

plants which then have to be bedded out with a sufficient number of males (the plant is wind pollinated.) With the problem of falling manpower, and the desire to make all agriculture more productive per man-hour, widescale introduction of the jojoba could pose considerable problems of organization.

Vera Rich

Pneumoconiosis unit

Dusty answers

Members of the staff at the British Medical Research Council's Pneumoconiosis Unit in Cardiff are alarmed about the unit's future. So too are the National Union of Mineworkers, the Agricultural Workers' Union and the Association of Scientific, Technical and Managerial Staffs, who say that they value highly the unit's work on industrial diseases. Their fears have been roused by a routine review of the unit's work, conducted by a subcommittee of the council's Physiological Systems and Disorders Board, which has apparently suggested changes at the unit. Last week, council employees and union representatives lobbied a meeting of the council at which the recommendations were to be discussed.

According to the lobbyists, the review has recommended that the unit should continue with most of its present work until a further review in 1987, but that its value should be measured increasingly by the number of contracts for research that it manages to win from industry. They also say that the review has recommended that targets be set for reductions in staff levels, that some work on allergic responses and lung function be relocated and that the unit should not receive a new high-voltage electron microscope, a replacement radiographer nor a replacement respiratory physiologist.

The subcommittee's review is a routine 3-year assessment, to which the work of all council units is subjected. Such reviews frequently lead to decisions to close some units and open others. What seems to have worried the Cardiff staff is that running down some of the work now may pave the way for closing the unit after 1987, when the present director and several other senior staff are due to retire.

Representatives of those lobbying the council's headquarters last week presented their case to the industrial liaison officer who distributed their statements among council members. Their arguments are that relocating some of the unit's work will undermine the multidisciplinary approach needed for many problems and that, by whittling away at the unit's structure now, the council may cause it to become unworkable before formal consultations on steps towards closure can be taken.

The Medical Research Council refused last week to discuss the report of the review committee or the future of the unit. It has still to inform the unit of the decision of the council meeting.

Judy Redfearn

Bulgar birthday

Two for one

"Bulgaria-1300", the unmanned space probe planned as a highlight of the country's 1300th anniversary of statehood, will now consist of two satellites. The first, Bulgaria-1300/1, will be equipped entirely with Bulgarian apparatus, and will carry out ionosphere and magnetosphere investigations. The second, Bulgaria-1300/2, will carry both Bulgarian and Soviet apparatus including several remote sensing experiments, using infrared and VHF wavelengths, and also a special Bulgarian-made multichannel camera. The experiments on Bulgaria-1300/2 will be combined with observations from a high-altitude aircraft and collated with terrestrial measurements.

No details of the experiments have yet been announced. However, according to Dr Kiril Serafimov, chairman of the Bulgarian National Committee for Space Research and Utilization, Bulgaria's "historical circumstances" are such that Bulgarian teams can take part in all five areas of space physics covered by the Comecon joint "Interkosmos" programme — space physics, meteorology, communications, biology and medicine, and remote sensing. New Bulgarian ideas, developed within Interkosmos, stated Dr Serafimov, have included Langmuir probes, ion traps and electrophotometric telescopes. During the past few years, his teams have paid particular attention to noctiluscent clouds and have reported "very interesting data" concerning discharges of auroral type over the magnetic equator. A particular Bulgarian success has been the Spektr-15 multichannel camera, whose 15 channels compare favourably with Landsat's four channels and the East German MKF-6, which has six. (In addition Spektr-15 weighs only 15.2 kg as against the MKF-6 which weighs 158 kg.) The Spektr-15 will be a major feature of Bulgaria-1300/2.

So far, however, there have been no indications of any medical or biological experiments. This seems unfortunate, as the Bulgarian space medicine experiments scheduled for the visit of their Cosmonaut Georgi Ivanov to the Salyut-6 space station were abandoned when his Soyuz transport craft failed to link up with the station. (The other "Bulgarian" parts of the programme, such as the casting of aluminium "foam" using hydrogen as dispersant, were carried out by cosmonauts Lyaknov and Ryumin, who were already on board Salyut.) Nor are there any hints that Soviet birthday presents to Bulgaria will respond to the broad hints that the Bulgarian space planners have been dropping ever since Ivanov's mission was aborted — another, and this time more successful, flight of a Bulgarian cosmonaut. Other states have done better, but are not as old.

