

term research investigations are run, and the council is pleased to announce the employment of full-time research assistants at Preston Montford and Orielton.

The programmes of the different centres are full as usual. Courses offered this year range from 'Energy Relations in an Aquatic Ecosystem' at Slapton Ley from July 17-24, to "Some Aspects of Geomorphology" at Orielton from July 31-August 7. There are also arrangements for independent groups to work at the centres.

Congress and the "Hidden War"

ONE of the powerful committees of the US Congress has taken up the International Biological Programme (IBP) in a big way. The Sub-committee on Science, Research and Development (led by House Representative Emilio P. Daddario) of the Committee on Science and Astronautics may seem a strange forum for discussion of the IBP to those not learned in the infrastructure of congressional committees, but, after all, the Earth is a planet like any other and more like than unlike in its capacity for sustaining biologically irreversible damage from the casual activities of man.

This is the theme of what is certain to be called the Daddario report ("The International Biological Program, its Meaning and Needs", published March 20, 1968). American participation in the IBP is seen as the major opportunity for breakout from a position of siege in "conflict between man and nature in a 'hidden war' with possibly disastrous consequences . . . which may be of a magnitude to dwarf any military war yet fought on Earth and of a scope to reduce any conventional type of combat to relative unimportance". The report spells out some of the potential disasters ahead if total environment (ecological) effects are disregarded, and makes recommendations on what can be done about it. In sum, this congressional group does not want to be part of a civilization which may go down in history "as an elegant technological society struck down by biological disintegration for lack of ecological understanding".

The seriousness of the situation and the importance of ecology in providing answers have so far escaped both the administration and general public. Representative Daddario points out that ". . . this is the most restrictive element which faces US participation in the IBP. . . . Such concern as has been evidenced thus far by the Government—and that concern is relatively mild—seems to have been fostered more by the conditioned response of Government to the prestige of the scientific community than to an understanding of the problem itself. This situation must change—or the IBP is not likely to get off the ground." This could well be echoed for the IBP as a whole.

Seven danger areas or practices are cited in the report: thermal pollution from the nuclear power programme, which is expected to supply as much electricity as serviced the whole of the United States 25 years ago and for which all the large freshwater flow sites have already been tagged for possible nuclear plant cooling; the rise in heat production through urbanization and population increase; radical changes in the atmospheric balance through similar causes plus jet travel; upset of the oxygen/carbon dioxide cycle through defoliation practices (like those employed

in Vietnam) and general reduction in global plant cover; the ruining of freshwater reserves by waste pollution—it is estimated that 500 years would be required to restore Lake Erie to the condition of only 25 years ago if all human polluting activity were halted immediately; loss of useful wildlife species—"the prospect . . . of man living alone on his planet except for domesticated food animals and pets seems rather a dreary one"; the uncertainties of "human quality control" opened up by genetic advances. "New data on a total environmental system of the type proposed by the IBP are apparently the only way out of the present dilemma which pits alarm versus indifference", the report comments.

The sub-committee criticizes both the organization and funding of the IBP in the United States. It recommends an adequate full-time staff and tighter managerial control and urges that the present *ad hoc* funding methods be dropped. Estimates of the cost of the US IBP programme (see *Nature*, 216, 842; 1967) have ranged from \$50 million to \$200 million. The sub-committee does not consider that the programme is sufficiently advanced to justify the \$11 million proposed for the first operational year (1969 in this case), but recommends the Federal Government to provide not less than \$3 million and not more than \$5 million for this period. Current rethinking may have the effect of consolidating the major US IBP projects into a single programme consistent with the theme of ecosystem analysis, with a consequent fall in "new money" demands to as little as \$30 million. "To accomplish a great deal with \$30 million may in the end not accomplish enough."

Unrest among French Scientists

from our Paris Correspondent

SOME 250 French scientists, together with representatives of several political parties, virtuously gave up the first Sunday of spring in order to hold in Paris a National Research Symposia. Even if the problems discussed were not defined particularly clearly and the solutions envisaged were in many cases vague or unrealistic, this event is in itself extremely significant. In effect, it marks an important stage in a development which seems to have been slower to take place in France than elsewhere. This is the consciousness of research workers that they belong to a single community which ought, in the face of public and government opinion, to define its objectives.

The speeches made were somewhat disparate, but there was a measure of agreement. Professors Kourilsky, Hamburger and Mathé, for example, deplored the way in which medical research in faculties of medicine and university teaching hospitals is run by the teachers and clinical workers, who enjoy a higher status than the rest. They traced a comparison (which was flattering for Great Britain) between conditions on either side of the Channel. For the rest, two pre-occupations seemed to dominate most of the speeches—the need for a more coherent organization and for a more efficient deployment of research facilities. On both these themes there was a wide range of opinions, from highly technical discussions to political debates.

