

on a university project sponsored by a large fertilizer corporation and help run a private research company in which the same corporation has invested considerable capital (see *Nature* 8 October 1981, p.417).

A representative of the university said last week that the new regulations proposed by FPPC represented an acknowledgement of some of the recent scientific developments affecting university-industry relations "particularly in genetic engineering, which were not foreseen when we went into this business".

The precise form in which scientists will be required to disclose either their own financial interests, or those of their spouse or children, in companies financing their research has still to be worked out by the university. Also under discussion is the way that the new reporting requirements would be policed. Here the conventional procedure at the university is that, although faculty members are under no legal obligation to make details of their outside interests available to the university, they can be barred from promotion or salary upgrading — both of which must be approved by the state — if they do not do as required.

So far, the university has reacted cautiously to the proposed regulations, recognizing that they have considerable support in the political community. One official on the Berkeley campus claimed that, although many faculty members felt they were being unnecessarily penalized for the excessive actions of a few, the general reaction was a reluctant acceptance.

But the debate may not be over. Some faculty members have apparently indicated informally that they may challenge the new regulations in court on the grounds that they constitute an infringement of constitutional rights. California Rural Legal Assistance in turn is suggesting that it, too, may sue the state if it feels that the regulations are not tight enough.

David Dickson

Polish higher education

Whose pigeon?

Academic freedom cannot be used to combat socialism and to reduce life to anarchy, General Wojciech Jaruzelski told the Sejm (Polish parliament) last week. This was the first meeting of the Sejm since the introduction of martial law. The two-hour speech was intended to justify the drastic measures of 13 December.

On the universities, he noted that the "political tensions" of the past year had involved most of the higher education system, and "weakened the pace" of academic work, creating "painful gaps" in study. The "reinstatement of law and order", however, was now creating conditions for normal work in the universities. "We want to continue the democratization of academic life, to ensure the self-government and autonomy of the

colleges", he said. The new higher education bill should, he said, go ahead.

In spite of his professed support for autonomy, the general suggested that more government control over research would be necessary. In many institutes, he said, the practical results of research are nugatory, and the "discipline of scientific research" must be increased. In this respect he criticized all three sectors of Polish science — the universities, the Academy of Sciences and the "departmental" institutes belonging to the production ministries. Hitherto the "departmental" sector has been given financial priority and better fringe benefits. A main plank of Solidarity's programme for science and culture had been parity between the three sectors. Now, it appears, the three sectors may at least attain parity in the degree of government control. The state, said Jaruzelski, must reserve for itself the supervision of the cost-effectiveness of expensive research, and there should be no repetition in the future of "misguided specialist advice".

This last remark appears to refer to the grandiose investment projects envisaged by the Poland-2000 programme of the Gierek regime — although for the past 18 months the major criticism aimed by the scientists at Gierek was that he commissioned expert reports, and then went ahead with his plans for political reasons in spite of economic and technical indications to the contrary.

The form that the Polish research structure will now take is unclear from the general's speech, although clearly Solidarity's hopes of block-grants for academic research, with autonomy for the universities in the allocation of available resources seem unlikely to materialize. One possibility much discussed during the past 18 months had been the dissolution of the existing Ministry of Science, Higher Education and Technology, and the combination of the higher education sector with the Ministry of Education and Upbringing to form a single education ministry, as existed in Poland before 1972. In that event, a Ministry of Science and Technology would be created with responsibility for all the "departmental" institutes now belonging to the various production ministries, while the Academy of Sciences would continue with its present quasi-ministerial status.

It is not yet certain that these plans will be frustrated. The combination of science, higher education and technology in a single ministry has so far favoured the appointment of a scientist as minister. The new minister, however, appointed last week to replace Dr Jerzy Nawrocki who resigned soon after the declaration of martial law, is Professor Benon Miskiewicz, a military historian, who, until 1981, was rector of the Adam Mickiewicz University of Poznan. The appointment of a minister from the humanities could be the first step towards the eventual reorganization of the ministry. **Vera Rich**

Recombinant DNA guidelines

Only formality

Washington

The Recombinant DNA Advisory Committee (RAC) of the US National Institutes of Health (NIH) is to meet in Bethesda, Maryland, next Monday to decide whether to recommend the *coup de grâce* for federal regulations introduced six years ago to cover research using recombinant DNA techniques.

