

Anxiety about Reagan's sanctions

Two views on the wisdom of suspension

Washington

President Reagan's announcement last week that the United States is suspending its scientific exchanges with the Soviet Union, as part of a package of reprisals aimed at chastising the Soviet Union for its support of the military clampdown in Poland, has provoked concern in the scientific community that the move indicates an increasing willingness to use science for explicit political purposes.

The immediate effect of the President's decision will be to suspend the scientific exchange agreement signed by President Richard Nixon and Soviet President Leonid Brezhnev in 1972. Furthermore, Mr Reagan announced that unless the situation in Poland changes the agreement will not be renewed when it runs out in July.

Similarly, agreements for cooperation in energy and space research will not, at present, be renegotiated when they run out in May. And a number of other agreements which include scientific components are also being suspended and reassessed.

To a large extent, however, Mr Reagan's decision to suspend scientific exchanges is viewed as more symbolic than substantive. In the case of high-technology trade, an area announced for suspension, even the US Department of Commerce accepts that the Soviet Union is little more than a "marginal market" for sophisticated equipment, accounting for less than one per cent of the US electronics industry's annual sales of \$200,000 million, and that the Soviets may well be able to meet their needs from other sources.

Officials at the National Science Foundation, which is responsible for nine of the twelve working groups still operating under the terms of the 1972 agreement, argue that as a result of deliberate efforts over the past few years to eliminate exchanges involving a marked imbalance of benefits, those still in effect provide scientific benefit to both sides.

Many — although not all — US scientists fear that if even these exchanges are now halted, the effect could be counter-productive. Not only would it close off an important channel of communication between two intellectual communities, but it would provide a useful propaganda weapon for use against those attempting to separate politics from science.

"I feel that it is very important that these communication channels are kept open because they provide a crucial link between

different societies and different peoples during periods of difficulty, and because they can be kept separate from immediate political concerns", Dr Alan Bromley, professor of physics at Yale University and president of the American Association for the Advancement of Science, said on the eve of the association's annual meeting.

At the National Academy of Sciences, which two years ago suspended all bilateral symposia, seminars and workshops with the Soviet Academy of Sciences in protest at the treatment of physicist Dr Andrei Sakharov, but has made no move to interrupt the exchange of individual scientists between the two academies, president Dr Frank Press said he was concerned that if there was no formal scientific agreement at all between the United States and the Soviet Union, it would be difficult to keep channels of communication open.

Even some of the groups which have been most vocal in their protests over the treatment of Dr Sakharov and other dissident scientists have expressed fears that their effectiveness could be severely reduced if scientific exchanges were terminated. Dr Max Gottesman, a member of the Committee of Concerned Scientists, said last week that since Soviet diplomats did not seem to consider the termination of such exchanges to be a major blow to their domestic scientific effort, the United States stood to lose more than it might gain in terms of influence over opinion in the Soviet scientific community.

In contrast, there is less consensus on how far the federal government should go in restricting access by foreign scientists, in particular those from the Soviet Union, to

US research laboratories on the grounds that the knowledge they pick up might later be used for military purposes.

Following protests from the scientific community that such restrictions could unnecessarily restrict the flow of scientific information, Mr Frank Carlucci, deputy secretary of the US Defense Department, has provided a detailed list of instances where, he claims, the Soviet Union has achieved significant military or technical benefits through visits to US laboratories made by Soviet scientists on exchange programmes. According to Mr Carlucci, "it is quite apparent the Soviets exploit scientific exchanges as well as a variety of other means in a highly orchestrated, centrally-directed effort aimed at gathering the technical information required to enhance their military posture".

A significant number of scientists are known to be in general agreement with the Defense Department's position. Dr Bromley, for example, said that although he felt restrictions should not be applied to basic science, he was concerned that information of potential military value might have been "given away" through exchange programmes.

The National Academy of Sciences is considering setting up a committee to look at the implications for the scientific community of existing and proposed federal restrictions on the flow of technical data. Dr Richard D. DeLauer, Under-Secretary of Defense for Research and Engineering, is said to be in favour of such a committee, although academy officials fear the government might act before a proper study can be carried out. **David Dickson**

Polish academia only partly normal

Polish academic life formally resumed this week but was, however, only partial. There are reliable reports that only graduate and fifth-year (finals) students have been readmitted to the universities and that all other undergraduate courses have been suspended until next year.

This leaves in doubt the status of the suspended students. A decree of the Military Council, passed on 30 December, obliges all able-bodied males between 18 and 45 years of age to work for the duration of martial law. Students as such are exempt, but it is not clear whether the exemption applies to those who must wait until next autumn to resume their studies.

There are also unconfirmed reports of some first-year students being drafted for military service. University graduates who have not yet found work are obliged to report to plenipotentiaries from the Ministry of Labour, Wages and Social Affairs stationed at their former colleges. Since unemployment among young graduates is considerable — particularly in the humanities and social sciences — there

seems little chance that for them the clause in the decree, enjoining the administrators to take professional qualifications into consideration "as far as possible", will be of more than a token significance.

Academic staffs are far from happy with the new situation in Poland. On 23 December, the Prime Minister, General Wojciech Jaruzelski, together with Deputy Prime Minister Mieczyslaw Rakowski and Politburo member Hieronim Kubiak, met 69 leading academics to discuss what Jaruzelski described as "the active role of Polish scientists, intellectuals, writers and artists working for the salvation of the homeland, consolidation of the state and the building of a bridge of special patriotic agreement". Both Kubiak and Rakowski have the reputation of being liberals, and the academics seem to have been selected mainly from those who played little or no active part in the campaign for academic autonomy of the past 16 months.

Even so, no agreement was reached. The official communiqués spoke merely of a "long and frank discussion", with the