Vera Rich

Reef aggregation

A new society and a new journal concerned with research on coral reefs have sprung from the frustrations of a group of interested scientists at the difficulties of funding this interdisciplinary work. The new society, called the International Society of Reef Studies, was formed after a meeting held at Churchill College, Cambridge last month.

The first president of the society is Dr D.R. Stoddart from the Department of Geography at the University of Cambridge, who was the leader of the Royal Society's expedition to the Indian Ocean island of Aldabra in the 1960s. The council of the society includes members from mainland Europe, North America, Australasia and the Far East.

One of the objectives of the society — to provide a forum of coral reef research — has been met by the proposed publication by Springer-Verlag of a quarterly journal, *Coral Reefs*, due to appear next year. The new journal will be more concerned with the structure and dynamics of coral reefs than with the flora and fauna, and will thus be complementary to the *Atoll Research Bulletin*, published by the Smithsonian Institution.

The society also plans to take over the management of the international symposia on the subject, of which the fourth is due to be held in Manila in May. Its formation illustrates the difficulties of recruiting funds for the support of research in fields that do not fall squarely within the terms of reference of established grant-making agencies, which have been acutely felt in Britain in recent years. Feeling has run high that governments are interested in coral reefs only in crises.

Brazilian ecology

Polluting by decree

São Paulo

Economic pressures have caused the Brazilian government to postpone legislation banning the use of non-biodegradable detergents which was due to come into force in January 1981.

A decree signed by President Figueiredo last month puts back the starting date for the new law by two years. Industrial pollution is now a serious problem in Brazil. In the state of São Paulo all the rivers are biologically dead and the appearance of foam on rivers is now considered normal, according to the head of the Environmental Technology Agency. Several waste-treatment plants due to open in 1981 in São Paulo will have to be abandoned if the foaming persists.

Although the intended ban on non-biodegradable detergents was drafted four years ago, nothing was done to make it

possible to comply with the deadline. Manufacture of the non-biodegradable component of detergents, alquilbenzene sulphonate (ABS), is a monopoly of the Atlantic Richfield subsidiary Empresa Carioca de Detergentes (EMCA). Its production at 45,000 tons a year covers all Brazil's needs. SPUMA, the only company importing biodegradable linear alquilbenzene (LAB) was forced to close down more than a year ago because of prohibitive transport costs from its factory in Manaus in the Amazon region to the main consumption centres of São Paulo and Rio 4,000 miles away. The government chose not to help SPUMA by reducing import taxes and the company's machinery was bought up by a multinational company and left idle.

The Association of Cleaning Products Industries has been accused of lobbying against the entry of biodegradable detergents on to the Brazilian market. The association pleaded for a four-year delay in passing the new law on the grounds that the cost of importing the annual requirement of 35,000 tons of LAB would amount to \$35 million in hard currency, increasing the \$3,000 million deficit in the Brazilian balance of payments.

What this ignores, however, is the fact that the Brazilian owned company DETEN is now building a plant for the manufacture of LAB in the huge petrochemical complex under construction in Salvador, Bahia. Production is to start in April, reaching 25,000 tons by the end of 1981 and satisfying the expected Brazilian requirement of 70,000 tons per year by 1983. By then the multinational-linked EMCA will also be producing LAB in Brazil at the rate of 25,000 tons per year.

The economic argument for keeping the Brazilian market open to non-biodegradable detergents is further undermined by the statement from the Health Commission of the Brazilian Congress that EMCA had received a firm offer from CONOCO, a Shell subsidiary, to buy up all of EMCA's yearly production of ABS for \$36 million for export to other even less ecologically minded countries.

When recommending the President to postpone the ban, the Minister of Industry and Commerce ignored the ecological arguments and cited only the views of the Association of Cleaning Products Industries. The Health Minister in his turn agreed to the postponement on the grounds that health issues were not involved.

The new decree leaves it up to the Ministry of Health to set "indices of biodegradability" over the next two years compatible with the proportions of LAB and ABS on the market. But the Minister of Industry has stated that the responsibility for all future regulations concerning the production, import and distribution of biodegradable products will remain with the executive branch and not with the legislature.

