decision will actually yield some clear results remains to be seen. But parliament has at least decided to await the final report from the steering group, expected at the end of 1983, before making its final decision.

Casper Schuurin

Commercialization of research

Student dilemma

Washington

Renewed public controversy has arisen about the connections of various faculty scientists at the University of California's Davis campus with a local research company Calgene, particularly over the effect these could have on graduate students.

Last October, plant biologist Dr Ray Valentine was told by the university that he must either relinquish his position as chief investigator on a \$2.3 million grant to the university's experimental station from the Allied Chemical Corporation to support his work on nitrogen fixing (*nif*) genes, or give up his contracts with Calgene, of which he is a co-founder and vice-president (*Nature* 8 October 1981, p.417).

The university's ultimatum followed the discovery that Allied Chemical had also agreed to buy a 20 per cent equity interest in Calgene. Dr Valentine subsequently agreed to step down from the university research project. However, the publicity helped spur the state's Fair Political Practices Commission into recommending that university researchers should no longer be allowed a blanket exemption from conflict-of-interest laws routinely applied to other state employees.

The latest dispute has arisen over charges that some graduate students in Dr Valentine's laboratory have been placed in a difficult position since it became clear that some of their research on the genetics of nitrogen fixation could have significant commercial consequences.

The campus daily student newspaper last week published extracts from memoranda written by faculty members expressing concern about the impact of Dr Valentine's involvement with Calgene on the academic functioning of the university.

One set of memoranda relate to a decision by four of the five graduate students to transfer their research, with Dr Valentine's approval, to another laboratory on the campus. Dr JaRue Manning, professor of bacteriology, said that graduate students have revealed several common concerns. The first was Dr Valentine's statement that it was the students' responsibility "to meet with Calgene personnel and establish that their graduate research project is not being conducted at Calgene".

The second factor quoted by Dr Manning was what he described as the switching of student research projects as a condition for continued support after students have spent up to two and a half

years on a project. "Regarding the second factor, while there is certainly a need to coordinate research activities with objectives stated in grants, etc., the manner in which these changes were made raise a number of questions as to the actions taken."

Other memoranda raise more general issues about the effects of intensifying links between university researchers and companies such as Calgene. In a note to Dr Charles E. Hess, dean of the College of Agricultural and Environmental Sciences, Dr Emanuel Epstein, professor of plant nutrition at Davis, suggests that scientists are no longer keen to exchange research data with each other as soon as it comes off the scintillation counter or the electrophoresis cell.

In another memorandum to Allen G. Marr, dean of graduate studies and research, professor of zoology Robert L. Rudd complains that plans by Calgene to initiate a research project which competes with the dissertation research objectives of one of his graduate students was "an infringement on academic freedom and potentially harmful to graduate education in general".

Both Dr Epstein and Dr Rudd said last week that they were not opposed, in principle, to collaboration between university research scientists and the private sector. As a land-grant college, the Davis campus of the University of California has long had close links with both local farmers and agricultural companies. Both, however, were concerned that public reaction to the tensions caused by the recent rush to exploit research findings in genetic engineering could lead to bureaucratic controls that might themselves be an infringement on academic freedom.

The state's Fair Political Practices Commission met on Monday to discuss whether it should give final approval to the suggestion, approved by a 3 to 2 majority at its January meeting, to require university researchers to make public any financial interest they may have in a company which is sponsoring their research (*Nature* 4 February 1982, p.357).

The internal memoranda appear to have been leaked as part of a campaign by the California Rural Legal Assistance to persuade the commission to go further and require university scientists to disclose all their financial commitments in outside companies, whether or not the companies are providing research funds to them.

Dr Valentine did not return telephone calls last week asking him to comment on the questions that had been raised about the position of the graduate students. A spokesman for Calgene said that that the company did not employ any Davis students, and was not sponsoring any research at the university. (About thirty Davis faculty members are reported to be acting as consultants to the company.)

David Dickson

Polish crisis

Questions asked

One of the casualties of martial law in Poland has been the free flow of information between Polish scientists and their Western colleagues. With the total severance of telecommunications, and the postal service considerably delayed by censorship, it has been difficult, if not impossible, for scholarly contacts to be maintained. Moreover, reports in the Western media of protest strikes in the universities and institutes of the Academy of Sciences have aroused considerable anxiety among scientists abroad as to what exactly is happening to their Polish colleagues.

The main source of information has been the lists of internees appearing from time to time via official or unofficial channels. The first list — issued by the Military Council for National Salvation — was clearly erroneous; it included several names of people who were actually outside Poland when martial law was declared, such as the young chemist, Miroslaw Chojewski, who became active in the underground press after his dismissal from the Swierk nuclear research institute in 1977. Later lists, received through church channels, though fuller, are still far from complete, and evidence of a colleague's being at liberty is, by and large, negative, and deduced from the absence of his or her name on the lists to date.

Only in a few cases, like that of the 101 intellectuals who signed a letter to the Sejm (parliament) calling for an end to military rule, or the published list of academics called in for consultations with General Jaruzelski in December, is there positive evidence.

A number of scientists have been approaching Polish embassies and consulates to enquire after their colleagues. In the case of known activists, such as the mathematical logician Dr Janusz Onyszkiewicz, a presidium member of the Mazowsze (Warsaw area) branch of Solidarity, or the economist Dr Bronislaw Geremek, one of Solidarity's chief "advisers", such enquiries were initially met by suggestions that if a job could be found for them abroad, the Polish authorities would not refuse an exit visa. Following General Jaruzelski's assurance in the Sejm on 25 January that no internee would be deported from Poland, such proposals have been dropped. Nevertheless, enquiries at consulates do not proceed smoothly — officials are unwilling to discuss "rumours" — even to deny them.

On the facing page we print some extracts from such a conversation, lasting several hours, between Dr Wilfred Hodges and Dr Derrick of the British Logic Colloquium and the Polish Chargé d'Affaires Mr Gorajewski and Scientific Counsellor Mr S. Wojtaszek at the Polish embassy in London.

Vera Rich