

BOOK REVIEWS

An International Bibliography on Atomic Energy, Vol. 2, Scientific Aspects, published by the Atomic Energy Commission Group Department of Security Council Affairs, United Nations, New York, 1951, 880 pp., \$ 10.—.

The volume lists over 24,000 articles published between 1925 and 1949 dealing with scientific aspects of research in the field of atomic energy. Each of the 5 main chapters begins with an introductory essay by an outstanding scientist from each respective field. The main headings are: 1. Fundamental Nuclear Science (P. AUGER); 2. Physics and Engineering of Nuclear Reactors (J. D. COCKCROFT); 3. Biological and Medical Effects of High Energy Radiations (R. E. ZIRKLE); 4. Isotopes in Biology and Medicine (G. HEVESY), and 5. Application of Radioactive Tracers in Non-biological Sciences and Technology (O. HAHN). In addition, the volume contains a general introduction by J. R. OPPENHEIMER, a foreword by S. A. KORFF, a complete author index, and a list of journals.

The reader will find it profitable first to study the table of contents which presents the subdivisions of the chapters in more specific paragraphs and sub-sections. Once familiar with the groupings of the vast material under a reasonable number of headlines, it is easy to use the volume, for example, in search of the literature available on a given subject. Moreover, each consecutive number given to a certain author's work as listed in the index indicates immediately to which group the paper belongs.

While it may be of minor interest in a bibliography on atomic energy to list work done before 1925, it must be regretted that the literature included for work carried out after 1948 is rather arbitrarily chosen and incomplete. However, since the most recent scientific literature is now more easily accessible in many countries than that from the period 1939 to 1947, this bibliography is a very useful guide, and, as far as the writer has been able to check, a fairly complete one. Probably, some authors will be dissatisfied with the grouping of their articles. But a bibliography of this scope shows clearly that titles 20–30 words long are a nuisance, and that concise headings are much to be preferred for numerous reasons. The fact that many authors are listed in duplicate under two initials should not lead the inexperienced to believe that there are, for example, 2 HEVESYS, 2 BETHES or 2 KAMENS, as there are indeed 2 JOLIO-CURIES or 2 LAWRENCEs. However, mention of such minor shortcomings is only apt to emphasize the writer's respect of the admirable effort and great skill of those who brought the second volume of this bibliography into being.

HILDE LEVI (Copenhagen)

Annual Reports on the Progress of Chemistry for 1950, issued by the Chemical Society. Vol. XLVII, London 1951, 490 pp., 25s.

During the past few years the chapters on biochemistry and on organic chemistry usually consisted of articles on special topics of current interest, but now an attempt has been made to report on larger fields. For biochemistry however the subjects will not be covered each year but rather on a triennial basis. In this volume ABRAHAM AND NEWTON discuss antibiotics, VAN HEYNINGEN bacterial toxins, DUCKWORTH general nutrition, HERBERT oxidising enzymes, in which however he had to make a choice, omitting the papers on less well-defined enzymes, and FOLLEY the hormones of the anterior-pituitary gland.

But also in the chapter on organic chemistry many topics of biochemical interest are dealt with. DE LA MARE discusses the progress of theoretical organic chemistry and RYDON of stereochemistry. The latter author also describes the general preparative methods and the aliphatic compounds, in which the total synthesis of β -carotene is discussed in some detail. Under the head Homocyclic Compounds (BRCH) many terpenes and steroids are more extensively described. Compounds of biochemical interest dealt with under the head Heterocyclic Compounds (JOHNSON AND RYDON) are benzofurans as khellin, benzopyrans as eleutherin, vitamin B₁₂, pterins and related compounds. The chapter macromolecules (RYDON) contains polysaccharides and proteins. BADDILEY has given a broad review (18 pp.) of nucleic acids, nucleosides and nucleotides, and FALK AND RIMINGTON of porphyrins.

The chapter on analytical chemistry covers the advances made in all fields of analytical chemistry during the current year and the broad survey on crystallography is a review of four years, especially of neutron crystallography and of organic compounds.

This volume of Annual Reports is a worthy successor to its imposing row of predecessors. Personally however I regret the omission in this volume of an index of author's names.

J. VAN ALPHEN (Delft)