that would prevent these things from ever having been used".

Following apparent complaints from State Department officials about the possible implications of the secretary's comments, the "Voice of America" added a statement to the interview reaffirming the United States's renunciation of biological and toxin weapons. It explained that "retaliation in kind" meant "redressing the imbalance through the development of an adequate protective posture".

David Dickson

International nuclear agency

Changing sides?

Stockholm

The man who led the campaign in Sweden in 1980 to reduce nuclear power to only a stopgap option, to be abandoned when renewable energy sources become economic, has been appointed Secretary General of the International Atomic Energy Agency (IAEA).

The primary role of IAEA — a United Nations agency — has been to promote the peaceful uses of nuclear energy: a role which has given it a prominent part in the debate over energy supplies to the Third World and potential nuclear proliferation. So the appointment last week of Dr Hans M. Blix, 58, Sweden's deputy foreign minister and an environmentalist, is somewhat controversial.

Until 1978 Blix was a senior civil servant specializing in international law—in which he earlier held a professorship. But with the collapse of the 1976 conservative government he was drawn into politics on behalf of the Liberal Party. As deputy foreign minister he has concentrated on Sweden's aid to developing countries, making Sweden one of the few to reach the United Nations target of 1 per cent of gross national product. It is this interest and success with the Third World which has no doubt won him the secretary generalship of the IAEA.

In the 1980 referendum on nuclear power in Sweden, Blix campaigned for the winning "middle line": increasing the number of nuclear power stations from 6 to 12 in the next few years, but then holding the number at 12 if alternative sources such as solar power or biomass (a realistic option in Sweden with its vast number of trees) are then viable.

However, Blix said this week in an interview with the Stockholm newspaper Dagfens Nyheter that he did not see IAEA as a place to peddle his own views. His job will be to implement what can be agreed. He failed to mention that what can and cannot be agreed is, to a degree, under the influence of the IAEA secretary general.

There were three areas that IAEA should pursue, he said. First, its traditional role of furthering the peaceful uses of nuclear power — though he would like to see more nations adhering to the non-proliferation

treaty. Blix is greatly interested in the idea of the creation of a nuclear weapon-free zone in the Middle East. Although he has made no public comment yet on the question of the use and international control (through IAEA) of the French reactors supplied to Iraq and recently bombed by Israel for fear of Iraq developing nuclear weapons, he did say in the interview that the control of nuclear power was "very important" — and that that control works very well today.

The second area in which IAEA should give assistance is in nuclear safety, both in reactors and waste disposal, Blix said: here there should be an international exchange of experience and a degree of open debate. "I came to realize the importance of this during the Swedish referendum", he commented. The third role for IAEA was support of developing countries in the

More science cuts

Washington

Further proposed cuts in American science programmes are expected to be announced shortly following President Reagan's announcement of an across-the-board cut of 12 per cent in the discretionary spending budgets of all federal agencies.

Basic science did relatively well in the President's original budget proposals to Congress in March, which envisaged keeping research spending virtually constant in real terms. The new round of cuts, made necessary by indications that even the original cuts were not likely to be sufficient to satisfy the Wall Street bond market, mean that spending on science in real terms would drop by at least 10 per cent in the fiscal year which begins on 1 October, the first drop since 1974.

Individual agencies, such as the National Science Foundation and the National Aeronautics and Space Administration (NASA), have yet to decide precisely where the cuts would fall. But the magnitude of the cuts — about \$600 million in the case of NASA — means that many research projects would inevitably be terminated.

In high energy physics, for example, Dr Sidney Drell, deputy director of the Stanford Linear Accelerator Center and chairman of the Department of Energy's high energy physics advisory panel, said on Monday that the result would probably mean about a 20 per cent reduction in the level of operations. He expected hundreds of personnel to be laid off from the country's national laboratories, and that many planned experiments would not now take place.

Addressing a meeting of the panel, the President's Science Advisor, Dr George A. Keyworth, said that the new rounds of cuts made his earlier remarks about the need to choose priorities for the support of science "even more relevant today than three months ago". David Dickson

analytical and other uses of radionuclides.

