

CZECHOSLOVAKIA

Sharp cosmopolitans break out

Prague

CZECHOSLOVAK research seems marvelously to have survived forty-two years of the old regime, largely on the strength of people's instinct for collaborating with like-minded people elsewhere. Laboratories boast of their partnerships overseas. People individually denied the right to travel to the West have made fruitful collaborations in the East.

But the system will not be able to "come back into Europe" — the common phrase — without upheaval, which will not be easy. Many institutions, conspicuously the Academy of Sciences, are in chaos (see page opposite).

Reflecting on the past, people draw attention to the importance of the Soviet-led crackdown after the Prague spring of 1968. People then considered unreliable were dismissed by the Party and, if teachers at universities, shunted into

CZECHOSLOVAKIA

Population: 15.5 million

Area: 127,903 sq. km

Per capita GNP: \$8,700

Higher education: Five

universities — Charles Univ.

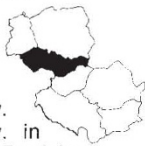
in Prague; Purkyně Univ. in

Brno; Comenius Univ. in Bratislava;

Palacký Univ. in Olomouc; Šafárik Univ. in

Košice. Twelve technical universities or

institutes. Total no. of students: 135,874.



backwater jobs. Although external contacts have remained strong, there have been fewer of them as time has passed. Last year's revolution came only in the nick of time.

The system nevertheless remains productive. Dr Frantisek Vyskocil, director of the Institute of Physiology, has arranged for a comparison of the productivity of his institute in Prague with that of the comparable Maria Negrino Institute in Milan. In 1988, half as many graduate scientists at Prague produced more than half as many papers in journals covered by *Current Contents* at a total cost suggesting that \$1 (US) would be worth 2.17 crowns — an exchange rate that flatters the Czechoslovak currency by a factor of more than fifteen.

The implications of the comparison will not, of course, be misunderstood: it is not the case that discovery costs only one-fifteenth as much in Prague, but that Czechoslovak scientists know the rules and work successfully to keep them.

They have to play the game with at least one hand tied behind their backs. Here are some practical problems. If you raise 15,000 crowns to buy a student's airline ticket to New York, how do you then arrange that he can pay the taxi fare to his destination when the crown is not conver-

tible? If it takes eighteen months to win approval for an order for a radiochemical, or for a hormone preparation, how do you organize your work so as to be ready to use it when it suddenly appears in the lab?

The dearth of information is crippling. Libraries have for years been cutting their subscription lists (there are said to be two libraries in Prague that subscribe to *Nature*), but the shortage of books is in many ways more serious: you cannot politely ask for a reprint. People have heard of Bitnet and the technology of the optical disk, but they know that it will be at least a decade before it is of any use to them.

CHARLES UNIVERSITY

Teaching the young is risky

Prague

LAST November, it fell to histologist Professor Zdenek Lojda to call on the then-rector of Charles University, the oldest university in Central Europe (founded in 1348), to tell him that the faculty had lost confidence in him, and he should resign.

"I'm sorry that we can't have you any longer as our rector", Lojda remembers saying. The conversation appears to have been as courteous as the circumstances would allow. "I'm sorry that I couldn't have done more", the rector said before agreeing to step down, resuming his old post as a professor in the law faculty. Lojda, who did not himself succeed in the subsequent election, is now the pro-rector responsible for overseas relations.

He tells a vivid tale of the indignities of academic life during the past 40 years. The first shock came in 1951, when the then Communist government decreed that rectors and deans should be appointed by itself, and when organs of the Party took on the task of selecting students awarded places at universities. The following year, the then new law on the Academy of Sciences removed responsibility for research from universities.

Lojda explains that, not being a party member, he was considered "a bad influence". "You see, I was a Christian". The underlying principle of academic life seems to have been that dangerous people such as Lojda should not have contact with the impressionable young. Some found refuge in research institutes, but Lojda was forced out of the Department of Embryology and Histology, and was offered refuge by friends in the Department of Pathology, but in a lowly post with few teaching responsibilities.

Lojda says that he had been able to keep his hand in histology only with the collaboration of colleagues abroad, notably in London and Dundee. He seems remark-

able? In the circumstances, it is remarkable that they are so optimistic. The explanation has something to do with the concept of revolution, and with the conviction of each participating group that success will redress its particular grievance. In Czechoslovakia, the research community went onto the streets for intellectual freedom, in support of its students (who might otherwise be condemned to a life like its own) and in defence of basic research. Most other participating groups shared the first objectives, but the last is a matter of resources.

Czechoslovakia's revolution is so new that its participants have not yet begun to strike a balance between their objectives and what their prosperity will allow them to afford. **J.M.**

ably philosophical about his painful experience, noting only with regret — not anger — that the whole of his working life has been blighted by the Communist Party and explaining that he came to his decision not to comply with full knowledge of the consequences. "That's what I call freedom", he says.

Now, the objective is to put the Charles University back on the map. Lojda has been busy signing agreements with universities throughout Western Europe — Sienna, Padua, Rome, the Sorbonne, Lille and even, soon, Birmingham. The crying need is for more opportunities to travel, but also for joint projects by which people can collaborate with groups elsewhere.

Nobody is too sure what the future holds. The new law on the universities (restoring autonomy, granting open access and regulating the granting of degrees and the like) will be operative in a few weeks. But how many students will there be when the next academic year begins? Lojda reckons that the student population, now 25,000, may even increase to 35,000, so great is the unmet demand for higher education. But there are doubts about the budget.

Meanwhile, the Charles University is making a bid to contain Eastern Europe's first institute of advanced study. An international committee whose chairman is Dr Harry Woolf, past president of the Institute of Advanced Study at Princeton, hopes to recruit up to ten distinguished people to the Centre for Theoretical Study, half of them from Czechoslovakia and the other half from abroad. Some would be tenured, others on short-term contracts. People seem reasonably confident of the local contribution to the budget (estimated at 6 million crowns a year); the problem is the \$500,000 required for partial compensation of visitors from abroad and for travelling expenses. **J.M.**