and a federal collective bargaining law for teachers will have to be put indefinitely on hold. But, perhaps ironically, NEA lobbyists may not be as personally non grata as lobbyists for some other education groups less clearly committed to Carter.

NEA's missionaries seem to have had a better record in keeping contact with Republican legislators and staff during their lean years than did many education lobbyists. Particularly on the Senate side, NEA lobbyists seem to have provided information and generally kept in touch with Republican legislators and minority staff dealing with education questions. And neither the NEA's Washington staff nor the visiting lobbyists that NEA tends to import from legislators' constituencies, apparently indulged in threats or other offensively extreme tactics. Minority staffers are now getting "a lot of calls from people we never heard of," as one of them said. Many of these are lobbyists for other education groups. So, for NEA, being "professional" may somewhat balance out having been for Carter. NEA also contributed to the campaigns of many victorious candidates, Republican as well as Democratic, in House and Senate races. In that respect the association is not left friendless.

As part of the long and painful election morning after, NEA has been told that more than half of its members voted for Reagan. In postelection comments NEA officials have said that the association will stick to its goals and legislative agenda, but there are reports that a rethinking of strategy may be under way at a national legislative meeting in progress in San Francisco as this was written. At the very least, the experience is a reminder that the prudent lobbyists play both sides of the aisle.

While it has attracted considerable notice, the issue of the DE is, of course, part of a much larger question—what trend federal policy toward education will follow under a Republican Administration that is avowedly conservative, fiscally and otherwise, and promises to have more political leverage than the GOP has had in a quarter century. The question acutely concerns higher education and its lobby in Washington because of the importance of federal policies both to academic finances and the regulatory atmosphere in academia.

For higher education, uncertainty about prospects after the changeover in January is considerable because of the genuine novelty of the situation. Republicans will control the Senate for the

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OSHA Backs Away from Strict Lab Rules

The Occupational Safety and Health Administration (OSHA) is taking steps to soothe those in the research community who were alarmed by its threat in 1977 and again this spring to stringently regulate exposure to toxic chemicals in laboratories (*Science*, 21 February). A recent OSHA statement suggests that it has abandoned previous plans to require monitoring of exposure to individual chemicals—a proposal that laboratory directors had criticized as unnecessary and costly. Instead, the agency says it has tentatively decided that general standards for safe handling of any chemical in the laboratory should be sufficient.

The decision represents a victory for members of the National Academy of Sciences (NAS) and officials at the National Institutes of Health (NIH), who have been pressuring OSHA to drop its plans and adopt their more flexible laboratory safety guidelines. The NAS alternative, in feverish preparation ever since OSHA announced its intentions, was released on 5 November.

"For most laboratory environments, we believe that regular monitoring of the airborne concentrations of a variety of different toxic materials is both unjustified and unjust," the report from the National Research Council concludes. Ventilation hoods, protective clothing, and good hygiene and safety practices should be adequate for handling "even highly toxic materials without undue hazard." Although these are considered standard practice at most industrial laboratories, academic laboratories—susceptible to high turnover of inexperienced workers—might need special advice from outside safety experts to get up to speed, the report suggests. In contrast to OSHA's requirement for regular medical examinations of laboratory workers, the NRC report says that "often, the analyses that could provide useful information for medical surveillance have yet to be developed. We therefore recommend that the need for regular . . . surveillance be decided on an individual basis."

OSHA, in an interim statement on its regulatory drafting, pledges not only to consult the NRC and forthcoming NIH recommendations, but also to give scientists an opportunity to comment next year on whether compliance with the regulations will be mandatory or voluntary. Both NIH and the NAS, naturally, are pushing for voluntary compliance. Their argument has been that researchers, unlike workers in an industrial plant, are exposed to a multitude of chemicals in low concentrations for only a short time, a circumstance that reduces the risk of cancer or other disease but makes compliance with regulations for each chemical difficult.

OSHA took support for its proposals to monitor laboratory air and require regular medical examinations from a series of epidemiological studies which showed that chemists experienced an elevated risk of cancer. The NRC report points to deficiencies in these studies and calls for more definitive work, perhaps drawing on tumor registries in one or more states.

Classified Research

Any research proposal submitted to the National Science Foundation (NSF) could be classified by another agency if it relates to national security, the NSF acting director, Donald Langenberg, said on 6 November. His statement is intended to clarify the agency's position on funding and classification of cryptologic research. NSF has been referring such research to the National Security Agency for review since 1977 (see *Science*, 31 October 1980).

NSF officials say their responsibility to see that sensitive material is classified stems from an executive order on secrecy issued by President Carter in 1977. The order barred certain agencies, including NSF, from classifying anything on their own, but ordered each to hand over sensitive items to agencies with proper authority as the need arose.

Langenberg assures the research community that "NSF does not expect that the results of the basic research which it supports will be classified, except in very rare instances." With the exception of the cryptology proposals submitted to NSA, NSF officials say that to their knowledge no proposals have been referred to the CIA or other

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agencies for possible classification.

