

in future be a direct pensioner. From the beginning of the next financial year in April, the Tidal Institute will be rechristened the Institute of Coastal Oceanography and Tides, and will rejoice in the comparative luxury of a budget for the year of £140,000. NERC says that its object in these negotiations has been to establish "a new growing point for research in the wider field of coastal oceanography". Although everybody is agreed that the institute's links with the University of Liverpool will survive—the staff will continue to teach, and the institute will continue to accept post-graduate students—it does appear that NERC and the institute regard the new development as an essential preparation for a larger programme of work in what NERC describes as a field "which is now of major economic significance to many aspects of the commerce and welfare of the country".

Dr G. Rossiter, the director of the institute, said earlier this week that the new association would provide opportunities, inaccessible within the framework of UGC financing, of equipping the institute with the kinds of instruments which are now necessary in coastal oceanography. One prize will be a research vessel. There are also plans for new kinds of instruments—work is already under way, in association with the National Institute of Oceanography, on a serviceable permanent tide gauge. Evidently the new institute is hoping to supplement its present skills in the construction and exploitation of mathematical models for the prediction of tidal movements with a programme of well instrumented observations, principally in the Irish Sea. Extra people, particularly experimental officers, are also among the benefits which Dr Rossiter hopes will flow, but he may find that government establishments are not much more able than universities to compete with industry for skilled but unprofessional labour.

The formation of the new institute will augment what is now a substantial list of institutes working independently on oceanography and related topics. The National Institute of Oceanography is still the chief of them, but the Ministry of Agriculture's laboratory at Lowestoft, the Ministry of Technology's Hydraulics Research Station at Wallingford and the independent Marine Research Laboratory at Plymouth are only some of the other institutions now operating in oceanography. These developments inevitably raise two important administrative questions—what arrangements will there be for coordination among the several institutes and what influence will the universities command on the strategy of research? NERC seems to be hoping that steering committees with cross membership will prevent poaching, but the overlap between Wallingford and Liverpool is potentially troublesome. Whether the Oceanography and Fisheries Committee of NERC will be able to keep a hand on the tiller remains to be seen, but in any case there seems very little anxiety in the research council to fight the fashionable view that universities are for teaching, not research.

#### EURATOM RESEARCH

### Budget Trouble Again

ONCE again, there has been a wrangle over the Euratom research budget, which for 1969 was not adopted by

the European Economic Community's Council of Ministers until earlier this month. For the first time, member states have had to be given an opportunity to opt out of research projects and for this reason the budget is split into two parts—a joint programme compulsory for all the member states and a supplementary programme in which states will only pay for items in which they are interested. The budget only takes Euratom to the beginning of July, by which time the organization hopes to have at last agreed on a research programme covering several years.

Euratom's research plans have been in disarray since the end of the second five-year research programme in 1967. Chiefly because of disagreements between France and the other member states, the organization made do with research budgets spanning only twelve months at a time for 1967 and 1968. When the joint and the supplementary programmes making up the six-month budget which has now been adopted are added together, the result is still marginally proportionately less than was available last year. The joint programme and the supplementary programme each make up roughly half of the total of \$48.9 million. Negotiations have not yet begun for the budget spanning several years which must be established before July, but the end result is likely to be a cut in research funds.

The largest item in the budget is research on heavy water reactors, which takes \$5.4 million of the joint programme and \$4.0 million in the supplementary programme. Next is fusion and plasma physics, with \$6.2 million entirely in the joint programme, and research on plutonium and the transplutonium elements with \$1.8 million in the joint programme and \$2.5 million in the supplementary. Fast reactors and high temperature reactors appear in both programmes, and gas reactors, including Dragon, are each taking more than \$1 million. Research both into condensed state physics and into nuclear physics is in the supplementary programme and both will cost about \$2 million in the current six months.

The way in which provision has had to be made for France to drop out of Euratom research is going very much against the grain. The other five members are showing their disagreement with the French attitude by continuing to finance parts of the supplementary programme in which they are not concerned, despite their right to drop out.

The Council of Ministers has also been concerned about redundancies in the research staff caused by the six-month budget. There is no employment under the new programme for 382 members of staff, but all will be retained at least until July, and some of them will be reabsorbed before then.

#### PATENT LAW

### Once and for All

AFTER years of wrangling over which countries should be included in a European system for granting patents, the countries of the EEC have at last agreed on a memorandum on the creation of such a system which will be sent to interested non-member countries as a basis for negotiation.

At present, patents are valid for only one country, so that one invention may have to be patented in, say,