

be \$110,000, but he will not confirm this, saying only that his salary is not all that much higher than it was at Harvard.

The university is also giving him an appointment in astronomy and the chance to hire additional faculty to build up the

French nuclear power

Cap de la Hague heads on

The French government has finally approved a major extension of the nuclear fuel reprocessing plant at Cap de la Hague, near Cherbourg on the English Channel coast. Meanwhile, a major and partly critical report on La Hague and on reprocessing in general remains unpublished.

The extension will cost some FF20,000 million (£1,786 million) and covers the upgrading of the existing UP2 400 plant to handle 800 tonnes of spent pressurized water reactor fuel and the construction of a completely new plant (UP3) to handle the same amount. The plants would handle French spent fuel and that arising from plants in Japan, West Germany and Belgium with which the French fuel company Cogema already has contracts. Without the extension, the French nuclear power programme would have been compromised. But UP2 400 has been notoriously ineffective — reprocessing only 250 tonnes in its first five years compared with its projected 2,000. After a series of accidents, one of them potentially disastrous (see *Nature* 290, 538; 1981), the present government set up a scientific commission to investigate the plant.

The report is now complete and should be published in mid-February — but the government has announced that the expansion of La Hague should go ahead

physics department, which he considers excellent in some areas. "It's a very exciting prospect of being able to build a good group", he says. "I don't believe scientists go anywhere for money."

Deborah Shapley

before the report is out.

The commission's conclusions, although not public, are believed to be broadly in line with remarks communicated by Professor Castaing, its chairman, to science minister Jean-Pierre Chevènement in April. These were that while Cogema and the Commissariat à l'Énergie Atomique now "have the know-how" to build the extension, the technology is only sufficient "for the short and medium term". Castaing told Chevènement that the most satisfactory solution would be "better waste treatment", in particular the isolation of neptunium and americium from the high-level waste stream. The chairman also argued that long-term storage of unprocessed spent fuel, either wet or dry, was feasible, safe and economical, and must be studied because part of the spent fuel to which France is now committed might remain unprocessed (if there were problems with the new plant for example). The commission also advocated work on final disposal for glassified waste forms and spent fuel itself. And he added that a fast breeder programme "implies substantial progress in reprocessing". These remarks may have stimulated the government to a preemptive announcement of the La Hague extension.

Robert Walgate

Soviet science policy

Spread the net

Softly, softly, decentralization and increased local responsibility are emerging as major themes in President Yuri Andropov's economic policy for the Soviet Union. The annual meeting of the Academy of Sciences of the USSR earlier this month suggested that that decentralization should also apply to science. Matching words to good intentions, coverage of the session in the official party newspaper *Pravda* concentrated not on the speech of the academy president, Academician Anatolii P. Aleksandrov, but on that of one of the vice-presidents, Vladimir A. Kotel'nikov, which emphasized the role of the "Republic" academies and the local filials of the All-Union academy.

The occasion coincided with the celebration last week of the 60th anniversary of the founding of the Soviet

INSERM's new shape

French medical researchers are to be subjected to a new form of scientific assessment next year — a mixture of stricter and looser rules than those they face at present.

The new arrangements are part of the long-awaited reform of the Institut National de la Santé et de la Recherche Médicale (INSERM), a reform delayed by arguments over whether directors of research groups should have terms limited to 12 years. That question having been settled — the limit will apply, but not immediately — the way was open for official approval of the full reform. That approval has now been granted, and the details of the reform were published last week.

Among the terms are the new forms of scientific assessment, dear to the heart of INSERM's innovative director-general, M. Philippe Lazar. Lazar has sought a system which would allow non-conformist — and perhaps superficially mediocre — groups to make their mark. He believes talent, particularly in the undervalued sciences, must be given its opportunity, but that judgements, when made, must be strict and scientific.

The reform meets these two objectives. Groups will be judged infrequently (probably less than annually) but firmly by specialist scientific commissions — which must visit the laboratory concerned. The result will be the definition of a research programme, against which the group will be assessed next time round, with a guaranteed long-term budget.

The mechanism will give groups more freedom and more time from pointless form-filling and fund-hunting, Lazar believes.

Robert Walgate

Martlesham in business

An important new semiconductor manufacturing process that was originally developed at British Telecom research laboratories is now being exploited commercially by British Telecom's offshoot, Martlesham Enterprises Ltd, together with Thomas Swan and Co. Ltd.

In January this year British Telecom set up in partnership with other investors to exploit a new process developed by Dr M.M. Faktor and Dr R.H. Moss at British Telecom's laboratories at Martlesham Heath. The process uses a new series of compounds developed in association with Professor D.C. Bradley at Queen Mary College, London, in a technique known as metallo-organic chemical vapour deposition (MOCVD). Existing techniques for MOCVD which used highly toxic and explosive trialkyl gallium and indium compounds had proved extremely hazardous, and had

caused several fires and explosions.

The new chemicals will avoid the use of these dangerous compounds and will also increase the range of applications of the method. In particular the process can now be carried out much more effectively with indium phosphide, a material which is likely to find increasing applications in semiconductor devices which emit and transmit infrared light; connected to optical fibres such devices will be important in long-distance optic information links.

Martlesham Enterprises, after a long search, has now awarded manufacturing and selling rights for the new process to Thomas Swan, a specialist chemical manufacturer, which has already secured advance orders for the new chemicals and process equipment from the Massachusetts Institute of Technology.

Tim Beardsley