

## NEWS and VIEWS

## Biochemistry at Cambridge :

Prof. A. C. Chibnall, F.R.S.

PROF. A. C. CHIBNALL, whose impending retirement from the Sir William Dunn chair of biochemistry has recently been announced, has held his present position since 1943. During his period of tenure, the Department of Biochemistry at Cambridge has fully maintained its former distinguished record. Under his guidance there have not only been developments in the major themes of research on the dynamic aspects of biochemistry for which the Department became famous under the late Sir Frederick Gowland Hopkins; in addition, much more attention has been paid than in the past to the biochemistry of proteins, a subject in which Prof. Chibnall himself is especially interested. As might be expected also, plant biochemistry at Cambridge has received much encouragement at his hands. A notable development which has occurred under Prof. Chibnall is the expansion of work on microbiological chemistry; this has led to the recognition of microbiological chemistry in the Natural Sciences Tripos, and to the establishment of a major division of the Department, headed first by the late Dr. Marjory Stephenson and now by Dr. E. F. Gale, with responsibility for research and the training of students in this branch of biochemistry. Although Prof. Chibnall's tenure of the chair at Cambridge has been short, he has thus very definitely left his mark on the Department. The regret of his scientific colleagues at his early retirement will be tempered by their knowledge of his intention to remain in Cambridge and to devote to scientific research the time liberated by relief from duties of administration and teaching. Doubtless also his wide knowledge and experience will continue to be available to such bodies as the Agricultural Research Council, to which he has given so much help in the past.

Prof. F. G. Young, F.R.S.

PROF. CHIBNALL will be succeeded in October next by Prof. F. G. Young, who will thus be leaving University College London, after having held the chair of biochemistry there since 1945. During the War the Biochemical Department of University College was evacuated from London, and one of his main tasks on appointment in 1945 was to superintend its return and to adapt it to post-war needs. This he has done with conspicuous success. Not only have the laboratories been more or less completely re-equipped, but also the teaching provided has been brought up to date by the introduction of a new course leading to the degree of M.Sc. in biochemistry. Prof. Young's research interests are in the sphere of carbohydrate metabolism, and brief mention of his activities to 1945 was made in a previous note (*Nature*, 156, 471; 1945). His outstanding achievement has been the production of permanent experimental diabetes in animals by injection of anterior pituitary extracts, and he has subjected the whole question of pituitary control of the insulin-secreting function of the pancreas to close and skilful experimental analysis. The value of his work was recognized recently by his election to the fellowship of the Royal Society. Under Prof. Young's vigorous leadership, the Biochemical Department at University College has become once again a flourishing centre for

teaching and research, and his pending departure will be viewed by his colleagues there with great regret. He goes to Cambridge with an established reputation, and he carries with him the good wishes of his numerous friends at home and abroad.

## Specialization at Universities

THE numbers of university undergraduates, in the technical faculties especially, are to-day greater than ever before, and yet apprehension as to the true worth of university training was never so widespread as at the present time; for modern scholarship has made such strides, particularly in the field of science, that no one subject can be adequately studied without undue specialization and consequent neglect of other points of view. This danger of specialization was the theme of Mr. Oliver Stanley's recent address, on being installed as chancellor of the University of Liverpool, when he said that too many men and women to-day leave a university complete masters of a subject but still incomplete individuals, unable to act as evangelists of that broader culture, that more general philosophy which should be the university's gift to the people. These words were echoed by Mr. Winston Churchill when, on the same occasion, he received the honorary degree of doctor of laws. Indeed, Mr. Churchill went further and, to a certain extent, accused science of being the usurper of culture. Few men of science would seriously dispute that "... We need a lot of engineers but we do not need a world of modern engineers. . . . Science must be the servant and never the master of mankind"; but Mr. Churchill's further statement, "I would venture to say that no amount of technical knowledge can replace the value of the humanities or the study of history", is one that is open to challenge. The study of science need not preclude a deep appreciation of the humanities; rather it is the high degree of specialization within the syllabus which is the excuse for not teaching a general appreciation of scientific principles. Many physics graduates have very little knowledge of the processes of life, just as, say, the majority of botanists are probably unaware of even the elementary facts of the quantum theory or relativity; and both know very little of either the history or philosophy of science. It is on this last point that, no doubt, science is lacking as a medium for educating (in the widest sense of the word) the student. If the teaching of science itself were less specialized and more cultural, then perhaps a scientific course would be more readily recognized as being as good an education as, say, a classical one, for training the undergraduate to become a leader of thought and action.

## New Coalfield in Britain

IT has been announced by the Lord President of the Council that a new coalfield has been discovered in south Staffordshire during the course of deep boring by the Geological Survey of Great Britain. At a minimum estimate this coalfield contains 400 million tons of workable coal, and the amount may possibly be several times as great as this estimate. The seams lie at a depth of about 3,000 ft.; thirty feet of coal has so far been discovered, including seams of 8, 6 and 5 ft. Boring is still going on, and it is likely that further seams will be found. The boring is at Whittington Heath near Lichfield. The new coalfield is situated between the Cannock Chase coalfield and the Warwickshire coalfield, in both

of which the productive coal measures crop out at surface. Additional borings will be necessary to prove the full resources and detailed structure of the new field. Funds to undertake a programme of deep boring were granted to the Geological Survey in 1947 for the purpose of investigating the deep-seated geological structure of Great Britain. It is unlikely that all the bores will give direct economic results of such importance as the Lichfield bore; but the information gained from the bores will enable geologists to interpret the structure of the rocks at great depths beneath considerable areas of the country. Knowledge of this kind is of great general importance in the search for underground mineral and water resources. Mr. T. Eastwood, assistant director of the Geological Survey in charge of mineral deposits of England and Wales, is responsible for the work. Boring has been carried out by the Craelius Company under contract.

