

l'Énergie Nucléaire dans le Monde

Programmes et Développements Prévus. Par T. Reis. Pp. x+296. (Paris: Dunod, 1957.) 2,900 francs.

THIS book provides a useful summary of the world's energy consumption and its distribution among available sources. It provides statistics of the energy consumption of most of the countries of the world and summarizes the predictions that have been made about the future growth of energy requirements.

The second chapter describes the atomic energy organizations of more than forty countries, lists their reactors of different types and gives their nuclear power programmes—where they exist. The information given is as accurate as could be expected when programmes change rapidly.

The third chapter summarizes the conclusion about the world's future requirements and predicts that in Western Europe nuclear energy will be providing between 15 and 20 per cent of all electricity generated by 1975. This would still only be 18 per cent of the indigenous energy deficit of the Organization for European Economic Co-operation countries.

A final table classes eight countries in order of nuclear power output by 1960, 1965 and 1970/75. According to this, Britain will take third place in 1960 and second place in later years, Canada being credited with second place in 1960. These predictions are of little value in the present shifting phase of national programmes.

J. D. COCKCROFT

Contributions to the Flora of Venezuela

By Julian A. Steyermark and Collaborators. (Fieldiana: Botany, Vol. 28, No. 4.) Pp. ii+512. (Chicago, Ill.: Chicago Natural History Museum, 1957.) 7.50 dollars.

THIS volume is the final instalment of new records, notes on range extensions, and descriptions of new species based on Dr. Steyermark's notable botanical collections on the mountains of Venezuela, especially on those of the Guayana Highlands, some of which had never before been explored by biologists. These contributions are of absorbing interest for the taxonomist and plant geographer, but the promise to include special notes on geology, topography, floral zones and ecological aspects in the sections devoted to certain mountains can scarcely be said to have been fulfilled. This final volume closes with a list, in taxonomic order, of all the new plants which have been described in the contributions. A complete set of Dr. Steyermark's specimens is placed in the Chicago Natural History Museum.

BBC Handbook, 1958

Pp. 288. (London: British Broadcasting Corporation, 1957.) 5s.

THE B.B.C. Handbook 1958 includes the balance sheet and accounts for the year ended March 31, 1957, as well as a brief analysis of income and expenditure for that year among the regions, an analysis of both sound and television programmes and a comparison of programme services costs. It also gives a comprehensive account of the Corporation's activities prior to the recent changes in the sound programmes. Following Sir Alexander Cadoogan's foreword, a chapter on the constitution of the Corporation refers briefly to the 'fourteen-day rule' forbidding the anticipation of Parliamentary debates, but neither there nor elsewhere is there any discussion of live issues. The Handbook is essentially factual and descriptive: besides a review of the year's broad-

casting, there are chapters on the domestic broadcasting services; the external services; the work and responsibilities of the engineering departments and their technical facilities and installations; programme policy and practice; and relations with the public, the latter including some advice on how to get the best reception. The texts of the Corporation's charter, licence and agreement and supplementary agreement are given, and the Handbook includes a useful select bibliography.

The Terpenes

By the late Sir John Simonsen and Dr. W. C. J. Ross. Vol. 4: The Triterpenes and their Derivatives: Hydrocarbons, Alcohols, Hydroxy-aldehydes, Ketones and Hydroxy-ketones. Pp. ix+524. (Cambridge: At the University Press, 1957.) 70s. net.

THIS is the fourth volume of a series, so it needs little in the way of general introduction. It contains accounts of the structures, degradations and general reactions of the compounds listed in the title, and some indication of stereochemistry. References are given up to 1956, but there are indications that some sections were substantially completed rather earlier than this, which is a disadvantage, although perhaps an inevitable one in a rapidly moving field. The volume is otherwise a very clear and complete account of the subject. The one quarrel which the reviewer has with it is the inadequate consideration given to stereochemistry. The results are stated in most cases, it is true, but without much account of the way they are derived. Conformations are not given. This is clearly a matter of deliberate policy, but the result is rather like raspberry jam without the seeds, wholesome and nourishing but a trifle unreal. It is a definite drawback to the use of the single volume. However, nobody who has the earlier volumes or who is interested in research or teaching in this field can afford to be without this book.

A. J. BIRCH

Kandelman's Krim

A Realistic Fantasy. By Prof. J. L. Synge. Pp. 175. (London: Jonathan Cape, Ltd., 1957.) 15s. net.

AN Orc, a Kea, a Unicorn and a Plumber, meeting to discuss the nature of infinity and the attributes of God, are joined by a sky-blue Goddess; her knowledge of arithmetic resembles Sam Weller's knowledge of London, but she does not understand why the debaters appear to be so interested in mathematics. Instruction is thrust upon her—integers, fractions, complex numbers, sequences, limits. Controversy is enlivened by flashes of wit and chunks of Carrollian nonsense.

Temptation to see an allegory is strong. Surely the Plumber, with his strong constructive sense, his appreciation of mathematical techniques and his deprecation of formalism and academic subtlety, is the modern mathematical physicist, while the sceptical and pedantic Orc is the orthodox pure mathematician, roused only once or twice to a passion which suggests descent from the Orc of William Blake. But the allegory is obscure, and the long preface, with its discussion of meaningful and meaningless statements, its references to Berkeley and to the author's ancestor, Bishop Hugh Hamilton, may be a veiled warning against seeking a meaning where none exists. The fun is there to be enjoyed, and only the careless reader will miss the implication that real mathematics is as much the product of imagination as of logic.

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