

up. The two bodies were established by Royal Charter issued under Letters Patent of July 25, 1929. The functions of the Trust were primarily to augment the supply of radium (and later, by supplemental Charter, other radiotherapeutic apparatus) for use "in relation to the treatment of the sick in Great Britain" and "the advancement of knowledge of the best methods of rendering such treatment". The main duty of the Commission was "to make arrangements for the proper custody, equitable distribution, and full use of the radium . . . of the Trust with the object of promoting the treatment of the sick . . . and to make such arrangements for the supply on loan of the radium . . . as are necessary". When the Commission started work it was generally admitted that radium treatment in Great Britain had not attained the standard then reached by such centres as the Fondation Curie and the Radiumhemmet. During the last nineteen years, however, some of the national (university) radium centres set up by the Commission have achieved a reputation equal to the best anywhere in the world. At the same time, the standard of radiotherapy in general has been raised by the policy of centralization pursued by the Commission. Hospitals with small radiotherapy departments have been advised to make agreements with a national centre for the treatment of their patients, and the formation of small independent centres has been consistently discouraged. The present health organisation requires that the work hitherto done by the Trust and the Commission shall in future be undertaken partly by a Ministry of Health committee, and partly by the regional hospital boards. It is deemed advisable, therefore, that the radium and other radioactive substances, apparatus, appliances, funds and property belonging to the Trust and the Commission shall be dealt with by vesting them in the Minister of Health, or the Secretary of State for Scotland, as may be appropriate. The Royal Charter and the three Supplemental Charters are to be surrendered.

Market Research

THE report of the Conference arranged by the Manchester Joint Research Council in Manchester on October 22, 1947, on "Market Research", has now been published (Manchester Joint Research Council. Market Research: Report of the Conference held on Wednesday, October 22, 1947, at the Albert Hall, Manchester. Pp. 108. (Manchester: Manchester Joint Research Council, 1948.) 2s. 6d.). It includes the full text of the three papers "The Technique and Applications of Market Research", "The Investigation of Trends of Consumer Tastes" and "Market Research and the Seller" submitted by Mr. O. W. Roskill, Mr. L. R. England and Mr. D. S. F. Vernon, respectively, together with their statements in presenting these papers and reports of the discussions. Summing up the discussions and the papers Mr. C. C. Renold said that, according to this composite picture, the broad purpose of market research was to provide answers to the questions, what does the customer, in fact, want, and, what is he likely to want in the future? These two questions immediately led to four others: who is the customer, what does he, in fact, buy, what is it that determines or influences his choice, and how much does he buy? The answers to some of these questions can be sought by statistical means; but, especially with consumer goods, other questions lead us into problems of psychology. The answers, too, have to be in two tenses—present and

future—and they are determined not only by general movements of economics, trade or social habits, but also by the position of the manufacturer in relation to his competitors. The essential in market research was to select the subject most worth close examination by the techniques available. Mr. A. H. S. Hinchliffe, pointing out that the Manchester Joint Research Council did not itself undertake market research, referred to its information bureau as of possible service to firms unaware of sources of information or market statistics and as possibly able to advise firms on the best sources and consultants for carrying out particular pieces of market research.

Recently Introduced Fungicides

LIME-SULPHUR and Bordeaux mixture, both discovered in the last century, are still very effective and relatively cheap sprays for the control of fungus diseases. It is natural, however, to investigate the possibilities of other substances which might be either more effective or more economical. R. W. Marsh has carried out an extensive series of fruit-spraying trials with various new fungicides (*J. Pom. and Hort. Sci.*, 23, 3 and 4, Dec. 1947). Phenyl mercury chloride was approximately equal to standard lime sulphur for the control of apple scab; in Grade E oil emulsion, it also gave promising inhibition of sporing of *Monilia fructigena*. Ferric dimethyldithiocarbamate and tetramethylthiuram disulphide are not phytotoxic, but are inferior as fungicides to lime sulphur. Heptadecylglyoxalidine equalled lime sulphur for apple scab control, and did not damage sulphur-sensitive varieties. The last substance, with dichloronaphthoquinone and dithiocarbamate sprays, gave satisfactory control of *Pseudopeziza* leaf-spot of black currants. Spread of brown rot infection of apples was reduced by ferric dimethyldithiocarbamate; but hydroxyquinoline sulphate showed no fungicidal value for apple scab.

Diseases of Mushroom Cultivation

THE Mushroom Growers' Association is a body formed by a particular section of the horticultural industry in order to solve its own pressing problems. Some interesting features relating to mushroom diseases have recently appeared in the Association's Bulletin (Nos. 11 and 12, April and July, 1948). 'Cobweb', caused by overgrowth of beds by *Dactylium* species, is briefly described by Fred C. Atkins. The control of 'bubble', caused by the fungus *Mycogone perniciosa*, is outlined by Edmund B. Lambert. He regards as necessary a complete programme: burning sulphur and fumigating with formalin before the mushroom houses are used, taking water direct from uncontaminated deep wells, attaining a temperature of 120° F. for 48 hr. in the final fermentation of manure and casing soil, and general methods of hygiene. A new leaflet of the Association (No. 3) describes the general characters of *Mycogone* disease. A detailed account of the invasion of mushroom beds by truffles is contributed by A. M. Kligman, and, as control of most mushroom diseases involves rigid methods of hygiene, the necessary measures are considered in detail by R. L. Edwards and C. J. la Touche.

