

CANCER RESEARCH

Concentration on Immunology

THE Cancer Research Campaign, the largest supporter of cancer research in Britain, has announced new grants worth £910,000 to individuals and institutions in Britain and the Commonwealth. This brings the campaign's total grants to cancer research next year to £2,100,000—an increase of more than £300,000 over the amount allotted in 1970.

The Middlesex Hospital Medical School is to receive £147,920, the largest single allocation, of which about two-thirds is to go to the Courtauld Institute of Biochemistry, where Professor P. N. Magee, who has pioneered research into the carcinogenicity of nitrosamines, will receive a grant of £45,000 to continue his work on the molecular mechanisms of alkylating carcinogens. The radiobiological unit at Mount Vernon Hospital, Middlesex—a unit financed entirely by the campaign—is to receive individual grants amounting to £127,535 to continue work on tumours induced chemically by filterable agents, the role of intracellular sulphhydryl groups in carcinogenesis and the cytogenetic aspects of malignant disease in man. The University of Bristol has been allocated £51,173, of which £9,831 goes as an individual grant to Professor M. A. Epstein for his work begun in 1960 on the virus aetiology of cancer. Professor H. Harris at the Sir William Dunn School of Pathology will receive much of the £47,771 given to the University of Oxford, to continue his work on cell hybridization. This represents an 80 per cent increase over the previous grant he received from the campaign.

It seems from these allocations that the Cancer Research campaign is continuing to concentrate on the immunological approach, leaving virology the responsibility of the Imperial Cancer Research Fund. Professor Epstein is among the few people keeping the campaign's small finger in the lymphoma pie.

COOPERATION

Bringing Chemists Together

WHAT must be regarded as another step in the direction of a federation of European chemical societies has taken place in the establishment of the European Photochemistry Association. According to Professor D. Bryce-Smith of the University of Reading, the chairman of the new association that was formally set up in September, applications for membership are now beginning to flow in. Membership is open to individuals, organizations and laboratories interested in photochemistry, one of the most vigorous branches of present-day chemistry, but it is understood that the membership fees have not yet been decided.

The reason for the boom in photochemistry in the past decade is as much as anything the development of techniques such as gas chromatography and NMR spectroscopy for the analysis of the minute amounts of often extremely interesting chemicals that are formed in photochemical reactions. These methods and the unusual chemical changes that were being produced by a few groups working in photochemistry in the 1950s seem to be at the foundations of a subject which now has profound industrial relevance, in copying and the manufacture of polymers, for example. It is now

hard to find a university in Britain that is not doing some work in photochemistry, and this subject is one of the areas selected by the SRC as being worthy of special support because of its timeliness. Photochemistry is also booming in Germany and Switzerland, but its development has been more patchy elsewhere, clearly one of the reasons why the Council of Europe was moved to establish the new association after surveying the subject.

Professor Bryce-Smith said last week that inevitably the formation of the association has a political context. For the time being, however, the association is being modest in its aims. There is to be no European photochemical laboratory along the lines of the EMBO laboratory planned in Munich, for example, and the association does not intend to organize grandiose symposia. Its chief aim will be educational; there will be summer schools in photochemistry for industrialists and teachers, visits by leading photochemists to European laboratories, and most probably a system for circulating preprints which is being organized by one of the joint secretaries, Dr A. E. Koerner von Gustorf of the Division of Irradiation Chemistry at the Max-Planck Institute for Coal Research. The hope is that these measures will lead to an improvement in undergraduate courses in photochemistry which sometimes do not reflect the advances that have been made in the past year or two.

For these purposes the association is not going to require a large budget although it is looking for financial backing in the hope of establishing a few studentships and fellowships. But Professor Bryce-Smith stresses that there is not going to be an elaborate secretariat, and clearly the association is hoping to avoid the pitfalls that have become an occupational hazard of international societies. As much as anything, however, the role of the European Photochemical Association must be as a pathfinder for a future federation of European chemical societies.

STATE BUDGET

Decline in Science Expenditure

from our Soviet Correspondent

THE State budget of the Soviet Union, adopted as law by the Supreme Soviet on December 11, 1970, reflects a policy of increasing investment in industry but some falling off of the rate of growth of spending on science and education. The means of dividing the budget between the national economy (industry, agriculture, transport and so on), social and cultural measures (science and education, health and social security), defence and state security makes it extremely difficult to determine the actual figures for investment in basic research, which falls within the scope of the first three of these categories. There is also no separate category for expenditure on space research. But some interesting conclusions can be drawn from the figures.

Spending on industry is to be increased by 15.3 per cent to 78.8 thousand million rubles, of which 65.7 thousand million rubles will go to heavy industry. Particularly high increases of the allocated funds go to machine tools (21.4 per cent), agricultural machinery (34.5 per cent) and machinery for light industry and the food industries (23.4 per cent).

The increase in the budget for "social and cultural