

RECENT SCIENTIFIC INQUIRIES IN PARLIAMENT

THE Parliamentary Secretary for Science, Mr. D. Freeth, dealt with a further 25 questions relating to science in the House of Commons on July 18, answers to which occupy 20 columns of the Official Report. Replying to a question about non-ferrous mineral resources in Cornwall, Mr. Freeth said that the results of a comprehensive study have been published in a Geological Survey memoir on the Metalliferous Mining Region of South-West England in 1956. Airborne geophysical surveys were undertaken in 1957, 1958 and 1959, and at present airborne magnetic surveys were being extended to the off-shore areas.

On international co-operation, Mr. Freeth said that high cost is an important but not the only factor in deciding whether an international project is desirable. The United Kingdom is participating in the European Organization for Nuclear Research, in the *Dragon* and *Halden* reactor experiments of the European Nuclear Energy Agency, in the Anglo-United States *Scout* satellite programme and a project for European space flights is under consideration.

Membership of the Machine Tool Industry Research Association incorporated in November 1960, includes 64 machine tool manufacturers representing about half the output of the industry, and 20 manufacturing firms in allied industries.

Repeated investigations by the Medical Research Council have shown no evidence of a higher incidence of lung cancer or respiratory disease among persons exposed to increased amounts of Diesel exhaust fumes. No figures are at present available to indicate the effect of Diesel smoke on road safety, but the Department of Scientific and Industrial Research is collaborating with the Minister of Transport in efforts to ensure the correct maintenance and operation of vehicles which will eliminate satisfactorily the nuisance from this source. Mr. Freeth also said that the Warren Spring Laboratory of the Department of Scientific and Industrial Research has examined methods for removing smoke from the exhausts of Diesel-propelled road-vehicles, but no device yet tested has proved satisfactory. The

British Internal Combustion Engine Research Association is undertaking fundamental work on the combustion process in Diesel cylinders which it is hoped may lead to remedial measures. Mr. Freeth said it is a fact that correct setting of the injectors and their proper maintenance and operation provide a simple and effective remedy.

In answer to a series of questions on cancer, Mr. Freeth said that work on geographical variation in cancer incidence is already being supported by the Medical Research Council and no promising lead on cancer or similar diseases will be held up through lack of Government funds. The Medical Research Council's expenditure from public funds on cancer research was £327,000 in 1955-56; £400,000 in 1956-57; £486,000 in 1957-58; £499,000 in 1958-59; £583,000 in 1959-60; £650,000 in 1960-61; and would be about £783,000 in 1961-62. No reliable estimate can be made of expenditure on research relevant to cancer in the universities and medical schools in Britain from funds provided by the University Grants Committee, or in the National Health Service during the treatment of patients.

Other answers were as follows: The annual output of qualified scientists would be about 6,900 in the present academic year, compared with less than 5,000 in 1956, and the annual output of qualified technologists has grown from 6,200 to more than 9,600 in the same period. The Research Councils, for which the Minister for Science is responsible, are providing about £250,000 in the current year for expenditure on printing, publications and other forms of publicity. The Department of Scientific and Industrial Research at present operates 13 research grants with six different universities or colleges, and 6 further grants are contemplated. It is also intended to extend the use of scientific methods by the Geological Survey. A Committee of the Royal Society, at the request of the Advisory Council on Scientific Policy, is considering existing arrangements for supporting fundamental research in biology.

ATOMIC ENERGY RESEARCH AND DEVELOPMENT IN BRITAIN

THE seventh annual report of the Atomic Energy Authority covers the period April 1, 1960-March 31, 1961*, in which the Authority had in hand a special survey of its future requirements, both of man-power and finance, to ensure that its demands on Britain's resources do not exceed the minimum required for the efficient discharge of its responsibilities. This survey is additional to the periodic reviews made to ensure that the choice of reactor systems for major development and the priorities between them are firmly based. Although the review is still proceeding, its existence offers some re-assurance that developments on the part of the Central Elec-

tricity Generating Board will not lead to inappropriate duplication of effort. An increase in staff from 38,500 to 40,840 during the year is reported, industrial employees rising from 19,572 to 20,606.

On the civil side, the development of nuclear reactors to generate electricity on an economic basis remains the Authority's principal objective, and work for the nuclear power stations under construction, particularly the development and manufacture of magnox fuel elements, occupied a substantial part of the Authority's scientific and technical resources. Work on possible reactor systems for nuclear ship propulsion, production of radioisotopes (sales of which rose by 10 per cent to total nearly £21 million during the year) and development work on their applications, basic nuclear science, work on health and safety

* United Kingdom Atomic Energy Authority. Seventh Annual Report for the period 1st April, 1960-31st March, 1961. Pp. viii + 80 + 4 plates. (London: H.M.S.O., 1961.) 5s. net.