

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 au-

thorities 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.

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