

NEWS IN BRIEF

Spanish science lurches ahead

SPANISH scientists have raced feverishly to meet a 1 March deadline for applications for newly released research funds. Announced in mid-January by the Comisión Asesora de Investigación Científica y Técnica, the amount of 1600 million pesetas (£10.6 million) is the first money made available to researchers since 1977. In addition the commission announced the formation of a committee of 20 to map out future Spanish research strategy. Researchers fear that the committee may impose a straightjacket on the fragile state of basic research out of an inability to realistically assess what kind of research is in "the national interest". A three year plan for restructuring research backed by 50 billion pesetas (£350m) will be tabled in the parliament this Spring.

Canadian research threatened

THE Science Council of Canada has warned that threats to the quality of Canadian higher education, where university enrolment is currently decreasing even though the number of 18-24 year olds is increasing, could have a severe impact on the future strength of Canadian research.

The report* says that for the past ten years, the financial resources for teaching and research provided by both the provinces and the federal government have generally been less than sufficient to keep up with inflation, leading to the serious erosion of research facilities built up in the 1960s.

It says that in addition to seeking more money, universities will have to make a number of hard decisions. These include the elimination of courses and programmes where the number of students and the resources for teaching or research are inadequate for productive scholarship of the highest quality; the transfer of faculty and facilities to other universities; the consolidation of graduate work in specific disciplines into joint centres embracing more than one university; and the common use of major facilities.

**University Research in Jeopardy: The Threat of Declining Enrolment. Available from the Canadian Government Publishing Centre, Supply and Services Canada, Hull, Quebec.*

Pharmaceutical company to rent space at Yale

MILES Laboratories Inc, a subsidiary of the West German chemical and pharmaceutical company Bayer AG, is to rent space in a building allocated to Yale University's department of biology to

establish an institute for pre-clinical pharmacology.

Initially seven or eight scientists and technicians are expected to work on the research and development of new pharmaceuticals, primarily in the cardiovascular field, in a section of Yale's Osborn Memorial Laboratories, which the company has agreed to renovate as part of its payment to the university.

"This agreement is especially significant for the basic biological sciences, since close ties with industry have not existed previously at Yale," Dr Frank R. Ruddle, professor of biology and human genetics, and chairman of the biology department, said in announcing the agreement. "Because of new technical and theoretical developments in biology, we believe that such relationships will be mutually beneficial and therefore more common in the future."

Stanford announces new centre for electronics

THE University of Stanford has announced plans for a new Center for Integrated Systems, bringing together in a single research laboratory individuals with experience in physics, materials science, electrical engineering and computer research to work on very large scale integrated systems (VLSI) for industry and business management.

"Our goal is to make Stanford the premier centre in the world for VLSI research" said Dr James F Gibbons, professor of electrical engineering, in announcing plans for the \$15 million centre.

The three goals of the new centre are: to produce approximately 100 MSc and 300 PhD graduates per year ("tomorrow's technological leaders" according to Professor James Meindl); to promote research, including the development of working design automation capability and computer-managed fabrication facilities; and to offer, via instructional television and videotapes, new courses, conference and workshops "designed to keep scientists and engineers now employed in industry abreast of rapid developments in the field." Funding will come principally from government and industry sources.

Fusion beam injection success

SCIENTISTS at the University of California's Lawrence Berkeley Laboratory last week reported that they have successfully tested a neutral beam injection system which will be used to heat the plasma of the Tokamak Fusion Test Reactor at Princeton Plasma Physics Laboratory, due to start operating in December 1981.

According to Dr Kenow H. Lou, project manager for the injection system at LBL, deuterium beams were successfully accelerated to 120,000 electron-volts, producing seven million watts of power in pulses lasting 0.5 seconds. The team is now studying ways of increasing the duration of the beam to 1.5 seconds.

The Princeton Tokamak will use four such neutral beam injection systems, the prototype of which has been built as a collaborative effort between LBL and the Lawrence Livermore Laboratory, which carried out the beam line engineering. Following the successful tests — described as a "major milestone" in the US fusion energy programme — the prototype system will remain in operation to develop further information and experience which may affect TFTR operations.

UK short of basic grade nuclear inspectors

THE Nuclear Installations Inspectorate is 53% below its full complement of basic grade inspectors according to information released last week by the Department of Employment. In answer to a parliamentary question by Frank Hooley (Labour, Sheffield) the department revealed that the NII was having difficulty recruiting structural, electrical, mechanical and instrumentation engineers and has a shortfall of 14 out of its complement of 26 positions. A Health and Safety Executive official told *Nature* that routine work was not affected but that in the review of the pressurised water reactor specific areas of work might have to be subcontracted to the Safety and Reliability Board of the UK Atomic Energy Authority. The 61 principal inspectors and 26 inspectors of the NII are responsible for surveillance of 11 nuclear power stations, three radio-chemical centres, five nuclear fuel production works and the UKAEA's facilities at Windscale, Dounreay, Springfields, Winfrith, and Harwell.

CERN opens data transmission experiment

THE European STELLA experiment to transmit scientific data by satellite between sub-nuclear physics laboratories was initiated today in Geneva. Directors-General of the European centre for nuclear research, CERN, the Internal Market and Industrial Affairs Commission of the European Communities and the European Space Agency took part in a ceremony inaugurating fast and reliable data transmission between CERN and laboratories in Hamburg, Saclay, Oxford, Pisa, Dublin and Graz. The STELLA system will transmit data at 1 megabit per second using the European telecommunications satellite OTS-2.