

nuclear future on PWR's entailed another far-reaching choice, that of ensuring a dependable supply of enriched uranium to fuel the reactors. The United States was offering enriched uranium at bargain prices, and the Soviet Union also had stocks for sale, invariably at 5 percent less than the going American price. Ignoring these siren voices, France determined to build her own uranium enrichment plant.

Down the Rhone valley from Bugey, about halfway between Lyon and Marseille, the realization of this decision has almost taken final shape. Started in 1972, the \$5.5 billion plant is based on the technology of enrichment by gaseous diffusion which was developed by French scientists for the military enrichment plant at nearby Pierrelatte. The first stages in the Eurodif cascade came into production last year. When complete, in 1981, Eurodif will produce 10,800 tons of separative work units per year, about a quarter of the world production of enriched uranium, and enough to fuel one hundred 1000-megawatt reactors. Built on a gigantic scale, the plant itself requires four 930-megawatt nuclear reactors to fulfill its electrical needs.

Some 1400 stages constitute the cascade which rearranges the isotopic composition of natural uranium. Each stage has a compressor which pumps uranium—converted into gaseous form as uranium hexafluoride—through a fine porous filter. Because the uranium-235 penetrates the filter slightly more rapidly than does uranium-238, the gas at each stage becomes fractionally more enriched in the lighter isotope. The heaviness of the gas, and the speed with which it is pumped round the cascade, dictates pipes of massive thickness and equipped with shock absorbers. Natural uranium, containing 0.7 percent of the fissile uranium-235 isotope, enters the plant; uranium containing 3 percent of uranium-235, and depleted uranium are the outputs.

Eurodif, like Super-Phénix, is a European undertaking under French direction. Cogema, France's state-dominated nuclear materials company, owns 51 percent of Eurodif; the rest belongs to Italian, Belgian, Spanish, and Iranian interests.

A visible triumph of French technology, Eurodif is also a guarantee of independence. Never again will the United States be able to impose political or commercial conditions because of its monopoly of enriched uranium. "The Americans," says the CEA's Goldschmidt, "had started the war of reactor types. . . . They would effectively win

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## Soviet Scientist Misses U.S. Parley

The 20th International Conference on High Energy Physics held recently at the University of Wisconsin attracted some 1200 scientists from around the world. A Soviet scientist who was to have had the most prestigious place on the program, however, did not show up.

No one is certain just what happened to Lev Okun, a leading Soviet scientist from the Moscow-based Institute of Theoretical and Experimental Physics. But his absence is believed to be politically inspired and has fueled speculation that the 1984 conference site, which was scheduled for the Soviet Union, might be moved to another country.

Prior to the conference, Okun had received permission from the Soviet authorities to attend. He had a visa and airline and hotel reservations, and had prepared notes for a speech that was to have been given on 23 July, the last day of the 6-day conference. When the 17 other members of the Soviet delegation arrived, however, they would say only that Okun had not boarded the airplane with them in Moscow.

Okun is a friend of dissident Soviet scientist Andrei Sakharov, but does not have a reputation for agitating Soviet authorities. According to conference organizers, Okun may at the last minute have been denied permission to travel because the conference had received several papers by Sakharov, a Nobel Peace Prize winner now living in exile in Gorky. Sakharov's papers, and an apology that some of his references were not complete because he is denied access to a library, had been smuggled out of the Soviet Union by persons connected with the International Zionist movement. Okun is believed to be Jewish.

Organizers of the conference sent a telegram, signed by 800 of the attending scientists, to the president of the Soviet Academy of Sciences protesting Okun's absence. Other actions are in the offing. At the 1978 annual conference, the sponsoring International Union of Pure and Applied Physics adopted a resolution that questioned whether the 1984 conference should be held in the Soviet

Union if the absence of invited Soviet speakers continued at other meetings. In light of Okun's absence, conference organizers at the University of Wisconsin said that such a boycott was now becoming a distinct possibility. Lee Pondrom, a conference co-chairman, noted that if the commission decided to change the 1984 site it would punish Soviet scientists who have no control over the situation. "But in some sense it would also punish the Soviet state," he said. "It is a situation similar to the Olympic boycott."

## Jordanian Accused of Plagiarism Quits Job

In the wake of accusations that he pirated 5 of his 60 published scientific papers, Elias A. K. Alsabti, 25, has resigned from an internal medicine residency program at the University of Virginia.

The resignation came on 2 July as administrators were convening a panel to investigate charges of plagiarism made by three groups of researchers (*Science*, 27 June). Since the resignation, journals that originally printed two of the papers have announced they will publish retractions. In a related development, a separate group of researchers in England has accused Alsabti of pirating an additional two papers—raising the number of papers under fire from five to seven.

Alsabti, who carries a Jordanian passport, went to the University of Virginia program in Roanoke after graduating in May 1980 from the American University of the Caribbean in Montserrat, the British West Indies, with an M.D. degree. While in Virginia, Alsabti denied having pirated the papers and threatened to sue anyone making such allegations (*Science*, 11 July). A few days later he resigned, having failed to answer tentative questions put forward by administrators at the University of Virginia concerning the charges of plagiarism. Officials said the panel would not pursue the matter further.

Retraction of one Alsabti paper is in the offing, according to Daniel Wierda, one of the researchers who had his work pirated by Alsabti. Wierda's paper appeared under his own name in