

preparation of a special type of tar for road-surfacing, and between the Building Research Station and the British Electricity Authority in developing the manufacture of bricks from the ash of power stations. Mr. Molson also reaffirmed the Government's intention to build a science centre in London and said that the site on the South Bank is still reserved for the purpose.

Little else of fresh interest emerged in the debate. Sir William Darling pointed out that the most effective industrial research organizations are created by industrial firms themselves, and there is some general recognition of the dangers of relying on a government organization, even of the type of the National Research Development Corporation, for development work; there is also the vital importance of good industrial relations in securing the effective co-operation on which efficient production depends. Equally, he added, it is recognized that the practice of indiscriminately denigrating business enterprise and management is not conducive to good relations and co-operation. Mr. A. Allen made a point that is now exercising men of science when he referred to the other arduous duties of the Lord President of the Council and urged that there should be a senior minister giving undivided attention to the scientific responsibilities and interests of the Lord President. Mr. W. Shepherd pressed for greater use of consultants in industry.

#### Education and the Oil Industry

THE world demand for the products of petroleum has more than doubled over the past fifteen years. It may well double again in the next fifteen years and, if so, there will be need for an increasing number of men who, by combining ability, technical knowledge and experience, can fill administrative posts of all kinds. The petroleum industry was among the first to seek the help of the universities in meeting its need for technical and administrative staff, in promoting academic studies in the applied sciences and in furthering education and training within its own organization. This has been particularly true of the Shell Organization which, with its associates in the Royal Dutch/Shell Group of oil companies, to-day operates in more than fifteen countries and employs a quarter of a million persons ("Venture in Education". Pp. 8. London: Shell Petroleum Co., Ltd., 1953). The Organization is faced with many educational problems in many lands and its general policy has had to be adapted not only to the industry but also to the community it serves. For a long time the universities have been looked to for men qualified for the technical side of the business. It has also been realized that the intellectual discipline of university training was no less valuable on the commercial and administrative sides than on the technical, and in particular that the Group's overseas marketing organization offered scope and opportunity to the arts graduate. A record of the activities of the Shell Group has been set down in a publication called "Venture in Education", which also indicates the financial support which the Organization has given to the universities. So long ago as 1912, for example, a donation was made to the University of Cambridge for a readership in physical chemistry, and this was followed in 1919 by a gift of £50,000 towards the establishment at Cambridge of the physical chemistry laboratory. Recent donations have totalled well over half a million pounds, while each year the Organization is spending a total of approximately £275,000 on its own educational activities.

#### City and Guilds of London Institute

ON the threshold of its seventy-fifth anniversary, the City and Guilds of London Institute finds itself in a critical and challenging position (City and Guilds of London Institute. Report of the Council for the Year 1952. Pp. 52. London: City and Guilds of London Institute, 1953). There is little doubt that the national importance of its work in technical education is appreciated, as is shown by the continued call for its syllabuses in established and new industrial fields and for its advisory services in educational matters of a more general and far-reaching nature. The critical point has been reached because the available resources of the City of London Corporation and Livery Companies can no longer maintain, let alone expand, the work of the Institute. The problem of accommodation for the Department of Technology is seriously hampering its work; suitable accommodation conveniently located and on one site would ease administration and lead to appreciable economies. In view of the increasing amount of work of the Department of Technology, this is a matter which is causing grave concern to the Council of the Institute. Since the War, the number of candidates taking examinations under the aegis of the Department of Technology has more than doubled. There have also been sixty-five major revisions, and thirty-one completely new subjects have been introduced. These figures are all the more impressive when it is realized that in many cases a subject may, in fact, include two or three independent schemes of syllabuses and related examinations. The need to balance claims of the development of a large number of new projects against the revision of existing subjects is a constant problem for the Department of Technology. At present, twenty subjects are being scrutinized and will shortly be completely revised. At the same time, many new subjects are in preparation.

#### Impact of Industry on the Worker

IN an imaginative but well-authenticated article, Nigel Balchin, the well-known psychologist and author, examines the way in which the growth of industry has affected the outlook and philosophy of those who work in large or small industrial undertakings (*J. Inst. Personnel Management*, June 1953). A comparison is made between the life of the agricultural worker and of the individual whose working life is confined to the factory, and Balchin concludes that the impact of industry upon the worker has been to destroy the simple and direct significance of work done and hence to sever the mental link between 'work' and life. In these circumstances 'work' is liable to become something which has no logic or point in itself. The impact of the huge and complicated industry structure on the worker has been to confuse the mind as to his real desires and requirements and to leave him with a vague impression that man exists for industry rather than *vice versa*.

#### Cambridge University Educational Film Council

THE sixth report of the Cambridge University Educational Film Council contains a description of experiments which have been made in the use of films for teaching history (Cambridge University Educational Film Council. Sixth Report, March 1953. Pp. 8. Cambridge, 1953). In collaboration with the Cambridge Branch of the Historical Association, a series of feature films have been shown to