

national Combustion Symposia to be held outside the United States, has been published (Pp. xxvi+959. London: Butterworths Scientific Publications, 1959. 224s.). It contains 124 original papers presented during August 29–September 3, 1958, at Oxford. Few who have a serious interest in combustion will fail to profit from a study of its pages. The largest of the eleven groups of papers concerns the chemistry of combustion reactions, and there are three important groups devoted respectively to deflagration, detonation and combustion in flowing systems. Smaller sections are concerned with spectroscopy, ionization and turbulence in flames, the last containing particularly welcome contributions to a difficult and, until recently, neglected subject. The section on ignition and limits of inflammability attracted mainly papers on the former subject, while that on the interaction of flames with surfaces proves to be a repository for papers on a variety of loosely related topics. The section on special fuels is disappointingly short and the final group of papers on instrumentation is characteristically miscellaneous.

The editors and publishers are to be commended on at least two counts. For the first time the volume appeared with a delay of little more than six months after the meetings. Furthermore, there is for the first time a rational and almost complete record of the discussions. One suggestion still remaining to be implemented is that the papers should be provided with a uniform type of summary or abstract. Will the Eighth Symposium book display every virtue of its kind? The present volume has not fallen far short of doing so.

### Computer Applications

THE report of the proceedings of the fifth annual Computer Applications Symposium, held in Chicago during October 29–30, 1958, has now been published (pp. x+153. Chicago, Ill.: Armour Research Foundation of Illinois Institute of Technology, 1959. 3 dollars). It covers the whole range of applications of computers and some two-thirds of the papers are concerned with data processing or computer organization, even though sometimes labelled as engineering and scientific, as, for example, the papers by R. A. Haertle on "Use of a Computer in the 'AC' Spark Plug Division of General Motors", and by E. M. Chastain and J. C. McCall on "Computer Sharing by a Group of Consulting Engineering Firms". At first reading it would appear that the United States is much ahead of Britain technically in dealing with data processing and large-scale scientific work, but perhaps it is in the attitude of mind towards application of the computer to this type of work that Britain is really behind. The breadth of vision shown in papers such as that of Col. Ellett, dealing with the data processing for air material command, and the willingness to attempt the 'blue skies' approach indicated both there and in the paper by R. D. Whisler on work at Johnson's Wax, is very impressive. It contrasts markedly with the timid and hesitating steps being taken in Britain and is a measure of the confidence now felt in the United States in the capacity of computers to carry through data processing economically. On the technical side, one or two papers are of particular interest, such as that of R. W. Hamming on "Frontiers of Computer Technology", and that of W. F. Bauer on "The Future of Automatic Programming". On the whole, it is an interesting report, but not of special

interest to the general scientific reader, except to demonstrate the very wide field over which computers are now applied.

### Guatemalan Flora

THE Flora of Guatemala is continued with a part devoted to a number of families of Gymnosperms and Monocotyledons, including the large Cyperaceae, Palmaceae, Araceae and Bromeliaceae (Chicago Natural History Museum. Fieldiana: Botany. Vol. 24, Part 1: Flora of Guatemala. By Paul C. Standley and Julian A. Steyermark. Pp. ix+478 (121 figures). (Chicago, Ill.: Chicago Natural History Museum, 1958.) 8 dollars). There is a number of helpful illustrations. It must be remembered that this work also deals with the flowering plants (and their vernacular names) of British Honduras, "since on both geographic and botanical grounds it is essentially a part of Guatemala". This part opens with a plan of the Flora, and mentions certain areas of Guatemala which still need further exploration.

### Space Projectiles

THE Russian journal *Priroda* has recently published a series of articles dealing with various types of space projectiles launched in the Soviet Union and the type and methods of observations connected with these projectiles. Thus Y. L. Alpert (10, 71; 1958) discusses the study of the ionosphere, V. I. Krasovsky (12, 71; 1958)—the study of the upper atmosphere, A. E. Chudakov (12, 88; 1958)—the study of photons, N. A. Dobrotin (1, 57, 1959)—the study of cosmic rays, N. S. Yakhontova (4, 5; 1959) presents an account of the small artificial planet launched in January, and, finally, V. L. Kurt (5, 74; 1959) discusses the artificial luminous sodium comet.

### New Radioisotope Training Programme

THE Atomic Energy Commission of the United States has announced a new programme which will provide students of undergraduate colleges with the opportunity for specialized training in the techniques of using radioisotopes. The new programme will utilize a mobile training laboratory which can be moved to the college campus for presentation of a short (two-week) concentrated course on the basic techniques of handling radioisotopes. The laboratory will be similar to one presented last year to the International Atomic Energy Agency by the United States. Further information is available from University Relations Division, Oak Ridge Institute of Nuclear Studies, P.O. Box 117, Oak Ridge, Tennessee.

### Animal Health Trust Awards, 1959–60

THE Animal Health Trust has announced the following senior awards for the period 1959–60. *Wellcome Fellowships*: Mr. P. H. Lamont to undertake investigation of enteroviruses of the pig, and their possible role, in disease, at the Department of Animal Pathology, Cambridge, under Prof. W. I. Beveridge; Mr. I. R. Falconer to study thyroid-ovarian-pituitary interrelationship at the Department of Biological Chemistry, University of Aberdeen, under Dr. H. A. Robertson. *Vitamealo Fellowship*: This new award was founded to commemorate the 70th birthday of Lord Rank and his close association with Vitamins, Ltd., by whom it was given. The first recipient is Mr. D. B. Ross, who is to continue work on some