Science in US Congress Fair winds

Washington

The apparently pro-science and technology mood of Congress this session, particularly in matters involving private industry, is indicated in much of the routine business of bills introduced, of bills reported out of subcommittee (which means that a small number of congressmen agree something should be done), of bills reported out of full committees (which means that a larger group of congressmen agrees), and by bills actually voted by either the House or the Senate.

True, Congress is not rushing through sweeping reforms. Indeed, it is unlikely to do much — in terms of legislation passed by both houses that then becomes law that will change the face of US science. The Republican party dominates the Senate; Democrats have a majority in the House. Democrats are preoccupied with the budget battle, while the Republicans tend to be thinking of the next election.

One measure with a chance of passing is a patent reform bill (the Uniform Science and Technology Research and Development Utilization Act or S. 1657 in the Senate). This would extend to most organizations performing government research the patent reforms enacted last year for small businesses, non-profit institutions and universities. It would also unify the patent policies of the various government agencies. The long-standing question has been when a researcher using government funds is entitled to hold the patents arising from the work, or when patent rights should go to the government department that sponsored the work. The present congressional mood includes greater consensus that federal shackles be removed, allowing researchers the greatest incentive to market their products.

Another bill, the Joint Research and Development Act (HR. 6262 in the House), is a response to the US high-technology industry's complaint that other countries allow industries to pool talent on research problems but that, in the United States, such pooling risks violating antitrust laws. The bill would allow the government's lawyers to issue a certificate permitting joint research and development in selected cases, and protecting the companies from antitrust prosecution.

The Senate has passed the Patent Term Restoration Act (S.255) whose counterpart is now in the House Judiciary Committee, but may not emerge before Congress adjourns in September. It tries to help industries that the government regulates to recoup more money from patents, to compensate for the costs of regulation. At present pharmaceutical companies file for a patent as soon as a new compound is discovered. The patent runs for 17 years, of which several are used to develop the compound into a marketable drug. Then the firm must file for permission to market from the Food and Drug Administration. By the time the drug is approved for marketing, which can take up to 10 years, the company has only a few years left in which to recoup its investment. The pharmaceutical industry claims that this delay can cost \$70 million for a single drug. The new bill would extend the lifetimes of certain patents by up to 7 years.

In the Senate especially, legislators seem concerned with freeing industry and assisting US high-technology trade. A resolution has been introduced to guide the imminent talks in Geneva concerning the General Agreement on Tariffs and Trade (GATT), that refers specifically to US hightechnology trade needs. Another bill, passed by the Senate, would fund a special clearing-house to help move the government's enormous store of technical information into the private sector. A further measure introduced in both houses would offer tax credits to manufacturers of computing equipment which give hardware to schools. The measure was promoted by one of the founders of the US home computer company, Apple Computers.

If sentiment were more like that of ten years ago, when faith in federal government intervention was far stronger, Congress might now be designing large federal programmes to "rescue" the US high-technology industry, or greatly increasing spending on federal research and development. Instead, there is a feeling that government is not very good at picking winners and that the congressmen want to encourage promotion of technology in the marketplace. This attitude, particularly prominent among Republican senators, is in contrast to past enthusiasm for heavy federal involvement and big government development and demonstration programmes. Basic research has benefitted from the change --- both those who favour more federal intervention and those wanting to promote technology in the marketplace view basic research as an essential government investment.

Likewise, the cause of improving US science education in the schools has support from both sides. Senator John Glenn (Democrat), the former astronaut who has made science and technology a main plank of his political activities, has introduced a bill (S.2421) to set up a council in the National Science Foundation to suggest a cure for the "technological illiteracy" of the nation. It would be given \$5 million to come up with the plan, and \$50 million per year for four years to implement it. A similar bill has been introduced in the House by Don Fuqua (Democrat) and Doug Walgren (Republican). Neither bill is likely to get very far. But the momentum these congressmen are giving to the issue of science education may promote a change of heart from the Reagan Administration, until now opposed to a major federal role in science education. **Deborah Shapley**

Computers for free

The US computer industry is joining the ranks of those crying for improvements in education in science and engineering offered in US schools and colleges. As a result, the National Science Foundation (NSF) is expected to announce in early June that five computer companies will be donating many hundreds of individual computers to help solve the growing problem of "technological illiteracy".

It all began when two computer companies — as yet unnamed — each tried to donate 100 machines to NSF for distribution to schools. This gift, however, set NSF bureaucrats worrying whether it was legal to accept this largesse. As it turned out, NSF, unlike some other government agencies, has specific statutory authority to accept gifts that are for the purpose of furthering NSF's missions.

But NSF did not want to be seen to favour these two computer companies over any rivals for the honour of giving away their machines to the government. So they went through a moneyless bidding process, and invited gifts from all companies. Now, NSF sources say, five companies will be making the donations, although the terms, the nature of the hardware, and the insitutions they will be given to have not yet been revealed.

Why is the computer industry so eager to provide free samples to young people in the schools and colleges? One answer, of course, is that a student who learns an elementary computer tongue at school will outgrow it and ask for another model. Company sales would not be hurt. **Deborah Shapley**

British universities

More misery

Hopes that the British university system would be spared some of the government's economy measures were dashed last week, when the University Grants Committee made public the recurrent grants to individual universities for the academic year 1982-83. There is no substantial change from the provisional allocations of a year ago, although the University of Salford, one of the most seriously afflicted then, has been given an extra year in which to reduce its establishment.

The coming academic year will be the second of the three in which government subvention for the universities is to be reduced by 8.5 per cent. The sum now offered to the universities is, however, larger than the amount advertised last year because allowance has been made for inflation (4 per cent on salaries, 9 per cent on other costs) and because the University Grants Committee has been given more