Cosmic Phenomena of the Past

IN a paper, "Further References to Cosmic Phenomena in the Kitāb Al-Muntazam of Ibn Al-Jauzī, and a Few in Tārīkh-E-Rāḥat Afzā (India)", a

reprint from *Islamic Culture*, April, 1948, Mohd. Abdur Rahman Khan provides a short account of thirteen fireballs from A.D. 983 to A.D. 1031; three comets from A.D. 974 to A.D. 1056; a comet in A.D. 1741, a detonating fireball in A.D. 1742, and another one in A.D. 1757 and an earthquake at the same time (it is conjectured that the earthquake may have been due to the impact of a large meteorite with the ground), and a slight earthquake in A.D. 1759. This information is additional to that published by the same author in his brochure "Meteoric Showers, Past and Present", some of which was discussed by him in the *Islamic Culture Magazine*, 20, 4 (1946).

Scottish Conference on Road Research

AN all-day conference to discuss road research problems will be held in Glasgow at the Royal Technical College on September 24. The conference is being called, with the collaboration of the Ministry of Transport, by Dr. W. H. Glanville, director of road research of the Department of Scientific and Industrial Research, in association with the Glasgow and District Association of the Institution of Civil Engineers, the Scottish branches of the Institution of Municipal Engineers and the County Surveyors' Society, and the Scottish Accident Prevention Council. The chairman of the conference will be Sir Patrick Dollan. The purpose of the conference is to bring the work of the Road Research Organisation before Scottish engineers and others concerned with roads and road traffic, and to provide an opportunity for discussing which research problems are of particular interest to Scotland. In addition to short papers by the director of road research and senior members of his staff, followed by an open discussion, there will be an exhibition of some aspects of the work of the Organisation. The morning session (deputy chairman: Colonel T. U. Wilson) will be devoted to materials and methods of construction, and the afternoon session (deputy chairman: Mr. G. J. Sherriff) to road safety and traffic flow. Owing to limitations of space, admission will be by ticket, obtainable from the Director of Road Research, Road Research Laboratory, Harmondsworth, West Drayton, Middlesex.

University of London: Appointments

THE following appointments in the University of London have recently been announced: Dr. T. Crawford, University professor of pathology in St. George's Hospital Medical School as from October 1. Since 1946 he has been director of pathological services at St. George's Hospital and Medical School; Mr. D. V. Davies, University professor of anatomy in St. Thomas's Hospital Medical School as from October 1. Since 1944 he has been fellow and College lecturer at St. John's College, Cambridge, and in 1945 was Arris and Gale Lecturer at the Royal College of Surgeons; Mr. A. V. Judges, University professor of history of education in King's College as from January 1, 1949. Since 1938 he has held the title of reader in economic history in the London School of Economics and Political Science; Dr. R. T. Williams, University professor of biochemistry in St. Mary's Hospital Medical School as from October 1. Since 1942 he has been senior lecturer in biochemistry and during 1943-44 was in charge of the Department of Biochemistry at the University of Birmingham; Dr. G. L. Clark, University reader in mathematics in Bedford College as from October 1. Since 1947 he has been senior lecturer in mathematics at University College, Cardiff; Mr. T. A. Rodger, University

reader in psychology in Birkbeck College as from October 1. He is at present senior psychologist to the Admiralty, consulting psychologist to the Central Juvenile Employment Executive and a lecturer in Birkbeck College.

Announcements

MR. DEREK ALLAN HOUGH has been appointed general secretary of the Institute of Petroleum with effect from September 1. Mr. George Sell has been appointed as editor of the Institute's publications with effect from August 1. Mr. Sell has been publications secretary since March, 1946.

PROF. WALTER H. BUCHER, of Columbia University, has been elected president of the American Geophysical Union to fill the unexpired term of the late Oscar E. Meinzer. This term will expire on June 30, 1950.

MR. F. A. SECRETT has resigned his position as honorary adviser to the Ministry of Agriculture and Fisheries on vegetable production, with effect from August 1. Mr. Secrett, who is himself a leading vegetable grower, has held this appointment since August, 1942. He will continue his membership of the Agricultural Improvement Council.

IN recognition of his studies on "Sludged Blood" the College of Physicians of Philadelphia has awarded the Alvarenga Prize for this year to Dr. Melvin H. Knisely, of the University of Chicago. The Alvarenga Prize was established by the will of Pedro Francisco da Costa Alvarenga, of Lisbon, Portugal, an associate fellow of the College, "to be awarded annually by the College of Physicians on each anniversary of the death of the testator, July 14, 1883".

THE Electronics Division of the U.S. Electrochemical Society is making preparations for a symposium on luminescence, to be held during its meeting in Philadelphia, from May 5 until 7, 1949. Further information can be obtained from Dr. R. M. Burns, Electrochemical Society, 235 West 102 Street, New York 25, New York.

THE Nuffield Foundation has provided funds for the establishment of a research fellowship in extraction metallurgy, which will be awarded in consultation with the Institution of Mining and Metallurgy and the Royal School of Mines, London, and will be tenable at the Royal School of Mines for a period of five years. The funds are sufficient to provide a small specialist staff and the necessary equipment in addition to adequate remuneration for the fellow. Further information can be obtained from the Secretary, the Institution of Mining and Metallurgy, Salisbury House, London, E.C.2.

THE Medical Research Council announces that it has awarded Rockefeller travelling fellowships in medicine to the following, for the academic year 1948-49: Dr. K. W. Donald, Medical Professorial Unit, St. Bartholomew's Hospital, London; Dr. L. P. R. Fourman, Nuffield Department of Clinical Medicine, University of Oxford; Dr. R. H. Girdwood, Department of Medicine, University of Edinburgh; Dr. A. Isaacs, Department of Medicine, University of Sheffield; Mr. A. I. S. Macpherson, Department of Surgery, University of Edinburgh; Dr. H. B. Stoner, Department of Pathology, University of Sheffield; Mr. S. F. Taylor, Department of Surgery, Postgraduate Medical School, London.