

## NEWS and VIEWS

### Food Yeast

BECAUSE, in contrast with animal protein, plant protein is poor in some of the B vitamins although rich in others, it is important to supply the missing types to human and animal diets when plant protein is consumed. Recently it has been found that micro-organisms build up all the members of the vitamin B group and that their protein is of the same high nutritive value as animal protein. These facts have been the basis of recent work at the Chemical Research Laboratory, Department of Scientific and Industrial Research, which has led to the production of 'Food Yeast'. For the factory in Jamaica, an organism has been developed at the Laboratory from a yeast used during the War of 1914-18 for feeding purposes; though at the time nothing was known about its vitamin content. The organism developed is double the size of that originally tried. This facilitates large-scale manufacture and the product is somewhat richer in some of the B vitamins than the original type. When dry it contains as much as 50 per cent of high-grade protein, approaching in nutritive value to meat and fish protein. Its vitamin B content is definitely higher than that of animal protein, including liver.

The product known as 'Food Yeast', which has resulted from the researches of the Chemical Research Laboratory, has a slightly meaty taste and is of a light straw colour. It can be mixed with water or milk or added to soups and stews, to which it imparts a pleasant meaty taste. It could be successfully incorporated into biscuits and could, if added to flour, yield a most palatable loaf; 5 per cent of it, added to a 2 lb. loaf, would increase its nutritive value as much as would the addition of a  $\frac{1}{4}$  lb. of beefsteak or two eggs. Food Yeast can be produced from waste molasses when nitrogen in the form of ammonia or ammonium salts is added, and its production is extremely rapid. A continuous process has been developed: a solution of molasses and the necessary ammonia and phosphate enter one end of a vat, and an equivalent volume of yeast in suspension is withdrawn from the other. Thus a product containing a high concentration of B vitamins and a high-grade protein is made in a matter of hours. This may be significant during the immediate post-war period when the depleted animal stock of Europe will be insufficient to provide meat and milk for the underfed populations of the occupied countries. In the tropical and sub-tropical countries it may also find an important application, for native diets are often deficient in vitamin B. It is estimated that Food Yeast can be supplied at 6d. per lb., and  $\frac{1}{2}$  oz. taken daily would ensure to the native a sufficiency of B vitamins.

### Great Britain and Latin American Culture

THE British Council was first established at the end of 1934 with the purpose of disseminating in foreign countries knowledge of the English language, British institutions and British contributions to science, medicine and the arts. Since then, a large network of institutes has grown up under the Council's auspices in Latin America, as in other parts of the world. But a one-way cultural programme is incomplete: what is needed is a two-way traffic of cultural relations. It is no less desirable that people in Britain should be informed of Latin American life and thought than that Latin Americans

should be informed about British thought and customs. The anonymous donation of £30,000 received by the British Government for the promotion of cultural relations with Latin America is thus most opportune. The donors have asked that the gift be at the disposal of the Secretary of State for Foreign Affairs and the chairman of the British Council. They have decided that £20,000 is to be set aside as part of the British contribution to the establishment of an Institute of Latin American Culture in London after the War. One of the projects which will be carried out with the remainder will be the provision of a science laboratory for an important boys' school in South America, conducted on British lines. This news will undoubtedly have an encouraging effect in the Latin American Republics. It will show them that Great Britain wants, not to impose British cultural propaganda on them, but to secure exchange of information on a basis of equality.

### Czechoslovak Degrees at Oxford

A UNIQUE ceremony was performed in the Sheldonian Theatre, Oxford, on February 27, when the Vice-Chancellor of the University presided, at the request of the Czechoslovak Government, at the conferment on a group of Czechoslovak medical students of degrees of their own universities. The occasion had a practical and also a symbolic aspect. Czechoslovak students who have been able to complete their studies in Great Britain were thus acknowledged as trained workers, and given a status which will be readily recognized in their own country when the time comes for them to return and minister to their own people. They will not have to labour under the disadvantages sometimes inherent in possessing 'foreign' qualification. But there is also the wider significance of the event. One of the old universities of Great Britain, through its highest resident official, the Vice-Chancellor, gave itself for the time being to the use of the universities of Czechoslovakia, so that the jealously guarded privilege of the conferment of degrees might still be theirs. The difference between the treatment accorded to university and other students by the United Nations and by the Axis Powers needs no emphasis here: it is sufficient to refer to the numerous measures which have been taken to facilitate the continuance of their studies by foreign students in the free countries, and to contrast these conditions with the wholesale persecution to which they have been subjected in occupied Europe. The ceremony at Oxford was a fitting mark of the international character of learning.

### Agriculture and Nutrition

MR. F. LE GROS CLARK delivered on February 19 the first of a series of lectures arranged by the Harpenden Branch of the Association of Scientific Workers on "Agriculture and World Nutritional Needs". Speaking on "The Problems of a Freedom from Want Economy", he pointed out that in implementing the principles of the Atlantic Charter, the first need is the acceptance of standards of suitable nutrition applicable with slight modification to populations in all parts of the world. Such standards can easily be agreed upon and should be subject to regular adjustment as knowledge advances. When these standards are applied to existing populations, it appears that in the world as a whole food production has fallen far short of requirements. In a given population, changes in income-level invariably

produce such changes in diet as indicate that the low nutritional-level of the major sections is more a function of economic conditions than of racial tradition or disposition. The exported food of the world as a whole shows a markedly erratic distribution: for example, the English-speaking countries and parts of Western Europe absorbed in times of peace almost the whole of the fruit and sugar which came on to the world markets. What is to be the policy of these favoured countries in a world governed by the principles of the Atlantic Charter?

