Hanoi and Ho Chi Minh City—formerly Saigon), and for oceanography (in Nha Trang and Haiphong) are smaller. Finally, there is an institute "for science and technics" in Ho Chi Minh City.

This pattern also holds in medicine. Vietnam's preeminent surgeon, Ton That Tung is building the Viet Duc Hospital in Hanoi into what Galston expansively calls "one of the great teaching hospitals of the world." When Galston was there recently, the 500-bed hospital was getting a new wing, an entirely new electrical system and generator, and a new operating amphitheater—primarily with help from East Germany, with which the hospital has special ties.

Tung is also on the track of the U.S. herbicide contaminant dioxin, and believes that the spraying of herbicides by the U.S. military in the South is responsible for the extraordinary rise in the incidence of liver cancers he has found in the North. Tung's theory is that the prevailing ocean currents, which run south to north, have carried dioxin-contaminated microorganisms, fish, and shellfish from the southern to the northern waters, thereby infecting the local food chain. Tung continues to be in contact with American scientists who are studying the dioxin problem in the United States.

Whatever the accomplishments of the Vietnamese, Galston finds it also clear that the 2 years and 6 months since the North's victory have wrought no miracles. Galston reports that bureaucracy and red tape hinder communication and progress in scientific activities, and says

Soviets Renege on Mathematician

In an unprecedented action, the Soviet Union has denied a visa to an American mathematician after he had been invited to spend 8 months in Moscow under the exchange program between the National Academy of Sciences (NAS) and the Soviet Academy of Sciences.

Melvyn Nathanson, associate professor of mathematics at the University of Illinois, had been accepted by the Soviet Academy of Sciences and was scheduled to leave for Moscow on 25 August. He had arranged to take a year's leave without pay, had sublet his apartment, packed his suitcases, and bought his plane ticket, when word came that the Soviet Ministry of Foreign Affairs—presumably on orders from the KGB—would not give him a visa. Fortunately, Harvard stepped in at the last minute and offered him academic shelter for the year.

Nathanson and NAS officials are thoroughly perplexed by the erratic Soviet behavior. Scientists nominated by this country to participate in exchanges have been turned down by the Soviet Academy in the past, but never has a scientist been denied entry into the country once he or she has been accepted.

Nathanson has been in the Soviet Union before, in the 1972–1973 academic year, under IREX, the program run by the International Research and Exchanges Board. While there, he learned Russian and made friends with a number of Soviet scientists, including several who later applied for emigration.

He applied to IREX again 2 years later, but was turned down by the Ministry of Education—presumably, he says, because the Russians prefer to have visitors who have no ties in their country and can be expected to remain isolated.

It would not have been surprising if the Soviet Academy had turned Nathanson down (the NAS did not know of his previous rejection when it nominated him); the Americans, though, find it strange that the Soviets would take a last-minute action that is potentially disruptive of the entire exchange program—particularly since there is the general feeling in this country that the Soviets are getting more information out of it than the Americans are.

The NAS has sent a strongly worded protest to the Soviet Academy, and has notified it that money that would have gone to support a Soviet scientist for 8 months (the two academies split the expenses for visitors) instead will go to help Nathanson through his salaryless year at Harvard.

Everyone regards the incident as most unfortunate, and steps are being taken to ensure that it will not be repeated. Says an Academy source: "We intend to make sure in the future that acceptance carries with it assurance that the scientist can get into the country."—C.H.

he even complained about this to Prime Minister Pham Van Dong. In one case, Galston listened to Tung, the Viet Duc Hospital chief, complaining he needed a tissue culture facility to grow pharmacological plants and unaware that, nearby, there already was such a laboratory.

Further, while research in some fields is strong, there are many areas of weakness; for instance, there is little Vietnamese work on molecular biology, and little synthetic chemistry. And despite the urgings of the leaders about the need for trained cadres to aid in industrialization, Hanoi University just awarded its first Pho Tien Si, a degree somewhere between a master's and a doctorate, to a forestry student whose thesis had been published in the national scientific magazine.

Perhaps the most interesting question about the development of Vietnamese science and technology is which model will be followed by this socialist government that finds itself at peace for the first time in 30 years. Galston found signs of coldness towards the Soviet Union; although the Vietnamese still send their physicists to the Dubna research center for training. Likewise, the Vietnamese are not following the pattern set for science in China during Mao Tse Tung's rule; Vietnam has no revolutionary committees allowing political figures to oversee research to make sure it conforms to proletarian goals. So far, Galston notes, the Vietnamese seem to be interested in getting the most from foreign basic research-such as Galston's own work on plant physiology-and figuring out the applications for themselves. How General Giap will elaborate or change this system remains to be seen.

In his lectures and talks Galston has been making another point, aimed at the U.S. National Academy of Sciences, and the role it should, by charter, play in developing contacts among scientists regardless of political ideology. Before leaving for Vietnam, Galston wrote to Frank Press, the President's Science Adviser, and to Philip Handler, President of the National Academy of Sciences (NAS), and to George Hammond, the Academy's foreign secretary.

Press replied with a restatement of official policy; however, neither the NAS's Handler nor Hammond replied. (Handler says he meant to write to Galston and wish him good luck, but never got around to it.) Says Galston, "I think that the academy's inaction on Vietnam represents a lost opportunity for scientists to play a crucial role in the rapprochement between the two countries."

> —Deborah Shapley science, vol. 198