

Legislative Branch oversight processes."

What Keyworth did not point out was that Catholic and Columbia were moved to try this unusual route to secure funds in part by the way another DOE project—the National Center for Advanced Materials (NCAM) at the Lawrence Berkeley Laboratory—was put together. A proposal to build NCAM was put in DOE's budget request, largely at Keyworth's urging, just before the request went to Congress and without the usual internal DOE review. If NCAM could bypass the review process, why couldn't Catholic and Columbia?

Be that as it may, the House was not much interested in maintaining the principle of scientific peer review for the two facilities (although, ironically the House has not approved NCAM on the grounds that it has not been adequately reviewed), and Sensenbrenner's amendment was defeated by 312 votes to 105. The lobbying for the two facilities is now focused on the Senate.—COLIN NORMAN

### Acid Rain Researchers Issue Joint Report

It was less than apocalyptic, but it was still news when the Administration released a report on 8 June stating that "Man-made atmospheric pollutants are probably the major contributors to acid deposition in Northeastern North America." This is the cardinal finding of the first annual report of the Interagency Task Force on Acid Precipitation, released by its research director Christopher Bernabo.

For 2 years, the Administration has said that the existing data do not tell enough about the origins of sulfur and nitrogen in acid rain to justify any government action to control industrial emissions. At the press briefing on 8 June, Courtney Riordan, director of research at the Environmental Protection Agency (EPA), said this policy may change. The new EPA administrator, William Ruckelshaus, has taken the entire subject under review, and may issue new directives on acid rain soon. However, the work in this report predates Ruckelshaus.

Although it represents a great stride into the present, the report does not

go far beyond stating the finding that man-made pollution is the culprit in the Northeast. It gives precious little information on the impacts of pollution, other than to say that acid deposition "is probably the major contributor" to the acidification of lakes in the Adirondacks, "one of the most sensitive regions in North America." It does not try to estimate the degree to which this acidification is due to man-made pollution, nor does it discuss the degree to which acidification might be slowed by cutting back on pollutants.

Most of these difficult questions are set aside for further study. "Current data and available methods . . . are not sufficient to quantify relationships between pollutant emissions and acid deposition on a regional scale," the report notes, "nor is it yet possible to identify the specific changes in acid deposition patterns that would result from a given change in precursor emissions." The report avows ignorance about the general effects of acid rain: "Beyond the alteration of the chemistry and biology of certain sensitive surface waters, the other effects of acid deposition in North America are undetermined. . . ." There may be deleterious effects on crops, on buildings and bridges, and on spruce forests in New England. But judgment on these points awaits better documentation. "The National Program is speeding up investigations and analyses to determine the actual effects of acid deposition."

Bernabo mentioned several early accomplishments worth noting:

- The program has produced the first national map of acid-sensitive waters in the United States.
- It has set in place a 90-site monitoring network, the world's best system for tracking wet deposition, due to begin operating this year.
- It is planning a major field test to be carried out jointly with Canada this summer, involving the release of tracer gases on both sides of the border.
- It has completed a massive "critical assessment document" describing the problem, now in review.
- It has tested a prototype emission control technology, designed to reduce sulfur and nitrogen emissions from old utilities by 50 percent, with no loss in efficiency.
- Research funding is expected to grow by \$4 million in the next budget.—ELIOT MARSHALL

### Xerox Scientist Joins DOD Supercomputer Program

A Xerox Corporation researcher, who is widely recognized for her contribution to the development of very large scale integrated circuits (VLSI), will assume a key management role in the Defense Department's nascent supercomputer program. Lynn Conway, who heads the Knowledge Systems group at Xerox's Palo Alto Research Center, has been named to a new senior executive post of computer research manager at the Defense Research Projects Agency (DARPA), the organization assigned to manage the research program of the Department of Defense.

The Administration has requested an additional \$50 million for fiscal year 1984 and \$95 million extra in 1985 for the DARPA supercomputer program. The initiative is regarded as a direct response to Japanese industry-government collaboration in microelectronics and computers, notably the program to develop a so-called Fifth Generation computer capable of artificial intelligence functions. Congressional action on funding of the DARPA program is said to be contingent on Hill reaction to detailed plans for the program on which DARPA is still working.

Conway earned her M.S. in electrical engineering from Columbia in 1963 and worked for IBM and Memorex before joining Xerox in 1973. At the Palo research facility she established the large scale integrated circuit "area" of research and then a VLSI area and more recently founded a Knowledge Systems area which specializes in the application of artificial intelligence research to so-called knowledge-based systems and expert systems.

At DARPA, Conway will work in the Information Processing Techniques Office which will oversee the supercomputer program. Defense officials aver that the main purpose of the program is not to compete with Japan, but to develop new technologies for the military. The official DARPA title of the program is "Strategic Computing and Survivability." Conway is scheduled to join the agency in August. No detailed description of her duties is available.—JOHN WALSH