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OFFICIAL AND INDEPENDENT REPORTS

• *Electrochemical Analysis: studies of acids bases and salts by emf, conductance, optical and kinetic methods July, 1964, to June, 1965.* is the first of a series of annual progress reports on the activities of the Analytical Chemistry Division of the U.S. National Bureau of Standards. This publication sets forth the purposes of the Electrochemical Analysis group of the division and the facilities and equipment used in carrying out this purpose. The main areas of investigation summarized include the study of acidity and solvent effects in water, deuterium oxide, and water-methanol solvents by emf methods; the development of reference indicator bases for non-aqueous media and reference materials for dielectric measurements; measurement of the thermodynamic properties of mixed salt solutions; and investigation of special problems in trace analysis by conductometric and kinetic methods. Also included are papers prepared by staff members during the year. This NBS Technical Note 271 is obtainable from the Superintendent of Documents, U.S. Government Printing Office, Washington D.C. 20402, price 66 cents.

Analysis of Uranium Concentrates at the National Bureau of Standards, by M. S. Richmond (Miscellaneous Publication 260-8) is the most recent of a series of papers emphasizing the preparation and characterization of standard reference materials and contains background information on a major usage of NBS Standard No. 950a, U.O₂. This black oxide and its predecessors have been of special value in ending the long-enduring error in our attempt to establish an accurate method of analysis for uranium concentrates. This publication traces the history of NBS involvement in this problem to give readers necessary information on the procedural development, then goes into the exact details of the NBS procedure, including the variations for working with certain low- or very high-grade uranium materials. This publication is available from the Superintendent of Documents, U.S. Government Printing Office, Washington D.C. 20402, price 55 cents.

• Improved sampling and testing methods for calcium carbide which give greater precision in the results of gas yield determination are included in the revision of B.S. 642, *calcium carbide for acetylene generation*. The title has been changed to avoid confusion with carbide intended for other uses and because the specification now includes wider size ranges such as 4-80 mm., 1-80 mm., and 0-80 mm. The maximum permissible content of dust has been reduced for most size ranges. The standard gas yield values have been revised to bring them closer to European practice, and to avoid ambiguity in interpretation of the standard the -5 per cent. tolerance on gas yield is now omitted. A new gravimetric method for determining gas yield, involving the addition of carbide to water, replaces the former water-to-carbide method. The revised standard specifies a limiting value for impurities insoluble in activated sulphuric acid, instead of fuming sulphuric acid as in the previous edition, and the limit has been reduced to 0.5 per cent. by volume. A spectrophotometric method for the determination of phosphine is given and the limit for sulphur compounds in the evolved gas has been replaced by one for total sulphur in the carbide itself, this being considered a better guide to quality. Requirements relating to arsenic and nitrogen compounds have been withdrawn. Procedures for selection of drums, sampling and preparation of the sample are specified in greater detail and the use of a sequential sampling scheme has been included. Copies of B.S. 642 may be obtained from the BSI Sales Branch, 2 Park Street, London W.1., price 10s. each.

• B.S. 3965, *artificial insemination pipettes for cattle* will assist stockbreeders in obtaining pipettes which are strong and convenient to use. The standard specifies materials, dimensions and construction for both glass and disposable plastic pipettes for the artificial insemination of cows and heifers. Copies of this standard (price 4s.) may be obtained from the BSI Sales Branch, 2 Park Street, London W.1.

• With the latest issue of the *News Letter* of the MRC Laboratory Animals Centre is included an index of publications available from this institution. Publications available free of charge include the *News Letter*, which is published twice yearly and gives a synopsis of the centre's activities; *Mouse News Letter*, published February and July and of special interest to geneticists and cancer workers; and *Parade State*, published on the 15th and 30th of month, which gives a list of animals of all strains notified to the centre as currently available.

Other publications include: *Catalogue of uniform strains of laboratory animals maintained in Great Britain*, second edition, 10s. per copy.

LAC collected papers; these contain the papers read at L.A.B. Symposia, the price per copy varies between 5s. and 12s. 6d.

These publications are available from the Laboratory Animals Centre, MRC Laboratories, Woodmansterne Road, Carshalton, Surrey.

• A recent issue of *Atom* contains the speech delivered by Sir William Penney at a press briefing on the publication of the report *The detection and recognition of underground explosions*. In this speech Sir William outlined the events leading up to the preparation of this report. In the same issue of *Atom* there is an interesting article on *Hydrostatic extrusion*. *Atom* is the monthly information bulletin of the U.K.A.E.A., enquiries regarding circulation may be addressed to the Public Relations Branch, U.K.A.E.A., 11 Charles II Street, London S.W.1.

• *BSI News*, the monthly publication of the British Standards Institution, has appeared in a new format which allows a more detailed reporting of the Institution's activities. A recent issue contains an article on the cost of the conversion to the metric system by Dr. Jean Nelson, an economist at the Stanford Research Institute, California.

• A booklet titled *Films on technology* has been issued by the Ministry of Technology. This is a list of films issued by the Ministry and its predecessor, the D.S.I.R., since 1961, and is obtainable from Mr. N. Stone, Head of Broadcasting and Films, Ministry of Technology, Milbank Tower, Milbank, London S.W.1.

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