

petroleum into the sea. The cost of the operation will be at least \$178 million—the amount which the oil companies paid for their leases almost exactly two years ago. In practice, however, the two groups of interests most directly affected—the petroleum companies and conservationists—are less happy with the proposal than those in the Administration who think it will be safer to stabilize the Santa Barbara Channel for oil exploration rather than to live more or less indefinitely with the prospect of another artificially stimulated spill of oil.

The conservationists protest that the leases to be bought back do not include those in the region at which the oil spill occurred and in which there is at present a moratorium on drilling. The answer of the Geological Survey to this charge is that the pressure of the submarine strata in the region in which the rock covering is at once thinnest and most likely to be damaged should be reduced by continued pumping. A more subtle point is that the leases now to be bought back have apparently yielded neither oil nor gas, with the result that corporation watchers consider that the proposed buy back is a way of giving the petroleum companies something for nothing.

In these circumstances, the oil companies are likely to be crying all the way to the bank with their compensation money, even though there are many who fear that the increasingly tight control being imposed on offshore drilling operations is likely to become a serious impediment to economic exploitation of offshore oil reserves. For this reason, some of the companies affected may seek compensation not merely for the original cost of their leases but for the cost of exploration since 1968.

Accelerator Reprieved?

THE possibility of a reprieve for the high energy physics laboratory operated jointly by Princeton University and the University of Pennsylvania has been raised in the past few weeks by the Nuclear Science Board of the AEC and by the director of the laboratory, Dr Thomas White. The laboratory was one of the more spectacular casualties of the United States budget for the coming financial year in that no allowance at all was made for its support, costing between \$4.5 and \$5 million a year. The accelerator is a new facility which cost \$40 million to build. It now appears that the laboratory could be operated at a reduced level at a cost of about \$2 million a year, and that the total cost to the federal government would amount only to \$1 million a year. Those responsible for advising both the AEC and the administration are in these circumstances now urging that there should be provision for the accelerator. It is known that the most serious difficulty to be overcome before this can be attempted is that the administration feels bound by a statement attributed personally to President Nixon that the laboratory would be shut down. Although intended as a proof of the administration's determination to economize, this statement has now also been invested with too much solemnity for it to be discarded easily.

Oceanography at Woods Hole

HARVARD University and Woods Hole Oceanographic Institution have come to a formal agreement on graduate training in oceanography. A statement by the two institutions last week says that the intention is to solemnize the practice of collaboration between Harvard and Woods Hole built up in the years since the Second World War when research projects have frequently been jointly planned and when Harvard graduate students have been based at Woods Hole. The agreement follows the lines of a similar arrangement between Woods Hole and Massachusetts Institute of Technology under the terms of which the Woods Hole Oceanographic Institution is able to award PhD degrees. The arrangement with Harvard provides that students in one institution may, with the permission of their instructors, take graduate courses offered by the other and there are also arrangements for cross registration and for the joint appointment of research supervisors.

Both institutions are anxious to point out the close historical connexion between them. Indeed, the Marine Biological Laboratory at Woods Hole was a direct outgrowth of the work of Professor Louis Agassiz while the Oceanographic Institution was a product of a report on oceanography by the National Academy of Sciences which led, in 1929, to the appointment of Professor H. B. Bigelow of Harvard as its first director.

CREATIVITY

Discipline for Imagination

ONE of the more remarkable of the offshoots of the New York University is the Creative Science Program organized by Dr Myron A. Coler as part of the School of Continuing Education. The programme is now in its twelfth year and its work is chiefly organized around an interdisciplinary seminar which meets roughly once a month for a whole day, usually a Saturday. The intention has been to devise ways in which participants can address themselves to problems of the interaction between technology and society in such a way as to define the points at which creative work by scientific people may help to provide solutions to pressing problems or even to make them vanish altogether.

Dr Coler is himself a chemist with a background in the Manhattan Project and is also the founder of a commercial company manufacturing electronic components. In the past year, he has been devoting himself fully to his work for the Creative Science Program. He says that his seminars have, after many years of tentative experiment, reached the point where thoroughly interdisciplinary interactions take place.

Over the years, there seems to have been a common preoccupation with what is called creativity, with higher education and with the management of research and development. At the beginning, in 1958, six out of nine seminars dealt with creativity, as it is called, explicitly, and with the discovery of the drugs isoniazid and marsilid as case studies. Much of the