## Science Meetings Catch the U.S.-Soviet Chill

## Chinese cool heels in Santa Barbara while Washington bureaucracies battle over entry policy

An issue that may at least temporarily put the scientific community at loggerheads with the Administration has arisen over the attendance of Soviet scientists at scientific conferences in the United States.

At government instigation, Soviet and other foreign scientists have been disinvited from two meetings held recently on the West Coast. Administration officials say the purpose was simply to deny the Russians access to high-grade technology of strategic significance, in accordance with the President's post-Afghanistan policy toward the Soviet Union. Scientists, on the other hand, fear the Administration's actions constitute or may lead to an unwarranted interference in the freedom of scientific exchange.

The Administration's policy on the question of Soviet attendance seems still to be evolving but could be far reaching. According to assistant secretary of state for scientific affairs Thomas R. Pick-

conference, the impetus seems to have come from the CIA, which may have prompted the Commerce Department to take action under the Export Administration Act. With the laser fusion meeting, it was the State Department which denied entry visas to five Soviet scientists and denied permission to travel to a sixth scientist already in the United States.

Whatever the origin of the disinvitation decision, the State Department has swung behind the Commerce Department's action. "I agree with their conclusion because the nature of the bubble memory conference was that it dealt with technical information, and technical data are subject to export control if they deal with strategically important equipment, says Dwight Cramer of the State Department's Office of Cooperative Science and Technology Programs.

The bubble memory conference was held in Santa Barbara on 20 to 22 February under the sponsorship of the Ameri-

said no Chinese. The Commerce position prevailed. Vossen hoped to disinvite no one. It was indicated to him that an offense against the Export Administration Act is punishable by a \$10,000 fine and 1 year in jail. He decided to wire the disinvitations as directed.

The Russians and East Europeans got the cables, which were sent on 15 February, but the Chinese were already in transit. They showed up in Santa Barbara on 18 February eager to discuss bubble memories, only to find themselves under threat of being barred from the meeting. Told that the difficulties arose from the question of implementing the President's post-Afghanistan policy, the Chinese scientists were amicable but mentioned that they had not invaded Afghanistan. They were sent on a trip organized for the conferees' wives to visit the artists' colony in Santa Barbara.

Their mere arrival in the United States, however, strengthened the State Department's hand in its tussle with Commerce. By 2 p.m. on 20 February, the first day of the meeting, a cable from the Commerce Department informed the organizers that the Chinese could be admitted, subject to a number of conditions. The technical data discussed at the conference were to be either already available in the public literature or, if unpublished, were to pertain only to general trends, not to manufacturing details. Also, all foreign scientists attending the meeting would have to sign a pledge undertaking not to divulge any unpublished information gleaned at the conference to any Eastern bloc national.

These conditions being accepted by the organizers, the Chinese were rescued from the artists' colony and allowed to attend the meeting. An FBI agent also appeared to check on who was in attendance. Thus, with the help of four federal agencies, the conference proceeded.

The Department of Commerce believes its intervention has a sure legal basis. "If the information is technical data which is not in the public domain, a license might be required. As I read the law, I would need an export license just to engage in chit-chat about such data," comments an official of the Office of Export Administration.

The State Department takes a more se-

## Can science meetings, like the Olympics, be used for political ends?

ering, "For any conference involving new, high-grade technology, we would advise people holding such a conference to consult with us" if Soviet scientists are to be invited. Pickering says that sponsors should check with the Department of Commerce, which administers the law under which technical data may be denied to potential adversaries.

The two meetings from which the Soviet and other scientists were barred concerned bubble memories, an important new computer technology, and laser fusion, a subject with both peaceful and military uses. It is not yet clear whether the initiative to bar the Soviet scientists was endorsed by the White House, and some scientists suggest that it was an overzealous interpretation of the President's wishes by lower-level officials. The Office of Science and Technology was not consulted in the decision. At least in the case of the bubble memory

can Vacuum Society. The disinvitation incident seems to have begun when the CIA, perhaps alerted by a visa request, approached the society's New York office and asked for a copy of the meeting program. A few days later a bureaucratic nightmare began for the American Vacuum Society's president, John L. Vossen of the RCA Laboratories in Princeton. The conference organizers called from Santa Barbara to say they had been instructed by the Department of Commerce to disinvite the Soviet, East European, and Chinese delegates, and furthermore that all other foreign nationals attending must sign a pledge not to disclose the information they heard to the nationals of some 15 other countries.

Then the State Department got into the act. It didn't want the Chinese disinvited. The officials of the Office of Export Administration refused to be budged from their regulations, which lective attitude: only conferences that deal with the practical aspects of high-grade technology should be subject to the Export Administration Act. In the department's view, the bubble memory conference fell squarely into this category. According to Cramer, "There

were sessions on crystal growth, grinding technology, and wafer slicing. This is exactly what you would do in a factory."

