in the Republic of Ireland in preparation for any new threat that may arise from the new oil installations there. There has also been a series of field and laboratory experiments in association with University College, Swansea, and a successful symposium on the biological effects of oil pollution on littoral communities was held at the centre in February 1968.

HISTORY OF SCIENCE Demise of a Department

THE professorial committee of University College London on Tuesday gave a temporary reprieve to the college's History and Philosophy of Science Department. The committee failed to reach agreement on the recommendation of a sub-committee that the department should be closed. Instead it deferred the decision to another meeting. The news will no doubt be taken as a sign of encouragement by those who believe that the history and philosophy of science should be a rapidly expanding discipline in its own right. The failure of the professorial committee to reach agreement must mean that there is in the college a strong lobby opposed to the recommendation to close the oldest department in the discipline in Britain, and the only department in London University which teaches both the history and the philosophy of science in an integrated fashion.

Lord Annan, the provost of University College, said that there had never been enthusiasm for the recommendation but, he said, the financial squeeze will force the college to cut the number of senior staff. Lord Annan explained that the University Grants Committee has been pressing London University as a whole, and University College in particular, to reduce the proportion of senior staff to 35 per cent of the total. At University College the proportion is 45 per cent, and Lord Annan says he has been told that if this proportion is not reduced by at least 2 per cent in this quinquennium, there can be no further promotions in any department. Cutting out the history and philosophy of science would reduce the establishment by one professor, a reader, a lecturer and an assistant lecturer and eventually a second readership would lapse. It would also free a house in Gordon Square.

The response of specialists at other British universities to the possibility of the closure seems to be one of astonishment, disappointment and dismay. It is held that University College has made no effort to make known and discuss the matter. The closure would also mean the removal of a valuable educational option for London University students. Professionals argue, of course, that the history and philosophy of science provides a unique meeting ground for the arts and sciences and gives science students a taste for discursive argument as well as a feeling for the place of science in social history and the history of ideas—the kind of education which the Swann report championed.

Lord Annan says in reply that should the closure be deemed necessary UCL will investigate how much history and philosophy of science can be taught by staff in other departments. They may be able to take over much of the work. And there would still be two readers and a lecturer interested in the history of science, while the philosophy department includes Professor P. Feyerabend—a philosopher of science who commutes between UCL and Berkeley. Lord Annan also says that with the new course unit system —similar to the credit system of American universities —now in operation, students at University College have the option of more than half a dozen courses ranging from history to psychology.

One of the reasons why University College can seriously discuss the closing of the department is that since 1923 it has never really tried to teach undergraduates. Its one attempt, a course in the history of science for historians, had a hopelessly large syllabus and was a failure. The teaching in the department has been at the postgraduate level, usually with a dozen or so part-time students reading for an MSc. The department can point to a handful of its students who are now lecturers at other universities, and it has no doubt broadened the horizons of many school teachers, but it can hardly claim to have had any real impact on undergraduate teaching in the college. Its critics say that it has not tackled the problem of recruiting large numbers of science undergraduates. A stronger department would have a better case for survival, and who can deny that a professor, two readers and some lecturers should do more than teach a dozen part-time students and the occasional PhD candidate ?

Perhaps the real question is why University College has allowed the department to run down in this way. Ever since Professor Herbert Dingle retired in 1955, the college seems to have been in two minds about the value of the department and seems to have done little to encourage expansion. For two years after Professor Dingle left, no successor was appointed; it apparently took the college that long to decide to appoint to the chair Dr Douglas McKie, who had been in the department for years and anyway was close to retirement. When he retired in 1963, the department languished for four years without a chairman, and then the acting head, Dr J. S. Wilkie, was appointed to the chair in 1967. He could well be the last professor and, as he says with hindsight, the discussions about whether to carry on which took place when Professor McKie retired were a taste of things to come. Once again on Tuesday the college showed its inability to make up its mind.

LITERATURE

Reproductive Newsletter

A NEWSLETTER covering new developments in reproductive physiology and intended to interest doctors of medicine as well as the general reader has been launched by the International Planned Parenthood Federation (IPPF, 18 Lower Regent Street, London SW1). *Research in Reproduction* will appear quarterly, in alternation with the IPPF's *Medical Bulletin*; it is edited by R. G. Edwards at the Physiological Laboratory, Cambridge.

In the first issue R. L. Brinster reviews the metabolism of the mammalian embryo before implantation, and there is a note on recent cases of immunological reactions against semen (surprisingly in a virgin after her first intercourse) and against cells in the ovary. Other items include notices of new journals and societies in the field and an account of the *Bibliography of Reproduction*. The IPPF hopes that the newsletter will help to keep doctors and others in touch with the quickening pace of advance in reproductive physiology, a basic science which has already had a profound practical influence in the development of the "pill".