Many scientists are urging the committee to support a proposal that, as a final step in dismantling regulations initially introduced as protection against potential hazards from such research, would transform them into a voluntary code of practice. Several state and city legislatures, however — most recently the health committee of the California State Assembly — say that if this happens, they may adopt their own stringent regulations.

Judging by past experience, the most likely outcome is that a compromise formula will be worked out by NIH. While reducing the overall stringency of the regulations, this will probably stop short of making them voluntary in the hope of heading off local, more restrictive controls.

Two proposals have been put to RAC as possible major revisions to the NIH guidelines. The more radical suggestion was originally put forward by Dr David Baltimore of Massachusetts Institute of Technology and Dr Allan M. Campbell of Stanford University.

In its current form, which committee members agreed at their last meeting in October should be published for public comment, this revision would reduce the recommended containment level for almost all experiments to P1 physical containment, eliminate all current prohibitions on certain experiments (though retaining two as "admonishments") and abolish the mandatory aspects of the guidelines (see *Nature* 17 December 1981, p.606, for full details).

A less severe revision has been proposed by RAC member Dr Susan Gottesman, of the National Cancer Institute's Laboratory of Molecular Biology. This would also revise and relax the containment requirements, but the guidelines would remain mandatory, and it would still be necessary for universities and research institutions to operate Institutional Biosafety Committees.

Officials at NIH report that, although both proposals have been widely distributed to the scientific community, the response has been much less than that to previous proposals to liberalize the guidelines made when the public debate about the safety of recombinant DNA techniques was at its height.

Some of those on both sides of the debate are clearly coming to an end of their stamina. "I cannot think of any letter that I

A letter to Leonid Brezhnev. . .

Secretary General of the Communist Party
and President of the Council of the Supreme Soviet,
Leonid Brezhnev, Moscow, Kremlin

Sir,

We have followed with great interest your remarks in the press and on television, on the occasion of your latest visit to Bonn, expressing your concern for the maintenance of world peace. This concern is shared by all responsible and thinking people throughout the world, independently of their ideological differences, and we stand with you in your desire to preserve humanity from destruction.

At the time of your visit, however, we were shaken by the news that your country's Nobel Peace Prize winner, Prof. Andrei Sakharov, and his wife, Yelena Bonner, had embarked on a hunger strike of unlimited duration. The ensuing response of the Soviet government, averting the danger to the Sakharovs' lives, was seen by the entire world as an act of humanitarianism. Indeed, we recognize in your government's action an important contribution to détente, a regard for human rights being basic to and inseparable from the search for peace.

The awarding of the Nobel Peace Prize to Andrei Sakharov acknowledges that he engaged himself unequivocally in the interests of world peace, independently of his successes in physics. This recognition of Prof. Sakharov is a tribute also to all our countrymen who, like our own, are filled with the sincere desire for the peaceful coexistence of all nations following the dreadful sacrifices of the Second World War.

In January 1980, Prof. Sakharov was exiled to Gorky, without benefit of a court trial or having been sentenced.

As members of the international scientific community, we feel we cannot ignore the circumstance that Prof. Sakharov, in his two years of exile, has been unable to carry out his scientific work. We see here a clear threat to the freedom of scientific endeavour, and indeed to the freedom of the human spirit.

We therefore appeal to you to accede to Sakharov's repeated request for a full trial, or to allow him to return to his work at the Soviet Academy of Sciences.

Prof. Dr. Gabriele Taugner

An English translation of a letter which was sent on 29 December last year to Soviet leader Leonid Brezhnev and signed by 136 scientists at the University of Heidelberg, West Germany.

have written that has had any effect at all; those of us who think NIH has been dismantling the guidelines too fast still feel as strongly as ever, but we see no evidence that anyone listened to what we were saying", says Dr Susan Wright of the University of Michigan.

Most of the letters received by NIH's Office of Recombinant DNA Activities from individual members of the scientific community, commenting on the two published proposals, support the more radical revision, which would make the guidelines voluntary. This support, the apparent waning of public concern over the potential hazards of recombinant DNA research, legislative efforts to spur the commercial application of genetic engineering, and the anti-regulatory leaning of the Reagan Administration appear to favour a move towards less control.

