

Soviet dissidents (3)

View from the Promised Land

Nechemia Meyers assesses the opportunities for Soviet scientists arriving in Israel

"AMONG the Russian immigrants are scientists on a par with the best in the US, and their coming to Israel gives this country a unique opportunity to develop many new research areas". So says Professor Alexandr Voronel, a Soviet expert in solid state physics formerly associated with the Institute of Physics at Chernogolevka, near Moscow, who joined the staff of Tel Aviv University. Voronel and his colleagues fear that this opportunity may be missed for lack of a coherent science policy in general and a plan for the absorption of these scientists in particular.

Exactly how many immigrant scientists have come here from the Soviet Union is impossible to determine, particularly because the term "scientist" covers a broader category of people in the East than it does in the West. Absorption authorities speak of 800 scientists and 400 graduate students (among the 100,000 Soviet immigrants who have arrived since 1971). Voronel thinks there are between 1,000 and 1,500, making up perhaps 15% of Israel's scientific community (as compared to about 25% of her doctors).

Those who have found employment in their professions work for the most part in universities and research centres. However, many hold temporary positions financed not by regular budgets but by special two- and three-year allocations from the Absorption Ministry and the Jewish Agency. When these allocations run out, the institutions where they are now working, which are so short of funds that they have had to fire some members of their academic staffs, will find it difficult to offer the immigrants permanent posts. In any case, future immigrants will find the universities closed to them.

This being the case, efforts are being made to channel immigrant scientists into industry. For example, the Centre for Absorption in Science announced that it was now sending 40% of its applicants to industrial firms, as compared to 10% 2½ years ago. However, as things stand, the absorptive capacity of Israel industry is also limited unless structural changes take place. For their part, the Russian immigrant scientists, or at least some of them, feel that Israel should pay heed not so much to the

American experience, as some have suggested, but to the Russian one.

"When I was in the Soviet Union," Professor Voronel stated earlier this year, "I was surprised that the Americans with all their resources and techniques had no scientific advantage over the Russians in many fields. Now that I am in Israel—that is to say within the framework of Western science—I wonder why the Russians are not doing even better, because from my vantage point I can see great advantages to the organized and planned system that exists in the USSR." Voronel says that with rare exceptions, such as the Manhattan Project or the attempt to land a man on the Moon, US research is based on individual initiative and achievements. In contrast, the USSR creates scientific teams geared to achieving specific national goals.

Voronel and his colleagues fully appreciate the freedom offered to them in Israel, which they would not forego in any circumstances; but they nevertheless believe that Israel requires a less "American approach" to science policy. "The US is big enough," Voronel declares, "to achieve success, without overall planning, in a great many fields. Israel, in contrast, will achieve very little without concentrating its efforts on a few well-defined projects, and this is where immigrant scientists from the Soviet Union can be of great value. They know how to organise and apply research though, of course, they must be better acquainted with the requirements of the Israeli economy before they are in a position to make concrete suggestions."

The Diamant brothers, Lev and Emanuel, are also drawing on the experience of Russian science in their attempt to create Arshach, a science-based community in the Galilee. They hope it will eventually expand into a kind of Academ Gorodok, the large Siberian research centre near Novosibirsk where Lev Diamant studied and worked in plasma physics before coming here. In spite of the fact that both brothers found positions in Israel soon after their arrival—Emanuel Diamant as an engineer at Tel Aviv University and Dr Lev Diamant as a physicist at the Weizmann Institute—they wanted to do more than just earn a living. They wanted to lay the foundations for the absorption of hundreds or



Alexandr Voronel, vantage point

even thousands of fellow scientists from the Soviet Union in a self-supporting scientific community to include both research and development and production facilities.

Their little settlement, perched on the Galilean hills not far from the spot where Christ gave his Sermon on the Mount, is no Academ Gorodok as yet. In fact, a lack of housing limits it to a few families and a modest research and development programme, most of it based on sub-contracts from established research centres in such fields as solar energy, custom-made electronics, electro-optics and lasers. Lev Diamant, who turned down US job offers, is not worried that the settlement is growing very slowly or that it is some distance from existing scientific and industrial complexes where computers, libraries and other important facilities are to be found. "In the US many scientists travel 60 miles, for example between Burlington and MIT, without thinking about it; why then," he asks, "should we Israelis make such a fuss about travelling 90 kilometers between Arshach and Haifa?"

The settlement has already established itself as an intellectual centre for immigrant scientists from the Soviet Union. The famous scientific seminars held in Moscow by Jewish scientists who had been dismissed from their posts after applying for an exit visa have been recreated at the village. They are headed by Professor Voronel, who was himself a key participant in the Moscow seminars before finally being permitted to leave for Israel last year.

Yet the purpose of these seminars, is different. "In Moscow," Voronel explains, "we were forced to concentrate on theoretical subjects because the authorities had taken away our laboratories and our instruments. Here we are discussing applied research, which we are trying, so far without too much success, to develop in Israel."