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.

Questions 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

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