

United States

David Dickson reports from the American Association for the Advancement of Science's annual conference in San Francisco.

New effort urged to control nuclear weapons spread

RECENT events in Iran and Afghanistan, and the domestic political response to these events in the US, have increased the need for scientists to support efforts to control the proliferation of nuclear weapons, a succession of speakers told a forum on ending the nuclear arms race.

Talking two days after President Carter had requested the US Senate to postpone its debate on the ratification of the Strategic Arms Limitation Treaty (SALT II), the speakers warned of the dangers of linking the nuclear weapons issue to broader political considerations of East-West relations.

"The present crises show that no security has been gained by massive nuclear arsenals. In fact the situation is only made more dangerous," said Professor Everett Mendelsohn of Harvard University. "I believe that scientists, who have been so especially involved in the design and construction of nuclear weapons and advanced missile systems, have an added responsibility to press for nuclear disarmament now. The scientific community has been too quiet for too long on the nuclear arms race."

Jeremy Stone, director of the Federation of American Scientists, emphasised that the importance of separating SALT from detente, as well as the whole logic of arms control, had never been so clear. "Supporters of SALT will have to, and

should, separate their case for SALT from their case for detente. And SALT opponents will have to consider how far they want to go in giving up hopes for reducing the risks of nuclear war in order to ensure sharp US responses to Soviet adventures."

Reflecting the shifting political climate with respect to arms control, and military spending Dr Bernard Feld, editor-in-chief of the *Bulletin of the Atomic Scientists*, pointed out that the magazine had recently decided to move the clock on its front cover, an indicator of the world's proximity to nuclear destruction, from nine to seven minutes before midnight.

"This seemed an adequate gesture a few months ago, but after the recent events we should probably move it even closer, perhaps to five minutes to midnight," said Dr Feld. Reasons for the decision to shift the clock, which had previously remained unchanged since 1974, included the apparent breakdown in the SALT process and the spread of new nuclear weapon systems in Europe.

Professor Mendelsohn told the audience that a new *ad hoc* committee was being established to coordinate the lobbying efforts of scientists in pushing for nuclear weapons control, and urged that the AAAS council adopt a resolution recognising the importance of continued support for the SALT treaty. □

'Big brother' approach to space must go

THE US should support the efforts of the United Nations to forge an international consensus on the commercial uses of space, as this was the only way to guarantee long-term access to the markets being opened up by current research, according to Dr Jerry Grey, administrator of public policy for the American Institute of Aeronautics and Astronautics.

Referring in particular to a draft treaty of the uses of the moon approved by the UN General Assembly in New York last month, Dr Grey said that it was important for the US Senate to ratify this treaty, even though many scientists and industrialists had already expressed concern about some of the restrictions that it might place on the space activities of US corporations.

"If necessary, the US should express reservations in the process of ratifying the treaty. But we must hedge our bets as effectively as possible to ensure that our long-term interests are protected. We cannot afford to have the US barred from these activities as a result of charges of imperialism or of exploitation of the Third

World," said Dr Grey.

He pointed out in particular that it was the US which had introduced the 'common heritage' language into discussion about the uses of space when the UN had first started discussing the issue in the early 1970s. Any other position than accepting the common heritage principle "would have seriously prejudiced US ability to conclude the cooperative agreements which are essential to US participation in potentially lucrative global markets," Dr Grey said. And awareness of this need among negotiators was one welcome sign that the US might be revamping its present "big brother" approach to global space applications.

In addition to the UN discussions, the recent successes of European space efforts emphasised how formerly sacrosanct US markets were being invaded. Unless policymakers reversed their traditional reluctance to engage in cooperative activities, the US would almost certainly lose out on major forthcoming market opportunities. □

EPA wants more data on chemicals

UNLESS the chemical industry is prepared to present more substantial data on the health and environmental effects of new chemicals, the Environmental Protection Agency may have to take various measures — including if necessary temporarily preventing the manufacture of the chemicals in question — to ensure that adequate testing has been carried out, according to Dr Steven Jellinek, director of the EPA's office of toxic substances.

Dr Jellinek said that since the pre-manufacture notification requirement of the Toxic Substances Control Act had come into force six months ago, data on the testing of 51 new chemicals had been passed to EPA for approval. In examining these notices the agency had in particular found a tendency for companies to go for less expensive forms of tests, resulting in a relative lack of what EPA considered to be adequate safety information.

"In many cases, very little environmental or health data is included — for example none of the notifications received included data on chronic testing," said Dr Jellinek. "Unless the situation is corrected, our review of such notices is going to be based on inadequate data, and we will have to rely on our own studies, such as the use of short-term screening tests, which will mean that the information on which we base our decisions is very uncertain."

Dr Jellinek emphasised that it was not the intent of the EPA to stifle technological innovation through excessive regulation — indeed in many cases regulation had had the effect of stimulating money-saving improvements to production processes. However, in considering the objections of the chemical industry to the agency's activities, it had to be recognised that major breakthroughs in the industry were rare and that most innovation was of a relatively run-of-the-mill variety, which did not necessarily require the same reverential treatment.

However Dr Jellinek said that the agency was considering various ways in which it could "fine-tune" its regulatory efforts, including the possible exemption of certain little used chemical substances from the full requirements of legislative controls, and enabling generic pre-manufacturing notices to be granted on a range of closely-related products.

Earlier in the session, Dr William J McCarville, director of environmental affairs for the Monsanto Company, demanded the separation of scientific decisions from political decisions in the regulatory process — and suggested the creation of a high-level independent scientific panel to answer the scientific needs of all federal agencies that regulate chemical carcinogens. □