energy. Sir John Hacking was re-elected vice-chairman and Mr. F. G. Brewer honorary treasurer of the Committee at its recent annual general meeting, and Mr. C. E. Iliffe has been appointed to serve on the Committee as representative of the United Kingdom Atomic Energy Authority. A third impression of the fifth edition of "Technical Data on Fuel" was published in June.

Statistical Aspects of the Nucleus

THE proceedings of the conference on "Statistical Aspects of the Nucleus", held at the Brookhaven National Laboratory, Upton, New York, during January 24–26, 1955, were tape-recorded, and the uncorrected report of the talks and discussions produced from the recording has recently been published (pp. 113; obtainable from the Office of Technical Services, Department of Commerce, Washington 25, D.C.; 1955; n.p.). The conference consisted of four sessions devoted to low-energy scattering, elastic scattering, inelastic scattering and reactions I (residual nuclei in discrete states), and inelastic scattering and reactions II (residual nuclei in continuum states). The chairmen were E. P. Wigner, K. M. Watson, L. Wolfenstein and V. F. Weisskopf, respectively, and the speakers were E. Vogt, R. G. Thomas, K. M. Watson, D. S. Saxon, H. Feshbach, H. McManus and P. C. Gugelot. The proceedings concluded with a summing up by V. F. Weisskopf. The talks were obviously stimulating and produced lively discussion, which is all faithfully reproduced; but in the privacy of one's study the printed report appears to lack conciseness, and the essential points made by the speakers are lost in a bewildering mass of question and answer. As is pointed out in the foreword, editing was kept to a minimum in order to make the report available rapidly; but it is open to question whether the usefulness of the report has not been jeopardized by this course.

Biochemical Activity of Pea-Seedling Mitochondria

D. D. DAVIES has reported the isolation of a diphosphopyridine nucleotide-specific *iso*citric dehydrogenase from pea-seedling mitochondria, a ten-fold purification having been effected (*J. Exp. Bot.*, 6, No. 17, 212; 1955). In the presence of manganese the enzyme catalyses the oxidative decarboxylation of *d-iso*citrate to α-oxoglutarate and carbon dioxide, but under similar conditions does not catalyse the reverse reaction. Evidence is presented indicating that —SH groups of the enzyme are essential for activity. The properties of the enzyme are described.

Reactions to Potato Virus Y

AN account has been given of the reactions of certain Solanaceae to strains of potato virus *Y* by J. Munro (*Canad. J. Bot.*, 33, No. 4, 355; 1955). Strains of potato virus *Y* that were not clearly differentiated from each other by their reaction on potato varieties were shown to be separate entities by the differing reactions that they caused in several other solanaceous species. One strain did not infect *Physalis floridana*, but this same strain caused necrosis and a severe distortion of the young leaves of *Nicotiana sanderae*. After infection with certain other strains, *N. rustica* showed leaf-drop streak symptoms; this observation has not been previously reported. An avirulent strain in all potato varieties and seedlings tested so far caused a severely necrotic disease in *N. tabacum* and other *Nicotiana* species. The author notes that isolates of potato virus *Y* can only be recognized as mutants when they have ceased to cause the symptoms peculiar to this virus in certain homozygous hosts. During the course of this work the different strains remained constant by this criterion, and there was no evidence that mutations or changes frequently arise from this virus. However, the fact that several distinct strains were picked up in the field without difficulty indicates that changes may commonly occur.

Cytology and Taxonomy of Ceylon Pteridophyta

As a further contribution to our understanding of the relationships between cytology and evolution in pteridophytes, I. Manton and W. A. Sledge (*Phil. Trans. Roy. Soc.*, B, 238, 127; 1954) have made a considerable study of fern material, largely collected by them in Ceylon, but also from other countries. In all, in the present work, cytological observations on 155 entities, referred provisionally to about 140 existing taxa in the fern flora of Ceylon, together with some sixty-nine entities from other sources, chiefly Malaya, are reported. A list of chromosome numbers is given, with an indication of the ploidy, or possible ploidy, of each species. The paper is illustrated by some silhouettes of plants, or leaves, and by a large number of diagrams and photographs of chromosomes. In discussing their findings, the authors consider that the new facts justify the view that cytology "will be at least as helpful in unravelling groups of difficult species in the tropics as it has long been known to be in temperate latitudes". The cytological data are considered in relation to the taxonomic systems of Copeland and of Holttum, and in a number of species and genera the authors have been able to indicate the need for revision. The distinctness of a number of little-known species has been confirmed, and apogamy has been demonstrated in a number of species. Two cases of putative intergeneric hybrids, from Ceylon and Malaya, have been investigated with confirmatory results. In the light of the new cytological information, the splitting of two of Copeland's families is recommended.

Oil Reserves and the Petroleum Industry during 1954

THE Annual Review for 1954 of the Esso Petroleum Co., Ltd., discloses some interesting economic facts concerning the industry generally and, in particular, the position of oil in Great Britain. Production of crude oil (world total) in 1954 was 2 per cent greater than in 1953, reaching 12·2 million barrels daily, due largely to progressive developments in the Middle East. Proved reserves of crude oil increased in 1954 by an amount more than enough to compensate for the total quantity of oil extracted. It is estimated that proved reserves "in the free world" amount to 147,000 million barrels (30 years consumption), of which the Middle East is likely to produce two-thirds. In Great Britain the growth of petroleum exports rose from a value of £6,900,000 in 1949, or one-seventh of the amount for coal, to £84,200,000 in 1954. Five years ago Great Britain refined less than half the petroleum products consumed. By 1952 the gap was closed. To-day there is a good surplus of home-refined products available for export.

Coryndon Memorial Museum, Nairobi: Report for 1954

THE annual report for 1954 of the Coryndon Memorial Museum, Nairobi (pp. 24+3 plates; 1955;