Deep-sea drilling

No cut-price membership

Washington

NATIONS participating in the Ocean Drilling Program (ODP) have come down hard against a suggestion from Britain that it might join the project as a part member, perhaps in collaboration with another country, and so save part of the £2.5 million annual membership fee. The executive committee of Joint Oceanographic Institutions Deep Earth Sampling (JOIDES), which manages ODP, has, while urging the United Kingdom to join, passed a resolution that it would be "neither appropriate nor in the best interests of the program or other full members" for Britain to join except as a full member. JOIDES has also instructed planning committees not to guarantee places for British scientists on future research missions of the new ODP drilling ship, the *JOIDES Resolution*.

Britain became a *de facto* non-member of ODP at the end of January when the British Natural Environment Research Council (NERC) failed to raise sufficient funds in time for a deadline. Britain's representative, John Bowman of NERC, had earlier voted in support of the rule that countries that had not paid up by the end of January would no longer be considered members. Efforts are still under way in Britain, however, to secure the amount needed, and JOIDES officials point out that Britain would be able to rejoin in future years if present efforts fail.

The British unwillingness to find the membership fee has annoyed other full

members, because the ODP budget had been planned on the assumption that there would be four full members (besides the United States) during 1985. Other full members are France, West Germany and Canada. Japan is committed to join after September this year, but this was also anticipated in budget planning. The programme will be \$2.5 million short next year unless another member is found. Already, purchase of some shore-based equipment has had to be deferred, according to Philip Rabinowitz, director of ODP.

ODP scientists say the British scientific contribution to ODP will also be missed. Britain, for its part, would lose its influence on the committees that plan the cruises of *JOIDES Resolution*. This is likely to cause problems for the independent British Antarctic Survey, which has planned its own work on the assumption that Britain would be a member of ODP and so able to participate in an Antarctic drilling cruise in the Weddell Sea.

Despite JOIDES' firm opposition to part membership for Britain, there are hopes that a consortium of European Science Foundation members may join in partnership with Australia. Britain, still out in the cold, has sought temporary observer membership status like that now enjoyed by Japan, and it seems likely that JOIDES will approve this request. But JOIDES is adamant that observer memberships will not be allowed to continue beyond the end of September. **Tim Beardsley**

Alternative energy

Fuels from the farm

Venice

RESEARCH in the European Community to produce ethanol fuels from biomass is to be stepped up; this may help to solve the problem of agricultural surpluses and the need for a new fuel blend policy as lead is phased out of fuel, and exhaust emissions are further reduced in the European Community (see *Nature* 28 March, p.304).

The problem of surpluses has injected new urgency in the eight-year-old research proposal, which forms part of a broad high-level Commission strategy by farm commissioner Frans Andriessen. According to Dr Strub, general director of the Commission's solar energy division, now there is the political will the research will form an important part of the Community's biomass policy, which has been allocated research funds of 20 million ECU (European Currency Units) for a four-year period.

While farm ministers last week battled over price reductions to stem agricultural overproduction, particularly in cereals, there were signs of a consensus between research, industry and the farm lobby at a European Commission-sponsored meeting on biomass in Venice. According to Madron Seligmann, a British Member of the European Parliament, one hectare of land can produce four tonnes of ethanol and one tonne of biomass each year. The nine million hectares (of the Community's 150 million hectares of agricultural land) that grow surpluses could produce 32 million tonnes of ethanol every year. The 8 million tonnes of cereal surpluses alone represents 2 million tonnes of ethanol or 1.6 million tonnes of butanol-acetone.

The cost of getting rid of Community surpluses is estimated at 7,000 million ECU. According to Professor Andre Giraud (former French industry and energy minister and initiator of the French biomass and nuclear programmes), the Community would actually spend less by encouraging biomass production from surpluses than by subsidizing them, which could be done by a gradually declining system of incentives, and closer cooperation between agriculture and industry.

The need for a new European fuel blend policy has become more pressing as Europe prepares for lead-free petrol distribution in 1989 and stricter vehicle emission controls from 1988 as a result of the decisions by environment ministers on 20 March. Oxygenated products such as ethanol, methanol, acetone and butanol are already used to enhance the octane rating of some 60 per cent of fuel sold in West Germany, which conforms to the stricter Community standard of lead content of 0.15 grams per litre. These fuels may be suitable for the lean-burn engines due shortly. **Anna Lubinska**

The sweet smell of success

Tokyo

BIOTECHNOLOGY may not yet be making much of a return for US venture capitalists, but in Japan it is already selling cosmetics just as fast as they can be put on the shelves. Recently launched and already a huge success is cosmetic manufacturers Kanebo's "Bio series" of lipsticks, eye shadow, powder and so on.

What puts the "bio" in the series is that the pigment shiokonin used in the cosmetics, is obtained by large-scale plant cell culture. Until now shiokonin has been extracted from the naturally grown roots of the plant gromwell. But in the new process, gromwell root cells are cultured in 750-litre bioreactors and the pigment recovered from solution (see *Nature* 307, 504; 1984). Interestingly, the scientists who developed plant cell culture at Mitsui Petrochemical Industries had not originally been aiming at the cosmetics market at all. Only when they found that they had developed a working system were they forced to try to find a good product to make with it — cosmetics was one of the last things they hit on. Kanebo is now trying to build on this unexpected success

and claims to have succeeded for the first time in culture of tissue from leaves and stems of aromatic geranium. "Bio" perfumes may thus be just around the corner.

The main impetus behind the increased sales of "bio" products — running at three quarters of a million lipsticks a month and outpacing supply — seems to be the allure of "biotechnology" rather than any major improvement in the product. Other Japanese cosmetics manufacturers are now scrambling to join the bandwagon and find their own products. **Alun Anderson**