Langenberg says about cryptology that "it makes no essential difference, in terms of the likelihood of classification, whether research is supported by NSF or NSA." He also raises the possibility that NSF will alter its existing requirements on open reporting of research in cases of "special relevance to national security . . . [We] would not regard this as a change in policy but simply as a change in administrative procedure necessary to apply a long-standing policy to a changed situation."

Passive Solar Homes Endorsed

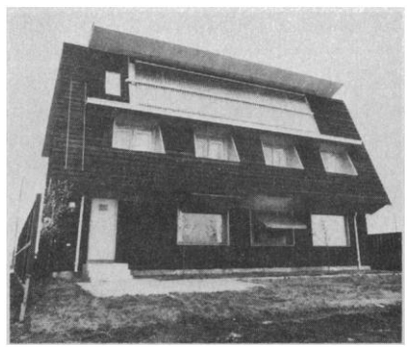
Innovative architectural design that emphasizes insulation and passive solar heating can reduce energy consumption in buildings by as much as 25 percent by the year 2000, the Worldwatch Institute claims. Energy-conscious building design is now being taught at the Massachusetts Institute of Technology, the University of Oregon, and Arizona State, among other schools.

"Passive solar buildings have long been thought of as unconventional and costly, a major deterrent to professional developers," says researcher Christopher Flavin. "It is now becoming good business, and will soon become big business."

Per capita fuel use in buildings in the United States is twice that of Europe. The prototypical American-designed office building—with poorly insulated glass and bolted windows—is now being exported to the Third World, where electrical systems are already overtaxed.

Ironically, many newer Western designs incorporate Third World traditional concepts of solar collection and shading and natural ventilation—though few such designs are adopted in the West without scientific study and analysis. Most research has been concentrated on homes, which use 20 to 100 times as much energy as commercial buildings. A successful house built by engineers at the University of Saskatchewan incorporates double-walls, heat exchangers, time-operated shutters, and polyethylene wrapping to reduce heat leakage. An active solar system, intended to complement the design, consistently malfunctioned and has since been dropped. Overall energy costs are still a fraction of the average for a U.S. home.

Though large commercial buildings depending on passive solar heating have been less successful, new projects are now under way. A 40-story passive solar office tower is under construction in Singapore and a town of solar buildings is planned in Belgium.



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Saskatchewan house

While the Department of Energy has focused heavily on insulation, it has paid less attention to solar design. Solar-oriented building codes have for the most part been fended off by developers, except in California. But the U.S. Solar Energy and Conservation Bank will begin in 1981 to subsidize mortgage rates for energy-conscious homes. And the lame-duck session of Congress is scheduled to take up a bill providing tax credits to builders of passive solar homes, with the amount of credit tied to the quantity of energy saved over the next decade.

Buettner-Janusch Is Sentenced

John Buettner-Janusch, the prominent anthropologist convicted of making Quaaludes and synthetic cocaine in his research laboratory was sentenced on 13 November to 5 years in prison. Buettner-Janusch, formerly chairman of the anthropology department at New York University, received a 3-year sentence on a drug-making conspiracy charge, and an additional 2 years for lying to federal authorities during the ensuing investigation (see *Science*, 17 October).

The judge, Charles Brieant of the federal district court in New York, called the professor's offenses "vicious" and "a serious crime." "Now it is said and I agree that the community needs great, indeed outstanding scientists like this man," the judge said. "But the community does not need great people so desperately that it will sentence a felon without regard to the nature of his crime or the effect of the crime on society and the nation and the university in the academic community."

He said that Buettner-Janusch had "violated the trusts which he owed to society and the academic community which looked upon him as a leader, and he breached the duty he owed to the university," which had furnished him with a tenured position, graduate students, and literally the chemical ingredients of the drugs.

The judge said that tapes of Buettner-Janusch by his graduate students had proven particularly incriminating. He noted that numerous letters were sent by prominent academics on Buettner-Janusch's behalf. Many of the authors, he said, attributed the professor's conduct to "the calamitous event of the loss of his wife in October 1974 due to cancer which left him in a state of shock, and as one of the authors said, 'dulled by grief.' I do not doubt for one minute that that was so."

But he chastised New York University for permitting Buettner-Janusch's work to go unreviewed by his peers, and for permitting the laboratory itself to go unsupervised during the period in which drugs were made. "There should be a lesson in this for everybody," he said.

Earlier, Buettner-Janusch's attorney had described his client as "one of the two most important physical anthropologists in the world," and suggested that he had suffered enough. "Gone is a professional status . . . gone is his chairmanship, his professorship, his tenure."

The judge deferred Buettner-Janusch's application for an alternative sentence, in which he could continue with some of his research. But Buettner-Janusch will be eligible for parole at any time. The professor said an appeal was likely but not yet certain.

R. Jeffrey Smith