

GDR's state of science

Scientific exchanges with the German Democratic Republic (GDR) are rare, and our knowledge of the state of its science is consequently sparse. A correspondent with some experience of East European countries, who recently completed a trip to several biochemistry and microbiology laboratories in the GDR, returned with these impressions.

THE mood among the scientists with whom I spoke is one of frustration and pessimism. The scientific community is thwarted and repressed by the government, and the situation is, if anything, worsening. I would put it as more critical than, say, in Poland or the Soviet Union. The very possibility of doing research in the GDR was a subject of discussion. The problems are of two sorts, financial and political.

One of my stops was a large city with a prestigious university. The contrast between the newly constructed university skyscraper, to be used primarily for the study of Marxism-Leninism, and the shabby buildings of the science complex made a striking impression. The biochemistry laboratory which I visited was not adequately equipped. The laboratory, with a staff of some 20 researchers, had, for example, no scintillation counter. In addition, some of the equipment which they did possess was of inferior quality. In particular, the ultracentrifuges, of East German manufacture, can be run for only a few hours at a time, or the drive will fail. Aggravating these financial problems is the peculiar bureaucratic regulation that purchases be made only once a year. This both wastes the meagre resources available to the laboratory—chemicals are ordered which are never used—but also leads to spot shortages which may abort an ongoing project.

Hard currency restrictions make subscriptions to Western scientific journals difficult to obtain. The biochemistry group had subscriptions neither to the *Journal of Biological Chemistry* nor to the *Journal of Molecular Biology*. The restrictions also greatly reduce the number of GDR scientists who can attend conferences in the West. At the time of my visit to another laboratory, for example, only one scientist out of some 800 total staff members was in the West. While science was a low priority area, the support of athletics was lavish. The new municipal stadium was monumental. Furthermore, much hard currency goes to support the hordes of javelin throwers, swimmers and runners who are treated to expensive trips to Western Europe and North America.

The political situation complements the economic one. The government plays a very direct role in laboratory affairs. Needless to say, permission is needed to attend a scientific conference outside the GDR, but it is also needed, for example, to publish an article in a Western scientific journal. The government can and does direct a laboratory programme; a microbiology laboratory on my itinerary had been ordered to abandon its programme of basic research and to commence work on a project which the administrators felt had industrial applications. Even in basic research, 'plans' are delivered to the researchers detailing experimental 'goals'. With the exception of the Communist Party members of the staff, these 'plans' are largely ignored. Recently, however, it was decided that the laboratories must hire more Party members. For one group, this meant that all future appointments at the level of Laboratory Chief or above would have to be filled by Party men.

The authorities have also found that science administration is a good place to put retired military personnel. In

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some cases these ex-colonels have chosen to classify a laboratory as 'secret', shutting it off from communication with the rest of the scientific community.

Pressure is applied on the scientists to join the Communist Party, but it is my impression that this is far from successful. A valid reason for not joining is the profession of a religious belief, and this excuse is used frequently. Although promotions, trips abroad and other rewards are given preferentially to Party men, these inducements are not sufficient to overcome the moral repugnance which most of my informants felt towards Party membership. Other scientists, less estranged from Communist ideology, spoke of "compromises" that have to be made in order to work effectively.

In spite of these difficulties, science has not been abandoned; research of good quality is still going on. Efforts to keep up with scientific progress are evident. Especially apparent is the enthusiasm with which Western visitors are greeted; the GDR scientists clearly want to establish contacts and exchange ideas with their Western counterparts. If we wish to aid them, we must visit their laboratories and attend meetings in the GDR, since our Eastern colleagues cannot easily leave their country, or initiate contacts with Western scientists. The exchange of scientific information, as well as gifts of subscriptions to journals or of chemicals and laboratory supplies could help science survive. □