

Polish universities

On hold again

Student protest continues in Poland, in spite of the stern controls on university life imposed by General Jaruzelski's Military Council for National Salvation. Plans for the opening of undergraduate courses at the University of Warsaw were shelved again last week, following the widespread distribution of an underground leaflet appealing to students elsewhere to support the Poles' right to academic freedom and the restoration of the banned Independent Students' Association (NZS).

NZS, the leaflet pointed out, was legally recognised by the Lodz accords which concluded five weeks of student protest last spring. Almost all the students who held office or played an active part in this legal organization are now, the leaflet said, interned.

In Gdansk, the already severe restrictions on student life have apparently been tightened after a 3,000-strong demonstration on 30 January was broken up by riot police. The local newspaper, which was only allowed to report the event several days later, said that out of the 205 persons detained, 40 were students and 56 were schoolchildren. According to the government's press spokesman, Jerzy Urban, stricter controls have also had to be imposed at Wroclaw Technical University following a student protest march.

Wroclaw is a sensitive area; last autumn, when a young mathematics lecturer and Solidarity activist, Kornel Morawiecki, was charged with including provocative and anti-state material in internal union publications, the rector and academic council spoke out strongly in his defence. Another Wroclaw mathematician, 68-year old Dr Tadeusz Koszecki, is reported to have died of a heart attack while attempting to protect students during a police raid on 23 December.

Expulsions of students and the dismissal of academics unwilling to take the oath imposed by the political "verification" process are reported across the country. Unconfirmed reports state that the expulsion rate at the Academy of Mining and Metallurgy in Krakow is as high as 35 per cent — which bodes ill for the future of Poland's two major industries, for which the academy is intended to supply experts and research consultants. **Vera Rich**

Euratom treaty

Call for change

Brussels

The Euratom treaty, signed by the European Economic Community's six founder members in 1958, is in urgent need of revision, asserted European Commissioner for Industry and Energy, Vicomte Etienne Davignon, at a press conference on 4 February. The Euratom treaty

is an instrument setting up a common market for nuclear energy. It is intended to guarantee common safety standards and safeguards and to ensure that all nuclear energy users obtain a regular supply of nuclear materials. Under the treaty, the European Commission has the exclusive right to conclude supply contracts.

The economic advantages of nuclear power are once again argued in this provision policy paper. The present 16 per cent of EEC's total electricity production created by nuclear power equalled 56 million tonnes of oil equivalent in 1981. With the planned capacity increase of 69 megawatts by 1990, nuclear energy could supply as much electricity as coal and save imports of 150 million tonnes of oil equivalent.

The Commission estimates that electricity from nuclear energy is between 30 and 90 per cent cheaper than that from coal, and compared with petrol nuclear power is 100–150 per cent cheaper. Although the investment costs are high, nuclear fuel costs are negligible compared with coal and oil. And Davignon considers the nuclear option to have other advantages supplying a bonus in jobs and a high level of technology. More detailed economic studies are awaited.

In order to boost investment, the Commission wants Euratom loans doubled. Credit worth 800 million European currency units (approximately \$800 million) has so far been taken up out of the ceiling of 1,000 million fixed in 1977. The new ceiling would then be 2,000 million.

More common efforts are called for from the member states in the storage and reprocessing of irradiated waste. This could involve the establishment of EEC reprocessing companies. In addition, Davignon proposes an end to electricity subsidies, which distort competition among power supplies.

The essential element in the new strategy relates to the supply of nuclear materials. Here judicial changes to the Euratom treaty are envisaged which might mean dismantling the Commission's exclusive trading rights and leaving Brussels with the task of ensuring that there is discrimination towards purchasing countries. By this means, Davignon hopes to stimulate competition among suppliers such as the United States, Canada and Australia with which supply contracts already exist. The Community would then only guarantee that the fission materials would be used exclusively for peaceful purposes.

To reassure public opinion on nuclear safety, the Commission's proposals provide for a more open policy and more information. The system of technical controls and safeguards needs to be updated together with a "concentration of powers". Much the same was recommended in a report by the Belgian Member of the European Parliament, Anne-Marie Lizin (see *Nature* 21 January, p. 179).

Jasper Becker

Laboratory animals

Culture sought

A multi-laboratory research programme organized by FRAME (Fund for the Replacement of Animals in Medical Experiments) to investigate alternatives to animal toxicity tests is being backed by several established drugs and cosmetics manufacturers. Of the £240,000 needed to support the programme, £180,000 has already been guaranteed. The programme involves the collaboration of four laboratories: the Huntingdon Research Centre and centres at the University of Surrey, the University of Nottingham and St George's Hospital Medical School in London.

Although there have been isolated projects on toxicity testing, this is the first in the United Kingdom to link the work of several laboratories. The aim is to scrutinize a common list of chemicals, some toxic, using tissue cultures rather than animals.

The programme is the product of a two-year study by FRAME's Toxicity Committee who will assess the feasibility of non-animal methods of toxicity testing and report in November 1982.

FRAME's board of trustees numbers only four, of whom two are scientists: Dr Michael Balls of the University of Nottingham and Dr Peter Hodges, a senior scientist with Pfizer. Although still a small organization, FRAME seems to have acquired some influence since its inception in 1969. A group of 40 Members of Parliament, led by Joan Lester, has pledged itself to promote alternatives to animals in experiments. Industrial sponsors for FRAME's research programme include Avon Cosmetics, Rimmel International, Bristol-Myers and Pfizer.

FRAME's objectives superficially conflict with the interests of the companies, which at present market their products with a degree of confidence in protection from legal proceedings for negligence because of tests using animals. Their support for the new research programme seems to have been stimulated by the cost of animal screening tests and the growth in public concern for the welfare of laboratory animals.

Thus Avon Cosmetics, which is supporting one of the four research groups says that its interest in alternative methods of toxicity testing is based on ethical considerations. Pfizer says that it has incurred "significant expense" in making senior staff available for internal studies of alternatives to animal laboratory tests, and describes FRAME as its chief British channel for this kind of work.

The Royal Society was urged at a recent meeting to set up an "ethical committee". Its *ad hoc* Committee on Animal Experiments is likely to decide on the terms of reference and chairmanship of such a working party later this month.

Jane Wynn