

next 5 years. These investments would have been used to attract private finance into energy development. In essence, the UNERG conference was seen as establishing a broad framework that would help guide the World Bank's expanded investment program in renewable energy development.

In February, however, the Reagan Administration announced that it could not support the energy affiliate, and the proposal has been derailed (*Science*, 3 April 1981, p. 21). This could cause some strife at UNERG.

The focal point for negotiations over the proposed World Bank affiliate will, however, be the economic summit meeting of Western leaders to be held in Ottawa on 19 to 21 July. There, supporters of the idea, notably Canada and France, will try to persuade the Reagan Administration to change its mind. The most that can be expected, according to U.S. government sources, however, is a promise that the Administration will not oppose an expansion of the bank's energy lending programs within its current structure.

A second forum for thrashing out energy funding will be the North-South summit meeting scheduled for Cancun, Mexico, in October. Again, the United States is likely to find itself under pressure to support an expanded World Bank energy lending program. These negotiations over the World Bank "will be critical for the success of the [UNERG] conference," Taniguchi acknowledged in a conversation with *Science*.

The UNERG gathering is thus unlikely to produce grandiose schemes for solving the world's energy problems. But some suggest that the central achievement of the conference is the fact that it is taking place at all. David Chatfield, a representative of Friends of the Earth who has been helping coordinate the input of non-governmental organizations into UNERG, argues that the conference will help to raise the general level of understanding about the potential for renewable energy sources. "If UNERG pushes the energy transition forward by a few years, then it will have been a success," he says.

Before the Stockholm conference, notes Stromayer, only about a dozen governments had established offices concerned with protecting the environment; within a year after the conference, virtually every country had an office in place. UNERG, suggests Stromayer, "may similarly legitimize the role of new and renewable energy sources."

—COLIN NORMAN

French Government Bullish on Science and Technology

Both a bigger budget and substantial changes in organization are in store for French science under the Socialist government of President François Mitterrand. Decisions on funding and on details of restructuring are at least several months away, but the government is moving to carry out Mitterrand's design of using research and development as a major tool for achieving economic recovery and social reform.

Mitterrand has kept a preelection promise to give full cabinet status to a science minister; the post has been subordinated to the Minister of Industry in recent French governments. The new Minister of State for Research and Technology is Jean-Pierre Chevènement, 42, an intellectual technocrat from the left wing of the Socialist Party. He appears to have won a contest within the cabinet for control over the agencies that are responsible for basic research and scientific information. He is also expected to exert increased influence in nonmilitary nuclear affairs and the French space program.

In recent public statements, Chevènement has affirmed Mitterrand's pledges to increase spending on R & D from the present 1.8 percent of the gross national product to 2.5 percent by 1985, and to ask parliament to expand the nation's corps of researchers by some 4 percent, the largest increase since 1969.

Other Mitterrand proposals include creation of a special parliamentary committee for technology assessment and for a council on science and culture that would report directly to the President. Chevènement last month announced the government's intention to sponsor a national conference on scientific options in the autumn. The discussions would form the basis for a new science program to be submitted to parliament in 1982.

As part of a grand strategy for science, Chevènement says that the government will sponsor special programs in biotechnology, microelectronics, and new sources of energy. Chevènement is reputed to admire the partnership between government

and industry in Japan and is expected to advocate a similar alliance in France.

Chevènement has repeatedly expressed views like those quoted in an interview in the Paris magazine *Le Point*: "Above all, the technological revolution is at the heart of the problems. Moreover, it conditions all the others—energy independence, length of the work week, rapport with the Third World, health policy, industrial competitiveness, etc. We are fully aware, we Socialists, that it is illusory to wish to make society more just and more humane without integrating the parameter of technology."

French scientists' fortunes these days appear more favorable than those of their counterparts in Britain, Germany, and the United States. The catch is that special treatment may be accompanied by exaggerated expectations of results.—*John Walsh*

China to Get \$200 Million for University Expansion

In its first loan to the People's Republic of China, the World Bank has advanced \$200 million for the support of higher education, particularly graduate education and research in science and technology. The loan is intended to support China's ambitious plans to increase the enrollment of science and engineering students at Chinese universities and to reestablish a graduate education system that was effectively dismantled during the Cultural Revolution.

The bulk of the loan, some \$160 million, will purchase research and teaching equipment from abroad. It will be used to strengthen science and engineering departments in 26 universities throughout China.