Carl Tham, Swedish spokesman at IAEA, said this week that more important than Dr Blix's position during the Swedish referendum was his immense experience in international relations. Robert Walgate

Heidelberg cancer centre

Neurath's case

Dr Hans Neurath, whose resignation as Director of the German Cancer Research Centre at Heidelberg was announced in June (see *Nature* 20 August, p.665 and subsequent correspondence 24 September, p.252), gave the centre's board of trustees a critical and even bitter explanation on 23 September. In his statement, Dr Neurath said that he had found it impracticable to carry through agreed proposals for running the centre because of the circumstances, "structural, scientific and concerning personnel", at the centre.

Dr Neurath's departure from the centre will take effect on 31 December. In his statement to the board of trustees, he noted that his appointment had been made so that he could improve the quality of cancer research at Heidelberg and "bring it up to an international standard".

In reality, the statement continued, he had found the institution to be "plagued by serious and perhaps irreconcilable conflicts of interest", largely stemming from an "old established majority". Dr Neurath said that his impression was that "procedural questions and administrative and legal arguments" have priority over scientific work, and that scientific leadership is impeded by over-literal interpretations of the centre's charter.

Dr Neurath also said in his statement last week that he had been denied the active support both of the trustees to whom his statement was addressed and of the representatives of government ministries. He complained that those concerned had supported him by words and not by deeds, thus undermining the prospects for his success as director.

The statement added that Dr Neurath decided to resign in the hope that such a drastic step might contribute to reform.

Polish higher education

Bill progressing

Poland's controversial new bill on higher education is to go forward for discussion by the Council of Ministers "without essential changes". So promised the Minister for Science, Higher Education and Technology, Dr Jerzy Nawrocki in a statement intended to put an end to "unjustified fears and extreme protest movements".

The protests, which have now spread to virtually all universities and higher educational institutions in Poland, were triggered off by the the last-minute changes

which the ministry wanted to introduce into the bill, without the consent of the academic community. In particular, the academics said, the ministry had tried:

- To limit academic freedom.
- To restrict the autonomy of the universities in disposing of their financial resources.
- To extend the competence of the courts over students' organizations.
- To limit the right of workers in academic institutions to protest against discussions.
- To return to the former system of selection of university rectors, deans and collegiate bodies.

These amendments, the academics maintain, would virtually nullify the liberalization of academic life introduced in the past year which the bill was supposed merely to codify.

After a number of meetings with academics — and a stormy press confer-

Hidden spectre

Doubts have emerged about the validity of some important claims in photosynthesis research based on experiments carried out by Mr Mark Spector, much of whose recent work on protein kinases in relation to tumour viruses has been retracted by his erstwhile boss, Professor E. Racker of Cornell University (see *Nature* 10 September, p.93).

A paper published in the Proceedings of the National Academy of Sciences in February 1980 by Spector and C. Douglas Winget produced a considerable impact because it reported the purification from chloroplasts of the long sought-after enzyme responsible for the photosynthetic splitting of water to release oxygen. Other laboratories which hastened to confirm and extend this finding found difficulty in repeating the published experiments but, particularly when Spector ascended to the respectability of Racker's laboratory, these difficulties were put down to nothing more than the everyday problems of reproducibility of much biochemical work. Inevitably, however, there are now questions about the validity of the Spector and Winget claim as well as about an extension of the work reported by Dr Winget at the Fifth International Photosynthesis Congress held in Greece in September 1980.

Dr Winget, who did postdoctoral work with Professor Racker, is in the painful process of checking the experiments he published with Spector. Perhaps because he has not yet had time to check everything, the picture is confusing and not altogether comforting. Although he can repeat some parts, there are others which, despite considerable effort, he has been unable to reproduce. Dr Winget, reached by telephone on Monday afternoon, was afterwards unavailable.

