

suitable boat will be attached to the Station to make their use possible. Judging by the shore fauna, there is no doubt that the dredge will reveal as rich a bottom fauna as any biologist could desire. The real industry of the Island is fishing, and it is an experience never to be forgotten to watch the small boats gathering at about 4 p.m. each evening off Inhaca village and transferring their day's catch to the larger boats, which will sail all through the night to deliver it in time for the early morning markets in Lourenço Marques. Many an interesting fish or other animal can be 'collected' by the biologist at these evening gatherings.

It is a brave venture to have established so fine a station in this spot, and it is to be hoped that many workers will be able to avail themselves of the unique opportunities for research which it affords.

## THE BRITISH COUNCIL REPORT FOR 1950-51

**I**N the annual report of the British Council for 1950-51\*, which covers the year ended March 31, 1951, the general plan is that adopted for the first time in last year's report, though some of the chapter headings are different and that on the Council and the sciences disappears. A series of eleven chapters reviews in general terms the work of the Council in promoting cultural relations in four main territorial regions—Latin America, the Middle East, the Far East and the Commonwealth—then the work of the institutes, advisory visits abroad, work in the United Kingdom for the welfare of overseas students, and, finally, finance. Detail for the most part is given in a series of appendixes which occupy roughly half the report, of which those dealing with university interchange, lecturers overseas, and courses organized by the Council are of chief interest to the scientific worker.

In view of the publicity which the closing of three hostels for overseas students in Britain has received during the year, the section of the report which deals with the welfare of overseas students will be read with special interest. The scheme which the Council prepared, in consultation with the government departments concerned, for covering its wider responsibilities for the welfare of Colonial and overseas students generally for the period January 1, 1950, to March 31, 1954, was based on the view that, since it is undesirable to segregate Colonial students, hostels should not, if it could be avoided, be used by Colonial students only; and that, ideally, hostel accommodation should be regarded as a temporary necessity and that accommodation should be found for as many as possible either in permanent halls of residence, or with private families or in lodgings. Where hostel accommodation was unavoidable, it should be of a standard comparable with that of a university hall of residence.

The three hostels were closed in accordance with this policy and replaced by one residence housing 200 men, which was opened in Hans Crescent, London, in October. Planned and equipped to the standard of a modern university hall of residence, this is intended also to become a live centre for the Colonial student population of London. Those selected to spend a year there were mainly freshmen.

\* Report on the Work of the British Council for the Year ended 31st March, 1951. Pp. v+120. (London: British Council, 1951.)

A hostel in Edinburgh for twenty-eight men was taken over from the Colonial Office, and one for twenty-five men was re-opened in Newcastle. The small hostels in Manchester and Leeds had been established before the Council assumed its new responsibilities from the Colonial Office, and were not a part of the Colonial student welfare scheme. As a measure of economy, arrangements had to be made to close them at the end of the year; but the Leeds hostel was reprieved later through private generosity. Most Colonial students have to be accommodated in private houses, and the finding of suitable billets has not been easy. The report states that by the end of the year it was clear that additional hostel accommodation is required in London. The report stresses the value and far-reaching effects of this work; but points out that what really matters is how much the British public can be stimulated to do for such students.

Other work in the United Kingdom of particular interest to the scientific world is that of the Students Department, where the awards were re-distributed in view of the withdrawal of the Council from work in Czechoslovakia, Hungary and Bulgaria and the cessation of the flow of scholars from China. The number of scholarships for Germany and Yugoslavia was increased, and students from Burma, Indonesia and Thailand partly offset the loss of Chinese scholars. In October 1950 scholars came for the first time from India and Pakistan, the demand from India being such that for the present the field is to be restricted to candidates holding first-class honours degrees and who are to study education and public administration. In general, the proportion of applicants offering the sciences, notably medicine, economics and agriculture, is increasing. The number of bursaries, which provide opportunity for short-term intensive study in industry or the professions, was increased from 125 to 197, more than two-thirds being drawn from industry, agriculture and the social services. Five tours were organized for Greek provincial governors for the study of local government administration. New commitments in the Fellowships Section of the Visitors Department, which deals with all fellowships awarded for study in the United Kingdom by the United Nations and its Specialized Agencies, are in connexion with the International Labour Office Fellows and technical students under the Colombo Plan. Of the visitors, 258 were concerned with the social sciences, which displaced medicine (191) as the principal interest, education (147) coming third.

Departments constituting the Science Group further scientific exchanges with other countries, and as a result of last year's visit to Great Britain of the Secretary-General of the Spanish Higher Council for Scientific Research, several Spanish science students have received training in Britain and a delegation of British scientific workers attended the Higher Council's tenth annual congress at Madrid. The correction of the texts of Scandinavian scientific papers for publication in English continued on an increasing scale, and the Medical Department alone handled some sixteen hundred miscellaneous inquiries. The *British Medical Bulletin* continues to be the most successful scientific publication of the Council, and the monthly *British Medical Book List* has been launched to meet the overseas demand for a comprehensive list of this kind. In view of a comment by the Select Committee on Estimates, the size of the staff employed in the United Kingdom by the Council has been investigated by the Organization and Methods Division of the Treasury, as part of a wider inquiry into the

Council's organization and methods which lasted nearly two years. Only in the clerical and typing grades were any posts considered redundant by the investigators.

