finance all the fields in which it was active "when it was a part of an empire", but he is disappointed that, despite an evaluation by the Royal Swedish Academy that concluded that "almost 80 per cent of all the Estonian academy's projects are of a reasonable standard, we are now to restrict their number". He particularly regrets that the Institute of Marine Research is now compelled to sell its well-equipped research fleet.

The optimism of Romania and the bitterness of Estonia were echoed by other academy representatives from the former socialist bloc at Sofia. The antipathy towards science of the newly elected democratic parliaments seems commonplace, as does the lack of finance and the resulting brain-drain that accompanies it. The difficulty of research that requires expensive equipment and the breaking of scientific links with former partners, mainly Russia, were other common complaints.

The painful withering of familiar links with Russia is caused not by politics, as one might think, but by the lack of money. East European states can no longer afford to promote scientific contacts by covering travel expenses or even accommodation costs for researchers invited for a conference or a workshop, by contrast with governments and other organizations in the West. Is the 'golden curtain' likely to prove even less transparent than the 'iron curtain' it has replaced?

But there are some advantages in the new situation. The centralized control of science is less onerous and, especially in the humanities, ideological dictate has gone. The number of scientists may have diminished, but many of those who have left were not scientists at all. Now, when most academies (except the Russian and Bulgarian) do not pay large pensions to their members, there is no reason to elbow one's way into them unless one has a real interest in science. Indeed, many academy representatives agreed with Koorna's declaration that "the present number of scientists in Estonia is optimal".

Indeed, the productivity of many academies' researchers, measured by the number of publications in journals, has increased in the past 3–5 years. "I can safely say that the worst is over for science", said Jordan Malinovski, president of the Bulgarian Academy of Sciences and the host of the Sofia meeting.

But that may have been too optimistic. There was a reminder of the previous era in the appearance of an incongruous pair: a short old man with a hearing aid invariably accompanied by a tall and much younger man. The former, Dr Demirai, the president of the Albanian Academy of Sciences, was silent. The latter, who appeared to have no name, constantly repeated, "The president is busy, no interviews available". □

Bulgaria — cutting to the bone

Dr Jordan Malinovski (inset), president of the Bulgarian Academy of Sciences (BAS), considers Bulgarian science to be in a state of collapse. Openly, he blames this on the totalitarian regime that orientated industry and agriculture to suit the demands of the Soviet Union.

Now that the colossus has fallen, it seems that nobody wants Bulgarian goods because of their poor quality. Production has thus decreased dramatically. Moreover, scientists, who were once paid by the state for their contribution to the national economy, have lost government support.

There is worse. Since 1912, the BAS had been granted exemption from taxes and import duties on all essentials from abroad. Last April, the new non-totalitarian government proposed a law to the now democratic parliament depriving Bulgarian science of its privileges. It was passed.

The result, Malinovski says, is that $500,000 worth of scientific equipment "is now languishing in the customs' possession". Although the equipment has been given for nothing by foreign colleagues, BAS cannot afford the huge taxes and duties required, and so cannot collect it. That is the injury. The insult is that BAS is "even compelled to cover the expenses of keeping it in the customs warehouses".

But the real concern of Bulgaria's "first scientists" is their budget support. For 1994, the government allotted (but has not yet paid) to BAS only 1 billion leva (66 leva = US$1). A further 90 million leva comes from the National Scientific Foundation (NSF). And of the total, 75 per cent will be spent on salaries and 18 per cent on electricity, water and other essential services.

In other words, there are no funds for anything but mere survival, and certainly little for the purchase of scientific equipment. Yet strange as it may seem, nobody is likely to try to alter the April law.

In the present political situation, in which two major rivals, the Bulgarian Socialist Party (BSP) and the Union of Democratic Forces (UDF), are practically equal in power, there is little faith in the wisdom of parliament.

"Don't bother with Philip Dimitrov and Philip Bokov. Vote for Philip Morris!". This is the motto of a popular television show, Ku-Ku, directed by Luben Dilov Junior, son of the chairman of the Bulgarian Writers Union. (The first two Philips are respectively the chairman of the UDF and one of the leaders of the BSP).

So the BAS is left with only one option: cutting costs. Eighteen institutes have already been closed down, and others await their turn. But this gives rise to another problem, unemployment, which is increasingly hurting the Bulgarian scientific community.

Yet ironically, the academy has banned institutes from earning money by creating companies to manufacture goods based on their investigations. The reasoning is that it could lead to unlawful enrichment of the scientists involved. **Carl Levitin**

How to survive in business

Dr Rumen Tsanev is one of Bulgaria's scientists who have joined the commercial sector. After 30 years, he left his post as a director of the Molecular Biology Institute to join Pharmagen, a company founded by the institute, but now independent of it.

Bulgarian businessmen have invested US$1 million in Pharmagen to finance the manufacture of γ-interferon — effective against many viral diseases, in particular herpes — by a genetic engineering technique developed at the institute. Because labour is cheap and the technology effective, the medicine is a tenth the price of its equivalents. This enables it to be used against leishmaniasis in India, Africa and Latin America.

Tsanev claims that γ-interferon also represses collagen synthesis and that it is already used in clinics to cure certain diseases that cause the skin to overproduce collagen. It has also been tested against immunodeficiency in one Bulgarian military hospital, and has proved to be effective. If there were more HIV-infected patients in Bulgaria, γ-interferon would no doubt be being tested for its anti-AIDS properties.

According to Tsanev, Bulgaria can still make scientific discoveries because, under the totalitarian regime, they could buy expensive equipment, build large reserves of reagents, travel frequently and contact colleagues. "We use all that now"; that is Tsanev secret of survival.

The institute receives 11 million leva from BAS and 1 million from NSF, and spends 6.5 million on salaries and 2.5 million on rent, electricity, water and other essentials. What is left (around US$20,000) is almost nothing.

"We were lucky in that UNESCO presented us with scientific equipment worth US$100,000 before April", says the former director, "But now we have to ask our colleagues to refrain from such gifts, thanks to our present government, which seems to have forgotten the word 'science'." □