

scientists unemployed.

The man who may change all this is the new minister for universities and research, Professor Federico Major, recently returned from Paris after a spell as Deputy Director-General of UNESCO. Major, a 47-year-old developmental neurobiologist, has kept in touch with science despite a long career in politics. He is a personal friend of King Juan Carlos, and yet is right wing (he was minister of universities under Franco) and so may be able to ride the strong conservative opposition in Spain. He has to steer through a new law for the universities (now entering its seventh draft). And he appears to have been impressed, during his time in Paris, by the new French commitment to science as a means of economic development. He is already talking of a "law for science" which would define a budget and a programme for a stretch of a few years, so clearing all political hurdles in one jump. This is exactly the strategy of the French minister for science. It will be interesting to watch how far Professor Major will mimic him.

Robert Walgate

UK biotechnology

Blood money

A British publicly-funded organization for encouraging innovation in industry has made its second major investment in the fledgling biotechnology industry. The British Technology Group (BTG — an amalgamation of the former National Research Development Corporation and the National Enterprise Board) announced this week that it is investing £2 million in Speywood Laboratories Limited of Nottingham for the development of new techniques for blood protein manufacture. Prutec Limited, a subsidiary of the Prudential Assurance Company, will be matching BTG's investment.

BTG's other biotechnology venture is Celltech, the company it established last year with three finance houses and the Medical Research Council to develop recombinant DNA techniques for manufacturing medical products, including monoclonal antibodies. The group's latest venture is to develop a new fractionation technique for manufacturing blood proteins, an area in which Celltech is not involved.

Speywood, a small company set up seven years ago, will use the £4 million roughly to double the size of its factory and research laboratories. Its initial aim is to improve its polyelectrolyte process for fractionating blood cryoprecipitates, which allows the separation of a greater variety of blood proteins than the traditional Cohn process for fractionating whole-blood plasma. The company has already used the new technique for isolating a pure form of factor VIII from pigs' blood for use in particularly sensitive human patients. Clinical trials are expected next year. It now plans to expand factor VIII

production and extend the technique to factor IX, factor VWF (for treatment of von Willebrand's disease) and fibronectin.

Speywood is the only commercial company now producing blood products in Britain, the bulk of production being controlled by the health department through its Blood Products Laboratory at Elstree, and Speywood's plans for expansion are likely to be welcomed by the National Health Service, which has to import a large proportion of its supplies.

Speywood's longer-term goal, however, is to develop and use recombinant DNA techniques for manufacturing blood proteins such as factors VIII and IX, fibronectin, α_1 antitrypsin and albumin.

David Heath, managing director of Speywood, welcomes investment from BTG and Prutec not only for the money but also because it gives the company access to expertise on recombinant DNA technologies in universities (BTG acts as a "broker" between industry and the universities). He hopes that the £4 million will launch the company into an expansion plan costing about £19 million over the next five years. Later on, he will be looking for further investment, but BTG is for the time being non-committal, preferring to see how the company shapes up before committing itself further. **Judy Redfearn**

Telecommunications

French hanging on

Brussels

French doubts about the wisdom of opening up some public purchasing contracts in telecommunications to its partners in the European Economic Community held up agreement last Monday on a set of recommendations designed to stimulate the growth of the European market in telecommunications.

Although the recommendations would not be binding, they constitute a first step towards achieving community-wide services and a community-wide market for terminal and other kinds of equipment. The telecommunications administrations of the various member countries have, of course, been cooperating for a long time but the supply of equipment for national networks has tended to remain in national hands. Following the meeting of the Council of Telecommunications Ministers in December 1977, the European Commission established a working group on future networks which has recommended urgent action in the field of digital networks. But the different policies being pursued and conflicting commercial considerations continue to hamper progress.

The first recommendation is for consultation with a view to ensuring that new services are introduced within the community only when they are mutually compatible. Second, the telecommunications administrations of member

Pleasant surprise

The shortfall in admissions of overseas students to British universities has not been as great as anticipated. According to the University Grants Committee (UGC) admissions of overseas undergraduates in 1981-82 totalled 4,918 compared with 5,017 in 1980-81, a shortfall of about 2 per cent. Post-graduate admissions were 7,414, only 0.5 per cent less than in 1980-81.

These figures, however, come on top of reductions in 1980-81 compared with 1979-80. The sharpest reductions then were in students from the United States and Malaysia which sent 1,105 and 3,988 undergraduates respectively, compared with 1,450 and 4,188 in 1979-80. Most other countries cut back by two to five per cent. The exceptions were West Germany, Hong Kong and Nigeria which sent more students than in 1979-80. The largest contributors of overseas students are still Malaysia, Hong Kong and the United States, between them sending more than half of Britain's total overseas enrolments.

As yet UGC has no figures for individual universities or for the countries of origin of new entrants for 1981-82, but the unexpectedly small decline should mean that some universities, at least, have not suffered as severe a loss of income from overseas students' fees as had been feared. The effect may be to lessen the impact of the government's cut in the university grant. **Judy Redfearn**

countries should not discriminate between domestic and other EEC suppliers of telematic terminal equipment by means of type approval procedures taking longer than six months, or which are more complex and costly to comply with than those employed elsewhere. But it was the third recommendation which caused the greatest problems. This specified that for the period 1981-83, telecommunications agencies should seek tenders from suppliers who manufacture in other community countries for at least 10 per cent of their annual orders.

The French quibbled about the phrasing "suppliers who manufacture", partly because, as one diplomat put it, "they don't want to go ahead with the recommendations anyway". But the French also want to avoid loopholes that will open up their market to non-EEC countries. The worries of the Germans, the other main objectors to the recommendations, were, however, removed. The Bundespost's ambitious videotext programme is being accompanied by a new law to extend its monopoly in new information systems and terminals such as modems, although this move will be examined by the European Commission's directorate on competition.

Jasper Becker