

apocalypse seemed close. To those of us having some acquaintance with palaeontology, the fact that a greater number of species have become extinct than have survived is warning enough, some of these, like the ammonites, having vanished abruptly from the record after a great population explosion. Prudence demands that no effort be spared to advance those sciences which should be able to show whether the threat is real or imagined, close or distant."

"The position in the physical environmental sciences," Sir Kingsley said, "is that there is a pressing need for more widespread and exact surveys. These include surveys of mineral and hydrocarbon wealth, work on alternative energy sources such as solar energy and an assessment by meteorologists and oceanographers of the risk of the temperature of the atmosphere and seas being raised to an extent dangerous to life by increased waste heat from the energy used to produce a high standard of living throughout the world."

Sampling and surveys are equally important in the life sciences, Sir Kingsley said. So far most biologists can give only a hindsight interpretation of changes, not a prediction. Yet prediction is of the utmost importance within the framework of human ecology.

The widely separated positions held about the dangers of pollution, Sir Kingsley said, is "a measure of the inadequacy of the data so far at the disposal of scientists and economists."

A large scale chemical monitoring programme is needed, and a governmental programme of monitoring for substances other than radio isotopes is likely to be set up in the wake of last year's Stockholm conference.

"The data collecting here advocated is of the nature of survey work, but I see as the urgent task of environmental science to secure the complex information needed to test old hypotheses and to establish new ones."

Turning to the financing of this work Sir Kingsley questioned whether the resources available at present are sufficient. "I am myself too deeply involved to attempt to answer that question: it must suffice to say that . . . the cost of the effort does not amount to much more than one 0.1% of our national income."

With Sir Kingsley's speech as a keynote the conference is under way with a number of contributions running along similar lines.

A symposium on reserves, utilization and recycling of mineral wealth is part of the programme, and Sir George Porter, Director of the Royal Institution, opened the Chemistry Section meetings by declaring that "the lights will not go out in the 21st century" because chemical systems for utilizing and

storing solar energy will be developed.

Fifteen hundred people had materialized in Canterbury, at the University of Kent, by the start of the meeting, which is the first to be ruled by the association's slimmed-down committee structure. The first elected members of the general committee and council will be voted in during the course of the meeting.

FUSION

Design Team at Culham

A EUROPEAN team is to start work this month on the design of a large fusion experiment at the UK Atomic Energy Authority's Culham Laboratory. The study—which is to be carried out under the auspices of Euratom—is to be led by Dr Paul Rebut, a French engineering physicist. A team of about 20 physicists and engineers will be involved in the design of a tokamak system which is intended "to provide plasma conditions more advanced than would be obtainable in the American and Russian devices presently under construction", according to Dr R. S. Pease, Director of Culham.

The design work will take between eighteen months and two years, after which it is hoped to move immediately into construction of the experiment. The design study now proposed means that British plans announced last May to build a similar large experiment have been merged into the Euratom effort (*Nature*, 243, 51; 1973). At present, and probably for the first six months of the study, the work is being carried out under existing contracts of association with Euratom, but further funds and detailed approval from Euratom will be needed after that period. The design team is due to report on its progress to a European committee on fusion after six months.

EEC

Chairman for CERD?

LORD KENNET, the opposition spokesman on Foreign Affairs and Science Policy and one of the three British representatives on CERD, has been appointed as an adviser to the European Commission for one year. Lord Kennet succeeds Professors Aigrain of France and Casimir of the Netherlands.

Lord Kennet's appointment is very much a part-time job—a spokesman for the commission said last week that it involves about two days work a month. As adviser it is likely that Lord Kennet will take over as chairman of CERD, the advisory body which was set up last April to aid the commission on research and development matters.

But Lord Kennet's appointment does not mean that a full-time adviser to the

commission will not be appointed. The intention is still, according to a spokesman, to appoint a scientific adviser to the President of the Commission, but as yet there are no signs that such an appointment is imminent.

At a recent meeting it was suggested that CERD should be divided into sub-groups to concentrate on different aspects of research and development. This recommendation will be discussed again at the next meeting of CERD on September 17. If the fission of CERD goes ahead, then Lord Kennet will probably be responsible for the coordination of the work of the different groups.

OPEN UNIVERSITY

Links and Links

AN enthusiastic student at the Open University is attempting to forge links between the university and both the Royal Institution and the British Association for the Advancement of Science. In the August issue of *Sesame*, the university's newspaper, Mr Tony Raymond points out the advantages of such an arrangement.

The Open University, he says, is the only university without a library and the students cannot make use of any other university library. An association between the university and the Royal Institution would, for one thing, provide library facilities and it would also give students the opportunity to attend outside lectures. The events of the BA could also be attended if there was an association with it.

Mr Raymond has already approached both the bodies concerned and the response has been encouraging. A spokesman for the BA said this week that the association was interested in cooperating with any person or body that was involved in science and technology and that included the Open University.

But at this stage the possibility of links is strictly at the preliminary stage. The Open University said this week that it was giving Mr Raymond every encouragement but that it was taking no official action to help him. The next step is to see what sort of response Mr Raymond gets following his open letter to the students asking them whether they are interested in a close association with these bodies.

Perhaps the most important aspect of Mr Raymond's letter is his highlighting of the anomalous position of Open University students when they apply for membership of professional institutions. Most professional bodies have a class of membership for students but such membership usually has a basic educational requirement and an age limit, both of which most Open University students fail to satisfy.