The single factor which could prevent this, however, is a resurgent militancy in communities in different parts of the country, particularly where new debates about the safety of the research have been triggered by the ambitious plans of the genetic engineering industry.

Both the Boston Biohazards Committee and the Cambridge Biosafety Committee, for example, have written to NIH expressing their opposition to any move that would make the guidelines voluntary.

In California, the state assembly's health committee has recently held two hearings on the growth of biotechnology companies in the state and the current status of federal safety regulations. The chairman of the committee, Mr Art Torres, says he would consider introducing legislation enforcing the guidelines if NIH made them voluntary.

With a large proportion of the nation's genetic engineering research taking place in California, threats of state legislation are

not being treated idly by NIH. In the past, university scientists have made strenuous efforts to prevent Congress from enacting legislation that would turn the NIH guidelines into broad legal requirements; indeed, this has frequently been the motivation behind NIH's agreement to accept tougher restrictions on the research than it would have liked. **David Dickson**

Lead additives in petrol

New offensive

A well-organized campaign to persuade the British government to ban lead in petrol was launched in London last week. The Campaign for Lead-free Air, or CLEAR, claims already to have 130 Members of Parliament, 8 national organizations concerned with environmental and health matters and 21 scientists and clinicians who are convinced by epidemiological studies or their own clinical experience that low blood lead levels harm the mental health of children. The chairman of the campaign, Mr Des Wilson, is a seasoned campaigner whose organization to put forward the case of homeless people, SHELTER, was prominent in the late 1960s.

Lead in petrol has been in and out of British politics since 1980 when a working party under Professor Patrick Lawther found no conclusive evidence that low concentrations of lead in the blood are detrimental to health or that lead in air is a major contributor to increased blood lead concentrations. In the light of the Lawther report, the government's decision last May to reduce the lead content of petrol from 0.4 to 0.15 grammes per litre by 1985 was a surprise.

CLEAR's objectives are to persuade the government to introduce the reduction

earlier than planned and to pass legislation requiring all new cars sold in Britain after 1985 to run on lead-free petrol. The pressure group will also be pressing for a lower excise tax on lead-free petrol and for it to be on general sale by 1985 at the latest.

The campaign, which has received some money from its trustees, hopes to raise £250,000 mainly from public donations. Some of the money will be spent on public education and monitoring the government's programme to reduce lead pollution. The plan is to send out teams to investigate, for example, the effectiveness of the government's programme to increase public awareness of the hazards of lead in old paint and whether car manufacturers are following government instructions to reduce the amount of lead in solder. CLEAR also hopes to support academic research on the effects of low lead levels in the body and to monitor the level of lead in air.

At the launch last week, the organizers described two recent studies implicating low levels of lead in the body as harmful to health. D.A. Otto and colleagues in California, whose study was published in *Electroencephalography and Clinical Neurophysiology* 52, pp.229-239, claim to have found a link between abnormalities in the electroencephalograms of sensory stimulated children aged 1-6 years with blood lead levels as low as 150 microgrammes per litre. Dr Fraser Alexander, a paediatrician from Newcastle and a member of CLEAR's scientific and medical advisory committee, reported his as yet unpublished study implicating low blood lead levels in pregnant women with malformation of the fetus. **Judy Redfearn**

Satellite communications

Up for grabs

Washington

It seemed a good idea at the time; the RCA Corporation, besieged by more than 50 potential customers eager to lease space on its latest telecommunications satellite, Satcom-IV, successfully launched last month, had previously held a public auction for bids to lease seven separate transponders (frequency-shifted radio relays). The response was even better this time. With the auction being held in the Manhattan Galleries of Sotheby Parke Bernet, it attracted a flood of national publicity; the transponders were sold at between \$10.7 and 14.4 million for leases that run until 1988, resulting in a total sale of more than \$90 million dollars.

It was a bit too good to last. On Thursday the Federal Communications Commission (FCC) ruled that the auction was illegal, since it resulted in different prices for leases being paid by different buyers, in violation of federal regulations which require no discrimination. As a result, negotiations with the seven successful bidders have been suspended