Besides the withdrawal from Czechoslovakia and Bulgaria, the feature of the Council's work in Europe during 1950-51 was the opening of a new branch in Düsseldorf to take over the work previously done by the cultural department of the High Commission in Germany. The European work bore a major share of the reduction made in the Council's grant-in-aid as a whole, and the European budget for 1950-51 was about £100,000 less than that for the previous year. With Latin America this budget still accounts for more than half the Council's expenditure on overseas services, though expenditure in the Middle East comes next to that in Europe in magnitude. Lack of funds compelled withdrawal from the Sudan. Outside education in its narrower sense, the report suggests that the bringing of specialists and influential visitors to Great Britain and the giving of lectures, with supporting illustrative material, on agriculture and its associated sciences are the best means of maintaining and strengthening the interest of the Middle Eastern countries in the culture and institutions of the United Kingdom. In the Far East, with the exception of China, where a marked increase in the work of the local centres at Nanking, Shanghai and Peking was noted during the year in spite of Government interference with the Council's work, the main difficulty has been lack of funds; but as regards Latin America, commenting on the value of British publications for the propagation of knowledge, the report observes that in some countries currency restrictions or complicated import requirements constitute the chief obstacle and one which the Council can do little to overcome.

The British Council is responsible for the operation of schemes for the interchange of university teachers, scholars and scientific workers under the cultural conventions into which Great Britain has entered. Thirty-nine regular interchange visits of this type are already arranged each year with Austria, Belgium, France, Italy, the Netherlands and Norway. Negotiations are proceeding with Denmark, Western Germany, Spain, Sweden and Switzerland, which would bring the total to fifty-two, while under a scheme established at the request of the Conference of the Universities of the British Commonwealth at Oxford in 1948, thirty-three university teachers from eighteen Commonwealth universities visited the United Kingdom and one scholar from Britain visited Commonwealth universities. Seventy-two scholarships were offered to British students by Austria, Belgium, Brazil, Denmark, Finland, France, Germany, Italy, the Netherlands, Norway, Persia, Portugal, Spain, Sweden and Switzerland, in return for the scholarships offered by the Council for many years to students from foreign universities. The number of advisory visits has also increased, and the report cites in illustration those to France on recent developments in stock-breeding; and visits of a team of three surgeons, led by Mr. C. Price Thomas, to Yugoslavia; of Dame Katharine Watt to India, Pakistan, Syria, Egypt, Iraq, Jordan and the Lebanon, to advise on nursing services; and of Dr. Mouat Jones to the Middle East and India, to advise on the development of technical education.

The net expenditure of the Council during 1949-50, the last year for which figures of actual expenditure are available, was £3,045,321, and the total sum

available from public funds for 1950-51 was £3,233,700. There were, however, considerable changes in the distribution of expenditure, the estimates providing for major expansions in the work carried out for the Colonial Office, the Commonwealth Relations Office and Colonial Development and Welfare, and for a contraction, under instructions, of the provision for work in foreign countries of £325,000; the devaluation of sterling added a further £206,000 to this last figure. In the estimates for 1951-52, the Council has been called upon to reduce the provision for work in foreign countries by a further £364,000, although the Foreign Office is pressing for the expenditure of £49,000 on new services regarded as of the highest importance. Such reductions must entail drastic changes, and it is a matter for regret that neither in this report nor elsewhere is there any indication of a real inquiry into how far there is overlapping in the work of the British Council with that of the Central Office of Information, the Foreign Office itself, and the Overseas Service of the British Broadcasting Corporation which could be eliminated to the general advantage.

## ELECTRONICS IN NUCLEAR SCIENCE AND ENGINEERING

MANY visitors from overseas have been attracted to Great Britain in this Festival Year, not only to attend the Festival, but also to participate in the various supporting conferences arranged by the professional, scientific and technical institutes. The British Institution of Radio Engineers, the silver jubilee of which was to have been held last year, delayed its celebrations of this event and planned instead a Radio Convention for 1951. The Council of the Institution considered it appropriate that the Convention should aim at covering the whole field of electronics. In fact, the conference was probably the most comprehensive in its field ever to be held in Great Britain, and more than seventy papers were presented covering applications of electronics in all fields from nuclear physics to audio-frequency engineering. All the papers are being published in the *Journal* of the Institution.

The first session of the Convention was held at University College, London, during July 3 and 4 and dealt with the applications of electronics in nuclear science and engineering. The chair at these meetings was taken by Dr. Denis Taylor, of the Atomic Energy Research Establishment, Harwell, and his address, which was illustrated by lantern slides and ciné-film, was a survey of the radiation and particle detectors used in modern nucleonic instruments. The paper included a discussion of the long-term stability of the detectors used in assay and other instruments, and summarized from this point of view the relative advantages and disadvantages of Geiger-Müller counters, proportional counters and scintillation counters. In particular, the paper gave consideration to the problem of industrial instrumentation where high reliability is the first consideration. Graphs were presented showing the changes of counting efficiency of typical Geiger-Müller counters over a period of time, and it was noted that with counters filled with argon and ethyl alcohol large changes in the efficiency can occur during their working life. Some