The loan is geared to China's plan to increase undergraduate enrollment by 7 percent a year, reaching 2.2 million by 1990. Enrollment in graduate programs is slated to rise from close to zero at present to about 200,000 by the end of the decade.

Because enrollment in Chinese universities is currently well below the average for developing countries, China suffers from an acute shortage of skilled and technically qualified peo-

ple. Strengthening research and higher education is thus a major goal of the economic reforms launched by the Chinese government in the mid-1970's.

The People's Republic of China became a member of the World Bank in May 1980. Its emergence as a potential major borrower will increase pressure on the World Bank's resources at a time when increased support from the bank's major contributor, the United States, is in doubt. The Reagan Administration is now conducting a review of its policies for the World Bank, and Congress shows signs of balking at a proposal to increase U.S. contributions to the institution.

—**Colin Norman**

Chilean Doctors and AAAS Mission

In the wake of a fact-finding mission to Chile sponsored by the AAAS and four other organizations, a Chilean military judge has dismissed the main charge against three imprisoned Chilean physicians and ordered their case transferred to a civilian court. This could be the first step toward their release.

The three physicians, Manuel Almeyda, Pedro Castillo, and Patricio Arroyo, were accused of illegal political activities, but the real reason for their arrest is thought to have been their treatment of torture victims and supplying of medical help to students on hunger strike. Arrested in mid-May, the three physicians were held incommunicado, most of the time with their eyes taped, for 3 weeks until June 7. On this day two North American doctors, Jonathan Fine and James Koopman, arrived in Chile on a fact-finding mission at the request of the Chilean Commission on Human Rights.

Secretary of State Alexander Haig asserted recently that there had been "dramatic, dramatic reductions" in human rights violations in Chile and three other Latin American countries. The Fine-Koopman commission, however, reported that, far from a reduction, "Serious human rights abuses are once again on the increase in Chile." The imprisoned physician Manuel Almeyda, they noted, was direc-

tor of the medical program of the Catholic Church in Santiago. In this role he gave medical care to victims of torture and was also the principal physician in Chile to provide evidence of torture in Church efforts to bring torturers to justice through the courts.



Manuel Almeyda

Imprisoned physician ran program for Catholic Church.

These and other findings prompted House Foreign Affairs committee chairman Clement Zablocki and Michael Barnes, chairman of the subcommittee on inter-American affairs, to take up the case of the three physicians with Chilean foreign minister Rene Rojas Galdames. Rojas, in a recent meeting in Washington, had told the House Foreign Affairs committee that he abhorred torture. In a letter of 24 June the two congressmen told Rojas that "we consider the release of these physicians and an end to this kind of activity to be crucial for the improvement of relations between our two countries. . . ."

The military prosecutor having dismissed the major charge against the three physicians, there are hopes that they will soon be released on bail while a civilian court considers the remaining charge, one of "illicit association."

The mission of the two doctors was coordinated by the AAAS clearinghouse on science and human rights.

—**Nicholas Wade**

Congress to Reexamine Antiabortion Amendment

In a vote split along party lines, a Senate subcommittee has approved, three to two, the so-called human life bill, which implicitly outlaws abortion by stating that human life begins at conception. However, a vote by the full Judiciary Committee will be delayed until after the subcommittee on the Constitution has taken another look at a proposed amendment banning abortion.

Although right-to-lifers have hailed the vote as a sign the tide is turning in their direction, people favoring abortion believe a deadlock is at hand. Since the human life measure is of dubious constitutionality, congressional foes of abortion are now turning their hopes back to the amendment route—despite the fact that the human life bill was originally devised to get around the problems posed by the amendment.

Senator Orrin G. Hatch (R-Utah) said the Constitution subcommittee which he heads will not take up the amendment until the fall, and final action on either proposal is not expected before next year.

Meanwhile, as attempts to broaden the definition of human life are going on at one end of the mortal span, there are attempts to narrow the definition at the other end. Because life-support technology can keep peoples' hearts beating indefinitely after their brains are dead, a presidential commission is urging Congress and the states to adopt a uniform definition of death, based on cessation of all brain function. The President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research examined 2 months' worth of records from seven hospitals and found that about 17 percent of the comatose people being sustained on respirators were already dead in terms of brain function.

Currently, 23 states still hang on to an old definition of death that only recognizes heart stoppage. But several groups, including the American Medical Association, have approved a new definition involving cessation of function in both the higher brain and brainstem.—**Constance Holden**