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## Too many students, too little cash in German universities

Munich

1988 ended on a note of uncertainty in West Germany with students demonstrating at 40 universities to protest against overcrowding and lack of funds. Overcrowding is at record levels, with at least twice as many students registered as the universities are designed to handle.

A new DM2,100-million government 'emergency programme' announced in mid-December will help, but will make a real difference in only a few faculties. And even if the height of the *Studentenberg* begins to come down in 1989, many professors will continue to be hard-pressed to find time for their research.

University researchers have also been hit by a budget squeeze. The Deutsche Forschungsgemeinschaft (DFG) — the main university research funding body — found it could fund less than half the applications in its priority programmes (Schwerpunktprogramme). Overall, DFG turned down more grant applications than ever before, raising worries that young people will forced out of research careers. But DFG takes heart from the better quality of grant proposals.

Researchers at the Max Planck Society are better off. A modest increase in the 1989 budget comes on top of Nobel prizes in 1988 for three of its researchers: Hartmut Michel, Johann Deisenhofer and Robert Huber. Michel has since moved to Texas, but Deisenhofer and Huber remain at Max Planck Institutes.

The Large Research Establishments (Grossforschungseinrichtungen, GFE), like the Max Planck Institutes, do not have to worry about the annoyance of too many students. But both associations have promised to cooperate more with the universities, in keeping with the recommendations released in May by the science council (Wissenschaftsrat). The council fears an increasing division between universities and research institutes.

In 1989, GFE are likely to place greater emphasis on health research now that Harald zur Hausen of the German Cancer Research Centre is chairman. They have also announced their intention to work more closely with researchers in other European countries.

International cooperation is also the theme for West Germany's burgeoning space programme. The Research and Technology Ministry (BMFT) will increase its investment by 11.8 per cent to more than DM1,300 million in 1989, keeping pace with France and the other members of the European Space Agency. BMFT has stepped up its efforts on its second space laboratory, to be launched by the US shuttle in late 1991. West German groups

have also sent payloads on a Chinese rocket and on the Soviet probe to Phobos.

Cooperation may come harder in areas where ethics are involved. Differences began to appear in 1988 between West Germany and other European Community members about research on human embryos and the sequencing of the human genome. Both are emotive issues that will command more attention in 1989.

AIDS was less of a public issue in the second half of 1988, but the liberal policy of the West German government towards AIDS carriers may be in for some changes in 1989 under a new and untried Health Minister, Ursula Lehr, who replaced the veteran Rita Süssmuth in November. Peter Gauweiler, a hard-line conservative, lost the AIDS portfolio in a Bavarian state

government reshuffle. On the research front, a modest BMFT programme to establish centres of excellence for AIDS research has yet to bear fruit.

1988 began and ended with nuclear 'scandals' of different kinds. In January, hundreds of mislabelled barrels of nuclear waste turned up unexpectedly at nuclear waste storage sites across West Germany. In December, public trust was dealt another blow when a reactor mishap at the Biblis nuclear plant near Frankfurt was found to have been covered up. Nevertheless, Chancellor Helmut Kohl's centreright coalition government held fast to its nuclear programme, just as it had after Chernobyl.

1989 will find legislators watching the clock as the Kohl government's second term winds down. The next elections for the Bundestag (parliament) are not due until 1990 but five Landtag (state parliament) elections in 1989 will set the stage for the big campaign. Steven Dickman

## Return to the good old days of plenty for French researchers

Paris

French scientists began 1988 facing cutbacks in basic research spending and with instructions to begin paying homage to industry. That, said President Jacques Chirac and science minister Jacques Valade, was the way to bring France into a united European market in 1993, creating the opportunity to compete with Japanese and US technology. But elections in the spring brought a change of government and, with it, hopes of a return to the good old days. Radical changes were made by the incoming socialist government, but it was a long time before a coherent policy was formulated.

Minister for Research and Technology Hubert Curien's first move was to rectify "flagrant deficiencies" in research funding. A \$195 million handout was given in June, doctoral bursaries were increased and 150 new research posts created. In the autumn Curien finally gave substance to President François Mitterrand's promises with an extra \$484 million increase in his 1989 budget, a 7.5 per cent increase over 1988 and way ahead of inflation.

With the new government settling in during the summer, nothing new was done in the fight against AIDS, even though France continued to rank highest in Europe for the number of AIDS sufferers. Finally, in November, Curien gave researchers \$24 million, saying that if it was not enough they would get more, while Health Minister Claude Evin launched a new \$8 million AIDS information campaign. 1989 will show whether it succeeds in converting Roman Catholics to the condom, outlawed by the Pope.

The French space industry, major shareholder in the European Space Agency (ESA), continues to boom. Sixteen satellites have been launched in the past 15 months. Ariane 4, the new workhorse heavy-lift launcher, also successfully completed its maiden flight in 1988. Arianespace enters the new year with \$2,240 million worth of orders for the launch of 36 satellites. Now all eyes are on Ariane 5, which will be used to send the Hermes shuttle on its way to Europe's Columbus contribution to the US space station, also finally approved in 1988. Work has started at ESA's Kourou launch site to build a new launch complex for Ariane 5, due to fly in 1995, to the chagrin of British space scientists whose HOTOL shuttle is still looking for a sponsor.

Reform, the unlucky buzz-word of the last government, has been replaced by 'evaluate'. The high levels of public spending needed to realize the new government's declaration of research and education as priorities will need careful housekeeping. Curien has introduced a new watch-dog committee to oversee the cost-effectiveness of research. 1989 will also see Jacques Benveniste's research on the 'molecular memory' of water scrutinized as part of a routine, but major 'inhouse' review of his laboratory.

Besides 'evaluate', the government's will is to 'co-ordinate'. No major policy decision has been taken without an indepth report with the emphasis on interministerial co-operation. In France, 1989 will be the year of committees, but only time will tell if their designs produce horses or camels.

Peter Coles