Finishing developments allied to the automotive industry, (2) Advances in corrosion resistance of decorative chromium deposits over nickel and copper undercoats, (3) metal finishing of new metals and alloys, (4) Precious metal plating, (5) The role of biodegradable surfactants in the pollution abatement programme, (6) Coating of surfaces and the development of surface images by electric fields, (7) Paint in the seventies and (8) The development and contribution of electrocoating to industrial painting techniques.

The contributions cover many new or important areas in the field of metal finishing; plating plastics, nickel conservation, micro-porous/cracked chromium, uncommon

substrates like titanium-beryllium-superplastic metals for special applications, precious metals, and electrocoating which has developed rapidly during the last 5 years. References to literature would have been helpful in some papers. The first Conference held in 1969 (proceedings reviewed in this Journal, Volume 19, No. 1, 1970) was quite a success, and the information contained in the present publication will no doubt be valuable to electrochemists, metallurgists and the metal finishing industry.

—T. L. R.

Chemical Controls, Catalag 668 published by LaMotte Chemical Products Company, Chestertown, Maryland, U.S.A., 81 pages.

LaMotte Chemical Products Company manufactures special indicator chemicals for different types of chemicals in simple way. They have three different types of catalogues, and this one covers LaMotte products used in pH control, chlorine control, water treatment control in different industries, metal finishing processes, reagents for research and analysis and soil analysis chemicals. This brochure is illustrated and indicates the different sizes/quantities of chemicals included in each packing. The firm claims to have put in considerable research and investigation in standardising the chemicals, apparatus they are offering for various determinations. Wherever possible, the relevant references from literature, on which the reaction is based are indicated. There is an useful index for ready references to any particular process/topic.

The reviewer had difficulty in estimating sodium hydroxide content in zinc cyanide bath, and the answer was to use LaMotte range sulfo-orange indicator. LaMotte Chemical Products Company have excellently standardised their products, so that chemists can use their reagents and indicators with computer speed and accuracy based on their experience of fifty years in this field.

—S. K.

Plasmas-Laboratory and Cosmic, by Forrest L Boley, published for the Commission on College Physics by Van Nostrand Reinhold Co., New York/Affiliated East-West Pvt. Ltd., New Delhi, 1970, 154 pages, Rs. 2-75.

This book discusses the fundamental characteristics of plasma and some of the varied situations in which its behaviour is important. Both laboratory plasmas and naturally occurring plasmas are dealt with. The matter is covered in four chapters : (1) General properties of a plasma, (2) Plasma as a conducting fluid and wave-propagating medium, (3) Laboratory plasmas, and (4) Naturally occurring plasmas, with a bibliography at the end. The matter is presented very clearly, and as the author himself claims the book is situated for non-specialist reading who has had a first course in calculus.

—(Miss) V. K.

Solution Conductivity Handbook, Compiled and Edited by R. Rosenthal and R. J. Kidder, published by Beckman Instruments International S. A., Geneva, Bulletin No. 4090, 1969, 25 page, $2.

This is a useful booklet on conductivity, and contains 4 sections : (1) principles of industrial solution conductivity measurement, (2) equipment for industrial conductivity measurement, (3) installation of conductivity system and (4) applications. Four tables and 17 figures are included.

—T. L. R.

Electrostatic Finishing, published by Ransburg Electro-Coating Corp., Indianapolis, U.S.A.

Ransburg offer a choice of several electrostatic coating systems, for liquid or powder coatings, as well as automatic or manual equipment. This brochure describes the processes and equipment available.

—T. L. R.

Central Electrochemical Research Institute, Karaikudi, Annual Report 1969, 110 pages.

This volume covers the activities of the CECRI for 1969 : research projects-subjectwise, industrial liaison and extension, symposia, patents, library, publications, administration and miscellaneous.

—T. L. R.

Water Analysis-a chemical test equipment directory, published by LaMotte Chemical products Company, Chestertown, Maryland, U.S.A., 28, pages.

LaMotte Chemicals Product Company specializes in the development of fine chemicals and control equipments–for scientific and technical purposes since 1919.

The booklet gives information on approximately 200 outfits which cover about 45 different analytical processes. A number of different testing equipments are described and illustrated in the booklet. The specifications for different types of chemical analysis of water are given. The materials have been codified so that purchase of chemicals and outfits could be easily arranged.

—S. K.

Industrial Management, Soviet Experience, by B. Zabelin, published by Novosti Press Agency, Publishing House, Moscow, 119 pages; through Information Department of the USSR Embassy in India, New Delhi.

The book attempts to give a brief but valuable information about the various stages of industrial development in Soviet Land. The six chapters are well arranged in sequence and give the reader an opportunity to understand the principles of production management, stages of development and forms of industrial management, the present system of industrial management and finally the structure and functions of enterprise management bodies.

It is quite evident from the book that the new system of industrial management combines better centralised planning with cost accounting at enterprises, centralised sectoral administration with local initiative, the principle of one-man management with a greater role being played by production personnel. Such systems have provided to be effective in the industrial progress of Soviet Union. The Soviet experience as highlighted in this book, may be of significant interest to the developing countries of the world.