Peter Newmark

ence with educational journalists on 15 September — the minister found himself facing a number of "strike alerts" from academics and students, due to take effect when the academic year opens on 1 October. Although the majority of protest messages stressed the academics' desire for peaceful negotiation, some hard-liners were less amenable. In particular, the Independent Students' Association at Poznan Technical University called for all negotiations with the ministry to be called off. The only bill to go forward to the Seim (Parliament) for ratification, they said, should be that drawn up by the Codification Commission; Minister Nawrocki has now promised to put this bill before the Council of Ministers. However, he is adding an appendix giving the ministry's own views on disputed points. In particular, savs Nawrocki:

- The minister should have the right to set an upper limit on university intake "so as to ensure a rational employment policy.
- The university, as a budgetary unit, cannot have the right "freely to shape its pay fund", but must shape employment within the framework of the pay fund allocated.
- The rector should have the right to call for the dissolution of an assembly on university premises if it infringes public order or strikes at the political and social system of the state.
- Academic staff should have six weeks vacation, not eight.
- Rectors should be elected either by the university senate or electoral college, or by the senate and college in conjunction, as envisaged by the university statute.

In fact, some of these points were never in dispute. The academics had sought only budgetary autonomy within the funds allotted, not for unlimited funding. Nobody had questioned that the rector might need to call for help to quieten a disorderly assembly; what was agreed in the Lódz accords which settled last winter's student unrest was that the police should not come onto a campus uninvited.

The idea of an upper limit on university intake is reasonable enough, since Poland now faces the grim possibility of up to 1 million unemployed if the economy is to be made to balance, and the Prime Minister, General Wojciech Jaruzelski, has committed his government not to pay unemployment relief.

If such a policy is to be implemented, however, the present atmosphere of academic autonomy would suggest that it should be agreed by the various rectors and senates concerned, acting through the new Permanent Conference of Polish Universities, not sprung on them suddenly.

This, in fact, remains the bone of contention — the fact that the ministry tried to introduce the changes unilaterally and with virtually no time left for academics to voice objections. In spite of the minister's statement, therefore, the tension continues.

Vera Rich

Research sponsorship

Agony at MIT

Faculty members of the Massachusetts Institute of Technology (MIT) are holding a special meeting today (Thursday) to discuss a controversial offer from Mr Edwin (Jack) Whitehead, the founder and former president of the laboratory instrument company Technicon Corporation, to fund a free-standing institute for research into molecular approaches to developmental biology.

Under the terms of the offer, \$20 million would be provided for the construction of a building in Cambridge to house the Whitehead Institute for Biomedical Research, which has already been formed, with Dr David Baltimore, at present American Cancer Society Professor of Microbiology at MIT, as its director.

Mr Whitehead will also provide an initial \$5 million a year to cover the running costs of the institute, enough to support 20 new research professors. MIT would receive an additional endowment of \$7.5 million to cover costs associated with its links to the institute, and eventually the Whitehead Institute would be provided with its own endowment of \$100 million to guarantee a permanent income.

Top administrators at MIT are enthusiastic about Mr Whitehead's proposals, which they see as maintaining MIT as one of the leading biotechnology research institutions on the East Coast.

Commission man

The European Commission has appointed an outsider as director-general of Research, Science and Education (DG XII) in succession to Dr G. Schuster, who resigned in August after a nine year stint. Paolo Fasella, professor of biochemistry at the University of Rome, takes over the post on 1 October.

Professor Fasella is, however, well versed in European research policy. He has been involved in the running of the European Molecular Biology Laboratory and in the years 1975–79 was president of the European Molecular Biology Conference. He has also served on various committees dealing with research policy in energy and biotechnology both at a European level and in his native Italy. Since 1973 he has been an adviser to the Italian government on such matters and has taken a particular interest in the problems of relating research results to industry.

One of Professor Fasella's first tasks in his new appointment will be to formulate a revised research strategy for the commission. In particular he will be devising the four-year indirect action programme which begins in 1983.

Professor Fasella's research work has been mainly in enzymology.

Judy Redfearn