### Universities of the British Commonwealth: Congress in Canada

A MEETING of representative vice-chancellors and principals of the various countries of the British Commonwealth is to be held in Canada next month. At the Congress of Universities of the Commonwealth held at Oxford in July 1948, it was decided that there should be smaller meetings of executive heads of universities annually in some part of the Commonwealth in order to discuss matters of common policy, including the implementation of the decisions of the Congress on inter-university relationships (interchange of staff, students, etc.). This, the first of such conferences, will take the form of a meeting of the Executive Council of the Association of Universities of the British Commonwealth, and will be held at Halifax, Nova Scotia, during June 10-11, followed by the annual meeting of the National Conference of Canadian Universities during June 12-15, at which the overseas representatives will be guests. The conference will conclude with a meeting in Montreal on June 17. The president of McGill University, Dr. F. Cyril James, will preside, and the local arrangements are in the hands of Mr. T. H. Matthews, registrar of McGill University and secretary-treasurer of the National Conference of Canadian Universities.

The following is a list of delegates who will be attending the Conference. *Great Britain and Ireland*: Sir David Lindsay Keir (vice-chancellor, Queen's University, Belfast), Very Rev. Dr. J. Lowe (vice-chancellor, University of Oxford) and Prof. Lillian Penson (vice-chancellor, University of London). *Canada* (representatives on Executive Council): Dr. F. Cyril James (principal, McGill University, Montreal), Monseigneur F. Vandry (rector, Laval University, Quebec) and Dr. R. C. Wallace (principal, Queen's University, Kingston, Ontario). *Australia*: Prof. D. B. Copland (vice-chancellor, Australian National University) and Prof. W. Prest (dean of the Faculty of Commerce, University of Melbourne). *South Africa*: Dr. E. G. Malherbe (principal, University of Natal) and Dr. H. R. Raikes (vice-chancellor, University of the Witwatersrand). *New Zealand*: Dr. R. S. Aitken (vice-chancellor, University of Otago). *India and Ceylon*: Dr. P. N. Banerjee (vice-chancellor, University of Calcutta) and Sir A. Lakshmanaswami Mudaliar (vice-chancellor, University of Madras). *Pakistan*: Dr. S. M. Hossain (vice-chancellor, University of Dacca). *Other parts of the Commonwealth*: Colonel Lindsay Ride (vice-

chancellor, University of Hong Kong). *Officers of the Association*: Sir William Hamilton Fyfe (honorary treasurer, formerly vice-chancellor, Queen's University, Kingston, Ontario, and University of Aberdeen), Mr. J. F. Foster (secretary of the Association and of the Committee of Vice-Chancellors and Principals of Great Britain and Ireland, formerly registrar of the University of Melbourne, Australia) and Miss Margaret Palstra.

### Petroleum Oils and the Fruit-grower

A LECTURE given by Dr. T. Swarbrick to the Royal Society of Arts, on January 26, described, *inter alia*, some interesting features of the use of petroleum oils for controlling the pests of fruit trees. One difficulty about their use was an occasional phytotoxic effect. The chemists of the Royal Dutch Shell Group have now traced the cause of this damage, and found methods for its removal. Earlier work by Chapman and Pearce indicated the necessary conditions of boiling point and viscosity which conferred insecticidal action. Petroleum can also be used as a total or selective weed-killer, and new methods of application are designed to reduce the amount of water required in spraying. Atomized oil sprays may need no more than 2½ gallons of spray fluid per acre for crops of small fruit.

### A Virus-inhibiting Protein

A GLYCOPROTEIN which can inhibit the activity of tobacco mosaic, tomato bushy stunt and other plant viruses has been isolated by B. Kassanis and A. Kozłowski (*J. Gen. Microbiol.*, 2, No. 2; May 1948). It was obtained from the sap of *Phytolacca esculenta* by differential precipitation with ethanol followed by adsorption on 'Celite' and elution with 10 per cent sodium chloride. The protein is unaffected by pepsin and trypsin unless it is denatured, and it is not effective against bacteriophage.

### Royal Institute of Chemistry

At the annual general meeting of the Royal Institute of Chemistry held on April 28, it was announced that H.M. the King had been graciously pleased to grant to the Institute on April 14 a new royal charter in substitution for the original charter of 1885 and the supplemental charter of 1944. In the new charter it is made clear that the Institute is concerned with the whole profession of chemistry and not merely with that of "analytical and consulting chemistry", as stated in the original charter. The powers of the Institute have been modified in certain respects so as to facilitate the progressive development of its activities and services in the interests of the profession and of the public. The title of the Institute has been changed from "The Royal Institute of Chemistry of Great Britain and Ireland" to "The Royal Institute of Chemistry". It has been resolved to amend the by-laws so as to provide that citizens of Eire, as well as British subjects, shall be eligible for admission as members or for registration as students of the Institute. Resolutions were passed at the meeting authorizing the Council to establish, as a benevolent fund, a Residential Clubs Fund.

The following officers for 1949 were elected: *President*, Prof. J. W. Cook; *Vice-Presidents*, Prof. F. Challenger, Mr. H. Krall, Prof. R. P. Linstead, Mr. G. Roche Lynch, Mr. J. A. Oriel, Mr. E. T. Osborne; *Honorary Treasurer*, Dr. D. W. Kent-Jones.