France–India Fuel Deal Leaves Some Issues Open

France and India have signed a nuclear fuel agreement that deals with a troublesome issue of nuclear safeguards by deferring a decision on it. Under the agreement, France will furnish enriched uranium fuel for India's nuclear power plant at Tarapur near Bombay. As supplier, France will replace the United States, which withdrew because of a provision of the 1978 U.S. Nuclear Nonproliferation Act. This forbids shipment of U.S. fuel to countries whose nuclear facilities are not all under International Atomic Energy Agency (IAEA) safeguards. Tarapur itself has been under IAEA safeguards by virtue of the 1963 bilateral agreement between India and the United States, but India has refused to place other Indian-built nuclear facilities under safeguards (*Science*, 13 August, p. 614).

A deadlock on the fuel issue, which had soured relations between the two countries, was broken in August when it was announced that France would take over as supplier. Negotiations between France and India resulted in the signing of an agreement during French President François Mitterrand's recent visit to India. The brief text commits France to provide fuel within the framework of the 1963 India-U.S. agreement, and, in effect, postpones action on two major issues in dispute.

A chief U.S. aim had been to deter India from fuel reprocessing operations yielding plutonium, which can be used in nuclear weapons. The new agreement says only that French-supplied material will be used solely for "peaceful purposes." During negotiations, France sought an Indian commitment to extend safeguards on Tarapur after the expiration of the agreement in 1993. Resolution of that question is also left for later.

The French view appears to be that the agreement is not ideal, but the compromise is probably the best obtainable in the wake of the acrimony generated during India-U.S. discussions. While no Indian government commitments on reprocessing or extension of safeguards were made, the implied threat to take Tarapur out of safeguards has been removed. And the cooling-off period provided by the 10-year agreement could foster an Indian attitude more flexible than the hard line followed in recent years.

—JOHN WALSH

Langenberg Resigns as Deputy Director of NSF

Donald Langenberg has resigned as deputy director of the National Science Foundation (NSF). He will be leaving at the end of December. Pressure for his removal is said to have come from the Presidential Personnel Office, the White House body responsible for presidential appointments. But Edward Knapp, NSF's new director, is also reported to be keen to make some changes in the foundation's top personnel.

Langenberg, a physicist from the University of Pennsylvania, was appointed deputy director in July 1980. He was among several people recommended by the National Science Board, NSF's policy-making body, to replace John Slaughter as NSF director. (Slaughter recently left to become chancellor of the University of Maryland.) But Langenberg was passed over for the job, reportedly because he was a Carter appointee, and the post went to Knapp. Knapp, who has served as assistant NSF director for mathematical and physical sciences since September, was formerly head of the accelerator technology division at Los Alamos National Laboratory.

Langenberg's removal as deputy director is likely to rekindle debate about NSF's political independence. Although the top positions at the foundation are filled by presidential appointment, they are not generally considered to be political posts. The director and deputy director are not normally replaced during a change of Administration, for example.

The last time the issue of NSF's independence arose was when President Nixon blocked the nomination of Cornell chemist Franklin Long as NSF director because of Long's opposition to the antiballistic missile program. That caused such a hue and cry in the scientific community that Nixon publicly recanted and offered the post to Long. Long declined.—COLIN NORMAN

Hammer, Lasker Give Cancer Prizes

Two foundations, one old and one new, recently awarded cash prizes for achievement in primarily cancer research.

On 3 December, industrialist Armand Hammer handed out his first annual $100,000 prize for cancer studies to Ronald Levy of Stanford University and George T. Stevenson of the University of Southampton. The two scientists split the winnings. Levy was cited for his experimental work on the use of monoclonal antibodies to treat B-cell lymphoma patients. Stevenson also was noted for his studies of monoclonal antibodies as a potential therapy for lymphoma and for lymphocytic leukemia, a common cancer among children.

Hammer, recently reappointed as chairman of the President's Cancer Panel, announced last year a $1 million bounty to the discoverer of a cancer cure comparable to the Salk vaccine. The money is still sitting in the kitty. However, Hammer is also giving out yearly $100,000 prizes over the next 10 years for significant breakthroughs. This year's jurors for the Armand Hammer Foundation prizes were Hammer, Vincent DeVita, director of the National Cancer Institute, and Renato Dulbecco, a Nobel laureate and a professor at the Salk Institute where Hammer is chairman of the executive committee.

The 38th annual Albert and Mary Lasker Foundation awards went to seven scientists for basic and clinical research. Each category carries a $15,000 prize which is divided among the winners.

All the scientists in the basic research group were cited for their achievements in oncogene studies. The recipients were Robert Gallo of the National Institutes of Health (NIH), Raymond Erikson of Harvard, Hidesaburo Hanafusa of Rockefeller University, and J. Michael Bishop and Harold Varmus of the University of California at San Francisco.

In the clinical research category, Roscoe Brady and Elizabeth Neufield of NIH were selected for their research in genetic disease. The Lasker awards were determined by a jury of 25 scientists.—MARJORIE SUN

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