LIBRARIES

Who Reads What

A SURVEY of 104 technical libraries in the United Kingdom has now confirmed that people in universities and technical colleges make more use of their organizations' libraries than do people who work in government and industry. Moreover, this pattern of use reflects not so much the subject discipline as the nature of the institution (Use Made of Technical Libraries, Aslib Occasional Publication No. 2, 1969, 30s).

The authors of the survey, Margaret Slater and Pamela Fisher, have built up a series of user profiles for 6,300 people in a variety of institutions. Among other things, they conclude that most people use their technical library at least once a week, and that they are more likely to hunt out what they want for themselves than to ask the library staff. Textbooks are most often consulted, and then—in order—periodicals, abstract journals and indexes, handbooks and data books and, finally, dictionaries and encyclopaedias. Background reading and simple facts for immediate practical use were said to be the most frequently needed categories of information. More than half the users seem to have found useful results on their search.

Both government and industrial users seem to use libraries less frequently than people in academic or non-institutions-learned societies and research associations. They do, however, seem to use the library as a first resort more than the academic groups. Industrial users were especially interested in problems concerning equipment, sources of supply and the like, but these topics came low on the reading lists of government users. Keeping up to date was given less frequently as a reason for using the library by industrial users than by any other group except that of the academic users, and the report says that this may be because industrial libraries often have good circulation systems-for current journals and the like. Industrial users seem to ask for the help of a librarian more than any other group, and they also were more anxious for speed than academics and government workers. Industrial librarians seem to be coping satisfactorily, however, because only 3 per cent of the satisfied demands were described as "slower than convenient".

Academic discipline was found in the survey to have less relationship with user behaviour than, for example, the nature of people's work. Even so, out of the three groups—engineers, scientists and non-technical personnel—engineers were the least frequent library users and tended to go outside the resources of their own library more than scientists. Scientists made heavier use of periodicals and abstract journals and indexes than the others, but used textbooks and data books less frequently. On the whole, engineers seem to have more problems in getting information than scientists and non-technical users of technical libraries, and the report says that engineers, and particularly nongraduate engineers, merit special consideration and attention from librarians.

Parliament in Britain

by our Parliamentary Correspondent

High Energy Physics

THE Rutherford High Energy Laboratory employs 302 qualified engineers and scientists, and costs ± 7.387 million a year to run. Daresbury, on the other hand, employs seventy-four qualified scientists and engineers, and costs ± 3.5 million. These figures were given by Mrs Shirley Williams, who also said that the operation of NIMROD, at the Rutherford Laboratory, costs ± 2.283 million a year, and NINA, at Daresbury, costs ± 1.164 million. (Written answers, February 28.)

Fluidized Bed Combustion

THE inevitable questions about the development of fluidized bed combustion of coal have begun to appear. Mr Roy Mason told Mr Ashton that he was aware of the work being carried out at the British Coal Utilization Research Association. He added that he awaited the results of economic assessments "with great interest". His advisory council on research and development kept in close touch with developments, he said. (Written answer, February 28.)

Hovercraft

TOTAL research and development expenditure in support of hovercraft this year is expected to be £2.25 million. Mr J. P. W. Mallalieu, giving the figure, said that the National Physical Laboratory would spend £364,000 and the Royal Aircraft Establishment £45,000, and that extramural contracts would cost £1.8 million. (Written answer, March 3.)

European Airbus

MR ANTHONY WEDGWOOD BENN, Minister of Technology, said that his department was continuing its evaluation of both the A300B and the British Aircraft Corporation 3-11. The French and West German governments had been told of the proposals put forward by BAC. It was not yet possible, he said, to say what the decision of the governments would be. Hawker-Siddeley had carried out work worth £1-35 million so far on the airbus; 90 per cent of this work was relevant to the modified A300B. (Oral answer, March 5.)

Power Costs

MR Roy MASON, Minister of Power, said that the generating costs of Dungeness B power station should show no substantial change from the figures given on March 5, 1968. The generating cost would be 0.57 pence per unit. Drax, a coal fired station, would generate at a cost of 0.61 pence per unit. (Written answer, March 5.)

Computers

TOTAL Government support for computer research and development will be just over £9 million this year. Mr Jeremy Bray provided the figures, which show that the largest sum, $\pounds7.133$ million, is in grants and contracts awarded by the Ministry of Technology, the National Research Development Corporation and the Science Research Council. This includes a £4 million research and development grant paid to ICL under the terms of the computer merger arranged last year. Of Government establishments, the National Physical Laboratory, with a budget for computer work of just over £1 million, spends the most. (Written answers, March 3.)