Maurice Bazin

Security conference

Back to Madrid

The Madrid review conference of the Helsinki Final Act reconvened on Tuesday this week for a further two months. Attention now turns from the presentation of reports on progress by the signatory states to the potentially even more acrimonious question of future prospects.

Since the previous review conference in Belgrade in 1977, East-West relations have cooled. One consequence at Madrid was the long procedural wrangle before the conference could begin, partly over whether Afghanistan should be on the agenda.

Later meetings (which were closed to the public) saw much plain speaking, notably from Dr Philip Handler, president of the US National Academy of Sciences. He pointed out that the Hamburg "scientific forum" last February had been devoid of meaning because of Western scientists' concern about "serious infringements of the human rights and freedoms of too many of their colleagues in the East". He concluded with a quotation from Sakharov: "Intellectual freedom is essential to human society — freedom to obtain and distribute information, freedom for open-minded and fearless debate, and freedom from pressure by officialdom and prejudice".

Intellectual freedom concerns only the third of the three "baskets" into which the Helsinki process is conventionally divided. The term "basket" is a relic of the Helsinki Conference in 1973 during which it was decided that there should be three large filing baskets into which delegates could drop their suggestions on, respectively, military matters, trade/technology exchange and human rights.

Western signatories have always maintained, however, that this purely practical procedure did not change the essentially indivisible nature of the process of détente. The socialist bloc, however, would prefer to deal with the three "baskets" in isolation, which, in practice, means concentrating on the military aspects. Indeed, it has often suggested that the Western emphasis on human rights is itself a breach of the Final Act, being an interference in the internal affairs of signatory states.

The discussion of human rights at Madrid has been further complicated by semantics. The United Nations has made a working distinction between "legal" rights and "programme" rights, such as the right to an adequate living standard and the highest attainable standards of physical and mental health. Western signatories insist on the narrower meaning, Soviet spokesmen on the broader.

Proposals tabled for discussion in the next two months are of two kinds, concrete and declaratory. The French, for example, will urge that military "confidence building measures" should be extended to cover the whole of Europe as far as the

Indians home from home

Lucknow

In an attempt to recoup some of the talent lost through its relentless "brain-drain", the Indian government has reached an agreement with the United Nations Development Programme (UNDP) to implement a project known as TOKTEN, or the "Transfer of Know-how Through Expatriate Nationals".

Under the project, which it is hoped will further India's National Development Plan, Indian expatriates who are specialists in various technical and sociological fields will be invited to return to India for periods ranging from one week to three months. During their stay contributors would be expected to pass on their skills, act as consultants in their specialist field and make suggestions on issues of policy. They would help put their ideas into practice while in India and continue to give advice afterwards.

Responsibility for running the project will lie with a committee specially formed by the government's Council of Scientific and Industrial Research. Its members include representatives from ministries, government departments, public and private sector organizations, the University Grants Committee and the Indian branch of UNDP. Meanwhile UNDP has allocated an initial \$100,000 for travel and living expenses.

So far about 300 Indians — including doctors, engineers, scientists and social scientists — have agreed to take part in the TOKTEN project. **Zaka Imam**

Urals. At present, notification is required only within a frontier zone of 250 km.

The Soviets, for their part, have called for a European disarmament conference. Poland has proposed Warsaw as a suitable venue, and October 1981 as a possible date. A recent proposal by President Urho Kekkonen of Finland, which is likely to be raised again at Madrid, is known to have strong Soviet backing: the establishment of a nuclear-free zone in Northern Europe. (They are incensed, however, at Danish suggestions that "some regions of the USSR" should be included in the zone.)

Basket Two proposals (trade and technology transfer) will have to be discussed against the background of official trade sanctions imposed on the Soviet Union following its intervention in Afghanistan, and of "personal boycott" pledges by individual scientists and the United States academy's moratorium on exchanges. Major advances are unlikely.

Basket Three will carry a whole range of proposals, from the easing of visa restrictions and the "reunification of families" (the clause of the Final Act most frequently invoked by Soviet Jews wishing to emigrate) to the rights of private citizens to monitor the implementation of the Helsinki accords. **Vera Rich**