But the political contributions were generally dominant, and not all were on a happy note. Some of the outbursts from university factions wavered between a

narrow preoccupation with such matters as old age pensions, promotion and the like, and ritualistic denunciations of American imperialism or of the docility of the Government in the face of capitalist enterprise. Limiting himself to one particular and important point, M. Pierre Aigrain, general delegate for technical and scientific research, who was attending as an observer, announced that a working party was to be appointed to study the alarming problem of the mobility—or rather, immobility—of research workers. The Government, which has made some fairly ill-considered decisions in this field (see *Nature*, 217, 796; 1968), is now anxious to rationalize its strategy and see how a more fluid transition from research to teaching or to the industrial sector could be encouraged.

Two speeches created a special interest. M. Pierre Juquin, the Communist deputy, who announced that his party would soon be laying before Parliament a bill on the organization of research, outlined its main aspects. A representative of the SNIRS (the Independent National Union for Scientific Research) also introduced a plan for reorganization. They both offered, therefore, a valid response to what seems to be a great preoccupation among French research workers—that of assuring democratization of the decision-making procedure. To judge from opinions culled recently from politicians of all persuasions, the ranks of the opposition, both right wing and left wing, seem to be agreed on the necessity for creating a widely representative council whose job it is to guide the Government and provide Parliament with information on matters of scientific policy and which would replace the authoritarian machinery at present operative, or would at least contain it.

The scientists engaged on basic research have the feeling that they are the mere tools of a few big power-hungry “bosses”, working hand in glove with a few technocrats. But are the scientists fully aware of the responsibilities which they wish to acquire? One has frequently had the impression that they lack knowledge of the economic facts of life, among other things. Industrial problems, in particular, were frequently mentioned, but the speakers and their audience—consisting mainly of people from the universities—seemed to be paying lip service to a noble if somewhat vague cause. It is curious, for example, that no special attention has been given to the mysterious ANVAR (National Bureau for Research Evaluation), the setting up of which was decided 18 months ago and is still no more than a plan. This organization, whose job it would be to ensure the vigorous utilization of inventions made at the National Scientific Research Centre or in the universities, has not yet found a director, apparently for financial reasons. The French Government, after much hesitation, is preparing, it seems, to appoint M. Maurice Ponte, a member of the institute and former president of the Compagnie Générale de Télégraphie sans Fil. This appointment will probably arouse only mild enthusiasm, because of the age of M. Ponte and his lack of success at the head of the CSF which he left in a critical financial position. French scientists should at least be concerned about ANVAR, and try to do something about its future activity. There is still time.

This first session was an interesting if somewhat confused attempt which smacked as much of a huge psychological drama as of a working meeting. It ought to help in organizing seriously in 1969 a more

constructive meeting. For the time being, research workers in France, as elsewhere, are aware of the necessity for a more active participation in the running of society but are still anxious to retain the academic purity of their work. They are torn between a nostalgia for the priestly pursuit of science and the intoxicating thought of a boundless civil service. Neither mystics nor commission members, they are trying first of all to discover themselves.

Parliament in Britain

from our Parliamentary Correspondent

Renal Transplants

ON April 5 Sir Gerald Nabarro moved the Second Reading of the Renal Transplantation Bill permitting “removal from the body of a human person, duly certified as dead, of any kidney or kidneys required for medical purposes, unless there is reason to believe that the deceased during his lifetime had instructed otherwise”. He pointed out that the need for this Bill—which is really an amendment of the Human Tissue Act, 1961—has arisen as a result of the near-perfection of the technique of transplanting kidneys. He referred to the 1961 Act, according to which kidneys cannot be removed without the permission of the next of kin. Because kidneys are valueless for transplants unless chilled or refrigerated one hour after removal from a dead body, Sir Gerald maintained that at present it is impossible to obtain permission in time. But the Bill would permit kidney banks. Sir Gerald Nabarro also drew attention to the provision that, before kidneys can be removed, a death certificate must be signed by two doctors other than the surgeon performing the operation.

Mr Laurence Pavit supported the Bill, saying that Britain has more kidney machines per head of population than any other country. He suggested that the Bill was necessary for dialysis work, because successful dialysis on renal failure must be complemented by a transplant programme.

Mr Kenneth Robinson, the Minister of Health, applauded Sir Gerald's motives, but stressed the importance of safeguards to prevent unnecessary affront. The Bill was read a second time. (Debate, April 5.)

Orfordness

MR J. E. B. HILL asked the Secretary of State for Defence what the radius will be from the radio station at Orfordness within which there could be a hazard from radiation, and what steps he intends to take to safeguard fishermen and yachtsmen from this danger. Mr Rees replied that the zone in which radiation could create a hazard does not reach the sea, that the site is a prohibited area and that warning notices will be erected. In reply to a question from Mr Goodhew, Mr Rees said that discussions between the Governments of the United States and Britain about the Anglo-American radar station to be built began in October 1966, and agreement was reached in June 1967. Mr Goodhew wanted to know to what extent the radio station would result in Great Britain having greater warning of attack by missiles. Hedging a little, Mr Rees replied that the station would carry out radio research, some of which would have a bearing on methods of early warning of missile attacks. (Written answers, April 1.)