In recent years a great deal is being done to mechanize and automate managerial functions at industrial enterprises. Such measures are having a considerable economic effect reflected through reduction in costs and increased efficiency. Inspite of these developments millions of men and women are engaged in the various types of managerial work at enterprises in the Soviet Union. At all stages of growth, the Soviet system of industrial management has been based on principles such as-democratic centralism and state planning, one-man management and material and moral incentives. The historical development of national economy, particularly in the industrial sector, has been highlighted in this book. In general, it is an interesting book to read, since it presents facts in a simple and understandable language to a common man.

—T. G.

World Mining-Catalog, Survey and Directory Number 1970, published by Miller Freeman Publications, San Fransisco, Calif., U.S.A., 246 pages; World Mining, Volume, No. 7, 1970.

This Directory is issued yearly by the publishers of 'World mining', a Journal well known in the field of mining. It consists of the following sections: production equipment preview; technology advances mineral production in 1969; major production tables: world wide developments in 92 countries (79 during 1969); national mineral production statistics: 69 tables, covering 60 countries; US mining in 1969; catalog index of equipment and machinary; advertisers index. This volume will certainly be of use to all those who wish to keep in touch with the current trends in mining.

—T. L. R.

Twenty-Fifth Anniversary of the United Nations—UNDP and UN Agencies in India, published by the UN Information Centre, New Delhi, 1970, 22 pages.

This informative brochure covers the activities in India of various UN Agencies: UN Development programme, ILO, UN Children's Fund, UNESCO, WHO, and the World Bank Group. On the occasion of the 25th anniversary celebration, it is quite interesting to know the progress made by the UN groups in fulfilling the objectives of the UN.

—T. L. R.

Heavy Deposition, by J. D. Greenwood, published by Robert Draper Ltd., Teddington, 1970, xii, + 116 pages, 66 illus., 29 tables, £5.

Heavy deposition by chemical and electrolytic processes has reached a stage where it is an invaluable aid to engineers and designers facing the problem of friction and wear. In this context, this book is timely and important. The main forms of heavy deposition are concerned with copper, nickel and chromium, and this book deals with all aspects of heavy copper, heavy nickel and chromium plating, including the electroless nickel plating processes. The book leans heavily on the technology of heavy deposition processes; so much so, it would be an indispensable guide to practising engineers.

The book consists of four parts, spread over thirteen chapters. Part I deals with an introduction to the deposition of copper, nickel and hard chromium and with all the necessary information on the plants for heavy electrodeposition. The value of the book would have been enhanced considerably if there was an additional chapter on some of the fundamental principles of electrodeposition. The second part gives all the details on heavy copper, while the succeeding chapters deal with heavy and electroless nickel deposition and hard chromium deposition. Of special importance is the chapter on electroless nickel plating. The chapter on electroforming and electrotyping in copper is of interest to those engaged in the manufacture of gramaphone records and to the printing industry involving electrotyping, photogravure printing and lithography. The author is, however, at his best when he deals with hard chromium plating; every aspect of this is dealt with in a lucid manner. The index and the appendix on conversion tables and some other data of practical importance add on to the usefulness of the book. As with other Robert Draper books on metal finishing, this book has also kept up the traditional excellence in printing and get-up.

—K. I. V.

Corrosion in Fertiliser and Petroleum Industry, edited by K. N. P. Rao and A. K. Lahiri, published by Corrossion Advisory Bureau,Metals Research Committee, Council of Scientific and Industrial Research, Jamshedpur, 1968, 157 pages.

This is the Proceedings of a Short Course on 'Corrosion in Fertiliser and Petroleum Industry' organised by the Corrosion Advisory Bureau at Udyogamandal in December 1968. Petroleum and Fertiliser industries are making rapid progress in India, and corrosion is one of their chief concerns. The short course provided a link between corrosion scientist and plant engineers. There are nine papers dealing with the various aspects of corrosion and corrosion prevention. The papers though not scientifically deep, are particularly interesting because of the practical aspects touched upon. The discussion portion has provided pep to the papers, and the editors are to be congratulated for this. The printing is excellent and the photographs are reasonably clear in most cases. Perhaps, the value of the book would have improved considerably if care has been taken to use the same units of temperature, volume, length, weight and the like throughout the various papers.

—K. I. V.

Annual Report Council of Scientific and Industrial Research 1969, published by the CSIR, New Delhi, 1970, 173 pages.

The report of the activities of the CSIR for 1969 covers the processes leased to the industry and in production, publications and patents, scientific and administrative staff, research schemes and committees, and other items. The budget for 1969-70 is capital Rs. 6 and recurring 14 crores. The publication gives a fairly clear picture of the fostering of industrial research and the build-up of technical-know-how for its exploitation for commercial purposes.

—T. L. R.

Leeds and Northrup Environmental Instrumentation, published by Leeds & Northrup, North Wales, Pa, U. S. A., 14 pages.

This brochure describes, with illustrations, various L & N instruments available for the solution of environmental problems : water treatment, monitoring, control systems, calibration, products and technical documentation-data sheets. In the end there is bibliography with 23 references.

—T. L. R.

Sixth IASLIC—Seminar Bangalore, November, 1970, by T. K. S. Iyengar (Ed.), 102 pages.

Rapid dissemination of information is of great importance in the growing technology of the present time, and the Seminar held by the Indian Association of Special Libraries and Information Centres at Bangalore has brought out a very instructive and useful publication. It covers libraries in general and attached to specific organizations; the library movement in Mysore ; information science and management; documentation research and training ; technical information centres.

—T. L. R.