Chernobyl Claims Another Victim

Soviet physicist Valery Legasov, deputy director of the Kurchatov Institute for Nuclear Power and one of the chief investigators of the nuclear accident at the Chernobyl power plant 2 years ago, launched a stinging attack on the poor management and complacent attitudes of the Soviet nuclear industry shortly before his death in April (*Science*, 13 May, p. 877).

Although no official cause of his death has been given, the Soviet newspaper *Pravda* announced at the end of May that the 52-year-old physicist had committed suicide. Legasov had earlier acknowledged that he had flown several times over the burning plant in a helicopter shortly after the accident, as fire fighters struggled to bring it under control. This had provoked widespread rumors in Moscow that he may subsequently have been suffering from the effects of excessive radiation.

In an article commissioned by *Pravda* as a description of the accident and the following events, which was published after his death, Legasov described the accident as "the apotheosis, the summit of all the mismanagement of the economy which has been taking place in our country for many decades."

He claimed that the nuclear industry in the Soviet Union was inadequately equipped with control systems, and that while frequent assessments were made by U.S. nuclear scientists of the probability of different kinds of accidents, "not a single collective in the Soviet Union was posing such questions with any degree of competence."

Legasov led the Soviet delegation to the special meeting organized by the International Atomic Energy Agency in Vienna in August 1986 to discuss the accident. He impressed may delegates with the openness with which, in a 5-hour speech, he presented the main findings of the commission of inquiry that had been set up by the Soviet government and outlined the precautions that had been taken to prevent similar accidents in the future.

In his *Pravda* article, Legasov claims that a lack of personal responsibility for the quality of equipment used in the operation of nuclear plants was one of the key factors leading directly to the accident, which caused the death of at least 33 people either through burns or excessive radiation.

"I must share my conviction that responsibility should be in the hands of one man," wrote Legasov. "Collective responsibility is an incorrect approach."

Legasov also says in his article that several warnings had been given to the authorities about the low level of safety standards in nuclear plants, and that he himself had previously concluded that the authorities lacked the means to adequately control the system and diagnose its problems.

However, Legasov said that the leaders of the ministry of power and electrification, as well as the managers of the Chernobyl plant, lacked "any concept of the need for consistency" and that warnings about the dangers they were running frequently went unheeded. ■ DAVID DICKSON

NSF Picks Biology Centers

The National Science Foundation has picked the University of Arizona, the University of California at Berkeley, and Johns Hopkins University as sites for three new interdisciplinary biological research centers. NSF grants to the winners in the competition for the centers will be used primarily for equipment and training of doctoral and postdoctoral students.

NSF awarded Arizona $1.7 million to help establish an insect science center. Berkeley gets $2.2 million for a plant development center, and Hopkins $2.2 million to help set up an Institute for Biophysical Research on Macromolecular Assemblies.

These grants are one-time awards, which will be distributed over 4-year and 5-year periods. The grants will not be renewed because of a change in the agency's approach. NSF is incorporating future large biological research awards in its broader "science and technology centers" strategy. This concept was adopted by NSF after the biological research center initiative was announced. The proposed science and technology centers program will emphasise cooperation with industry; such cooperation was not required for the biological research centers.

NSF officials note that universities were required to submit plans detailing how they might continue the biology centers if federal funding ceased. The institutions also may seek new awards under the science and technology centers program.

■ JOHN WALSH

ADAMHA Nominee Still on Hold

Frederick Goodwin, chief of intramural research at the National Institute of Mental Health, has been waiting for about 6 months now for the White House to submit his name for Senate confirmation as director of the Alcohol, Drug Abuse and Mental Health Administration (ADAMHA).

Mental health advocacy groups have been wringing their hands and pelting authorities with inquiries as to what is holding up the nomination. There have been rumors that the White House fears a ruckus from animal rights groups, who were outraged at a memo Goodwin wrote last October calling on the Public Health Service to take a more "proactive" stance with regard to animal use in research. The White House itself has given no clue as to the nature of the problem.

ADAMHA has been without a chief for well over a year, since Donald Ian MacDonald, who is still officially the administrator, went over to the White House to spearhead the Administration's antidrug crusade. Some observers now believe that no action will be taken before the end of this Administration. ■ C.H.

Mergers Slow Down Research Spending

A survey conducted by the National Science Foundation indicates that corporate mergers may result in decreased expenditures on research and development, at least in the short run. Eighteen companies involved in mergers reported far lower rates of R&D growth on average than other U.S. companies in recent years, and 11 of them either cut R&D expenditure or held it constant for a period after a merger. "The experiences of the respondents [to the survey] indicate that R&D levels are maintained immediately after mergers, but there then follows consolidation, cost cutting, and elimination of duplication," NSF reports.* It adds, however, that the long-term implications are as yet unknown.

Overall, U.S. companies expect to spend $62 billion on R&D in 1988, a 3% increase in real terms over last year's spending. The growth rate has slowed a little in the past 3 years; in the first half of the 1980s, it averaged 5.5%. ■ C.N.

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