The conference was indeed heavily oriented toward manufacturing, being attended for the most part by the representatives of companies making bubble memories. But in the view of Robert Atkins, co-host of the conference and president of Quadra Bubble Memory Technology, manufacturing data would have been amply protected by the companies' concern to protect proprietary information. The bubble memory industry is just about to pass from the prototype to mass production stage. The purpose of the conference was for the companies to agree on matters such as standards, specifications, and how to ensure reliability of supply.

As for the laser fusion conference, which started in San Diego on 26 February under the auspices of the IEEE and the American Optical Society, the disinvitations involved only the State Department. Visas for Soviet scientists were denied "because of Afghanistan and the treatment of Sakharov," says an official.

The visa denials and pledge requirement are viewed with disquiet in some quarters of the scientific community. "This would be a disastrous mistake in terms of U.S. policy," says D. Allan Bromley of Yale, president-elect of the AAAS. American scientists have been the first to protest when the governments of other countries place restrictions on the attendance at scientific meetings. "To have our own government erecting these barriers to free circulation I find unacceptable," says Bromley.

Atkins, co-host of the bubble memory meeting, says he argued the decision at first, but that "once it was made clear to us that it was the policy of the United States government, we complied with it. In general we are in favor of open exchanges, which are of long-term value to the American scientific community, but in this specific instance we were willing to be a vehicle of U.S. foreign policy."

"In many ways I feel that scientific meetings, like the Olympics, should be nonpolitical operations, but in particular circumstances they might be used as political tools," Atkins suggests.

Ouestions of principle apart, the new policy could create severe practical problems for the conveners of scientific meetings. State Department officials take the view that scientific conferences will not be affected, only those that deal with technical or manufacturing details of items of strategic importance. But many scientific conferences may include such material, and it is not evident that the Department of Commerce has the expertise to give prompt and consistent guidance. The episode of the bubble memory conference suggests that the Administration's policy has not been thought out with perfect clarity.—NICHOLAS WADE

## Odd Couple Hit Energy Budget

Two chairmen of House science and technology subcommittees representing the hard and the soft paths in national energy policy are both ''dismayed'' at the Carter Administration's recently proposed energy R & D budget.

The two chairmen—Representative Mike McCormack (D-Wash.) of the Energy Research and Production Subcommittee and Representative Richard Ottinger (D-N.Y.) of the Energy Development and Applications Subcommittee—are so steamed up that they held a joint press conference on 21 February to let the world know of their displeasure.

McCormack, known chiefly as a big booster of developing energy supplies, especially deplored the fact that, in the fiscal 1981 budget submitted to Congress in January, funding proposed for nuclear fission actually went down for the first time ever. Under this budget, the Clinch River breeder reactor, for which \$172 million was authorized in fiscal 1980, would get nothing; two other nuclear fission projects, the gas-cooled fast reactor and the high temperature gas reactor (an advanced converter on the thorium cycle), would likewise be denied all funding; R & D for the basic liquid metal fast breeder reactor program would get \$320 million, but this is a far cry from the half-billion authorized for fiscal 1980.

McCormack regards the cuts proposed for nuclear fission—as well as the Administration's refusal to put the demonstration of nuclear fusion on a fast track—as "unfortunate if not downright irresponsible." He sees the nuclear fission budget partly as a very low opening bid by the Administration in negotiations with the Congress over the fate of the Clinch River breeder, which the President has been trying to kill while the Congress has been trying to keep it alive.

Ottinger, known as a booster of conservation and solar energy, believes his special areas of interest also have been slighted on the R & D side. The Department of Energy's R & D conservation budget proposed for fiscal 1981 is \$275.4 million, or only a bit more than Congress authorized for fiscal 1980. The sums earmarked for some key areas, such as conservation R & D in transportation, community systems, and buildings, actually showed decreases.

Ottinger believes that DOE's conservation R & D budget may be as much as \$200 million below what is needed. A staff aide to the congressman says that about \$100 million in projects initially proposed by DOE were cut out by the Office of Management and Budget. Another \$100 million could be used for "new starts," the aide said, as in tripling the size of DOE's current energy audit service for industry and developing better heat pumps for industry and an octane-boosting gasoline additive.

(The total federal energy conservation budget is way up in fiscal 1981, and totals some \$2.8 billion. But this includes conservation tax credits, home weatherization grants for low-income people, and grants to the states for their conservation programs.)

In Ottinger's view the proposed DOE budgets for conservation R & D and solar R & D—at \$400 million, the solar budget is about \$145 million shy of what he thinks is needed—are modest to the point that they mock the Administration's claims to leadership in conservation and development of renewable energy sources. "The proposed budget creates a credibility gap even bigger than the energy gap," he says.—LUTHER J. CARTER