### Social and Industrial Environment and Disease

HIPPOCRATES, in a famous passage, said that in forming a judgment on the outcome of illness not only the individual nature of the patient but also his environment, physiological and psychological, must be considered. This formed the text for a Chadwick Public Lecture delivered on February 23 by Prof. M. Greenwood, who suggested practicable lines of study for the medical student. In the first place, some knowledge of the housing position of England and Wales, as it was and is, is necessary. It is easy to forget that, in some parts of the country, the housing position is still very bad, and that rehousing schemes have not always been successes. In the next place, although scientific study of the influence of occupation on health is hundreds of years old, the earlier work was mainly devoted to specific occupational hazards, the noxious dusts and fumes. More general work on environmental effects is a generation old, but has been greatly neglected in education. Evidence of this is that at the beginning of the present war, and indeed still, the work of the Health of Munition Workers Committee and its successor, the Industrial Health Research Board, has been very largely ignored. One reason for this is that medical students and practitioners, overburdened by the demands of an ever-lengthening curriculum, have neither the training nor the leisure to study papers often of a technical character written by research workers who are usually not members of the medical profession. To prepare the way for improvement it is desirable that all medical students should receive an elementary training in statistical method. Both epidemiology and general social hygiene, because they are concerned with groups rather than individuals, must employ methods of averaging, that is, statistical methods. It is also necessary that more serious attention should be paid to the study of psychology.

### Institute of Chemistry

At the sixty-fifth annual general meeting of the Institute of Chemistry, Dr. J. J. Fox, the retiring president, said that the roll has increased to 8,250 fellows and associates and more than 950 students. The Institute has joined with the Institute of Physics and representatives of other sciences in forming a Joint Council of Professional Scientists to watch their common interests and give expression to the opinions of professional scientists as occasions arise. The Joint Council is in touch with the appropriate authorities in considering the probable position of scientific workers after the War. There has been much discussion among chemists on the future policy of the Institute and on the possibility of closer co-operation between the various organizations devoted to the science and profession. The main objects of the Institute are to promote the education and train-

ing of professional chemists, to hold examinations, to grant certificates of competency, to organize and register the competent, and to render every possible assistance to the Government, industry and commerce by encouraging the employment of chemists. Endeavours to promote co-operation at the present time by means of joint membership have not been so well supported as had been hoped by the Chemical Council, a body constituted under a deed of agreement between the Institute, the Chemical Society and the Society of Chemical Industry, which has now been asked to consider the possibility of co-ordinating the services performed by the various bodies for chemists and chemistry. Prof. Alexander Findlay, of the University of Aberdeen, has been elected president of the Institute.

### University of London

THE title of professor emeritus of botany in the University of London has been conferred on Prof. R. Ruggles Gates on his retirement from the chair of botany at King's College.

The degree of D.Sc. has been conferred on: Mr. A. G. Gaydon (Imperial College of Science and Technology); Mr. S. H. Jenkins (Rothamsted Experimental Station); Mr. J. T. Martin (Rothamsted Experimental Station); Mr. C. B. Taylor (Rothamsted Experimental Station); Mr. A. F. B. Zeuner (Institute of Archaeology).

The William Julius Mickle fellowship has been awarded to Prof. E. C. Dodds, Courtauld professor of biochemistry in the Middlesex Hospital Medical School.

### Foreign Books and Translations

MR. JOHN HAMPDEN, director of the Books and Periodicals Department of the British Council, is appealing for books of every type in Arabic, Chinese, Czech, Danish, Dutch, modern Greek, Norwegian, Polish, Serbo-Croat and Urdu for presentation to institutions and individuals in the British Empire, foreign countries and among men of the Allied fighting services and merchant seamen in Great Britain. Standard works, including advanced text-books, in French are also required. Translations into any of these languages of standard works in English would be particularly welcome. Offers should be addressed to the British Council (Foreign Books), The College, South Leigh, near Witney, Oxford.

### Social Welfare in the Colonies

A COLONIAL Social Welfare Advisory Committee has been appointed by the Secretary of State for the Colonies to advise him on problems affecting the social welfare of urban and rural communities in the Colonies, on the training of social welfare workers, and on allied matters. The Committee consists of: The Duke of Devonshire, Parliamentary Under-Secretary of State (*chairman*); Sir Charles Jeffries, Assistant Under-Secretary of State (*vice-chairman*); Prof. A. M. Carr-Saunders, director, London School of Economics and Political Science; Miss Margery Fry, well-known authority on juvenile delinquency; Miss L. Harford, chief woman officer, National Council of Social Service; Mr. J. Longland, director of education, Dorset; Mr. E. H. Lucette, secretary, Dr. Barnardo's Homes; Miss Margaret Nixon, chief superintendent of welfare at the Admiralty; Mr. A.