

logical expeditions of the Academy of Sciences of the Uzbek SSR, established a model which predicts that the ice in the Pamir and Altai glaciers changes completely in less than 1,000 years. The model also predicts that the rate of shrinkage of these glaciers has been about 0.8 per cent every year during the past 25 years.

It is still the Fedchenko glacier (named after the leader of the first scientific expedition to the Pamirs in 1871), however, which is the chief target of research. Over 70 km long, 3–4 km wide and up to 1 km thick, its 500 cubic kilometres of ice account for one third of the ice content of the entire Pamir glacier system. The Fedchenko research base, at 4,200 m above sea level, works in close conjunction with the Altyn Mazar weather station several km away. It is permanently manned by five to seven people, who make round-the-clock observations of the glacier itself and also of the weather conditions and solar radiation, including ultraviolet and shortwave emission.

#### TECHNOLOGY

### High Risk Research

THE government should drop its involvement in civil high technology, according to Professor John Jewkes, Professor Emeritus in Economics at the University of Oxford. Delivering the Harold Wincott Lecture last week, Professor Jewkes lambasted the government's involvement in high technology which, he said, "is due to an almost neurotic reaction to the fear that other countries are treading on our heels or have indeed actually surpassed us".

Professor Jewkes went on to argue that the only thing that is "high" about high technology is the level of risk involved. High technology is technology that private companies will not finance because they cannot see a reasonable return on their investment; "governments for one reason or another feel that they know better".

Professor Jewkes also suggested that in high technology, the government cannot learn from its mistakes, because each set of errors is unpredictable—the same things are not going to go wrong each time.

So, Professor Jewkes argued, might the government not do better to stick to financing science in the universities and maintaining research establishments on beneficial services such as public health, metrology, and transport safety? If the government did face up to "their falling standards of success and decided that activities with lower priorities should be dropped, surely involvement in civil high technology should be regarded as one of the first for the discard".

#### POLLUTION CONTROL

### Alkali Report

THE public must be given more information about airborne pollutants from factories, according to Mr Eldon Griffiths, under-secretary of state at the Department of the Environment. Speaking at the publication of the Alkali Inspectorate's annual report this week, Mr Griffiths added that "confidentiality must now come to an end and industry and government must make much more information available to the public".

Mr Frank Ireland, the chief alkali inspector, echoes Mr Griffiths's sentiments, although tacking a few conditions on the end. The Alkali Inspectorate is responsible for ensuring that the emissions from the 1,875 works registered with the inspectorate under the Alkali and Works Acts and Orders come up to standard. The inspectorate consists of 36 inspectors organized into 15 districts, and whereas Mr Ireland is eager "to have more information given to the public about processes and emissions" he is not willing to encourage the public to telephone his inspectorate to learn about emission levels from particular factories. He sees the task of educating numerous enquirers in the meaning of emission data as a "non-productive" task for the inspectorate. Local liaison committees however, on which the inspectorate, local industry, and the public are represented, and of which there are now fifteen, are seen as valuable.

The inspectorate's work was considerably broadened in 1971, when acrylates, di-isocyanates and mineral works came under its purview, and the inspectorate has some fairly hard things to say about the mineral works. While the best are "excellently chemically engineered", the report states that "the majority are dusty, uncoordinated pro-

cesses with bad housekeeping and inadequate arrestment or containment. Best practicable means (of emission control) for some is to pray for rain during dry weather". Mr Ireland is however, encouraged by the industry's willingness to cooperate with the inspectorate.

The inspectorate's policy of cooperation with industry to achieve pollution control has been criticized recently, and Mr Ireland is clearly very sensitive about it. "Cooperation is much better than coercion" he said, while Mr Griffiths pointed out that the inspectorate's achievements are the envy of other countries. But Mr Ireland is willing to admit that the penalties behind his inspectorate are "rather derisory". The maximum fine under the Alkali Act is £100, and the highest fine imposed under the three successful convictions brought last year was only £65. Stiffer measures are, however, under consideration.

The annual report also reveals that the UK Atomic Energy Authority has been having trouble with the activated carbon beds fitted to its nuclear reactors to absorb radioactive iodine which might be released under emergency conditions. One station was found to have poor absorption when tested *in situ* and was subsequently replaced. The bed is now 99.99 per cent efficient, and the fault was found to be in the sealing round the filters and not in the carbon itself. But the problem of imperfect sealing is a difficult one which has previously caused problems with particulate filters. The CEBG is now testing all the particulate filters at its existing power stations.

The report, which covers Scotland as well as England and Wales, presents a detailed account of the inspectorate's work and lists instances where there have been infractions of the standards set by the inspectorate.

#### ANTI-POLLUTION

### In Trafalgar Square

LIKE a canvas and scaffolding environmental disaster, the British Environmental Exhibition is now squatting in Trafalgar Square. The triangular geodesically patterned dome, which first saw the light of day at Stockholm, is a curved maze of photographs, slides and exhibits displaying with some pride the great strides made by the British in improving their environment. Touchingly bilingual, the exhibition sports pictures of London and the north before and after the Clean Air Act, and a list of British legislation on the environment. Garden cities are given their perennial puff, and spaghetti junction (Gravelly Hill motorway inter-

change) is presented as one of the greater achievements. Writing on the walls tells the inquisitive that as the pioneer of the Industrial Revolution, Britain was also the pioneer of pollution (and now of pollution control), while a six-screen, twelve-projector, audio-visual colour presentation (with that bilingual commentary in case the French are over) presents environmental triumphs from waste disposal upwards. Enquiry cards that can be despatched to the Department of the Environment for official response are littered in the alcoves, along with glossy handouts to take away and read (or take away and throw in Trafalgar Square's fountains, as some environmentally conscious members of the public have done). The question to ask is what it is all about?