

conference from 1969 to 1971 and who is now with a pro-arms control group called the Committee for National Security, says that although the Soviets are clearly making political hay out of the proposal, it is nonetheless more than just words if experience is any guide. "They know that if they make a statement like this, they will eventually be called on it", he says.

**Stephen Budiansky**

## French universities

# More change

### Paris

The French universities are to be reformed — again. A couple of years ago, the then President Giscard d'Estaing's minister of universities, Mme Alice Saunier-Seïté, set about the universities with a hatchet, amputating this and that to academic screams of "Fascist!" and worse. But now, more quietly and more carefully, the present socialist government of France is setting about a similar task. According to present analysis, Mme Saunier-Seïté was right about many things — it was only her draconian methods that were wrong.

The socialist idea is to base change on a 130-point questionnaire sent out a few months ago to presidents of universities, engineering schools and other such establishments by M. Claude Jeantet, cabinet member at the ministry of national education. The questionnaire was very far-reaching: it encouraged respondents to redefine the role of higher education in France. Jeantet has just analysed the results of that questionnaire — and he will use them to prepare the text of a new law on French higher education for his minister, M. Alain Savary. The new law is promised for the autumn. Although Jeantet will not publish the figures until then, it is already emerging that the government's task will be aided by a remarkable and sudden change in social outlook in the universities — one that has surprised even Jeantet. Now, university staff, often regarded in France as left-wing, see the government and even industry as partners, rather than enemies as appeared to be the case under Giscard d'Estaing. Now, it seems from the questionnaire, the universities are ready to forge links with industry and to run more courses aimed at training students for productive employment — an area in which they have previously been weak. It seems that one remnant of the 1968 university rebellion — a horror of the market-place, and of all government control — is being replaced by a nationalistic commitment to help France escape from the present economic crisis. According to Alain Geismar, one of the revolutionaries of 1968 and now vice-president of the University of Paris VII, the universities are now preparing to consider the provision of continuing education, post-retirement courses and science shops on the Netherlands model.

# Argonne prepares for change

### Washington

Argonne National Laboratory is renouncing a 16-year old agreement with a consortium of some 30 universities that has governed the laboratory ever since its principal machine, the Zero Gradient Synchrotron (ZGS), was built.

The laboratory outside Chicago is one of several, large, multipurpose energy laboratories whose fate is being deliberated by the White House and the Energy Research Advisory Board of the Department of Energy (DoE) (see *Nature* 6 May, p.3). Rumours that Argonne was to be closed helped prompt the move to change and streamline the laboratory's management. The ZGS itself was turned off a few years ago, leaving the laboratory to carry out other energy studies and nuclear physics, as well as some biology and other basic research.

Back in the heyday of building machines for high-energy physics, many colleges in the middle of the country wanted to have a big machine. When it was decided to put it near Chicago, a compromise was effected, in which other universities in the region could make input, and help get their scientists onto the machine, through a management group, the Argonne Universities Association (AUA). AUA's main job was

to coordinate the high-energy physics programme at Argonne, but it also had management responsibility in other areas. The University of Chicago was also involved in management, through a tripartite agreement involving the university, AUA and DoE, which provides 90 per cent of the laboratory's budget of \$200 million.

Without the ZPG, however, there is no need for regional high-energy physics co-ordination at Argonne. As one scientist formerly at the laboratory says, the AUA structure is also potentially divisive, allowing almost anyone who wants to do something to Argonne to get into the act.

So Argonne's management will gradually be streamlined. AUA will bow out and the University of Chicago will become the manager. Regional universities can still participate through an advisory steering committee. DoE will continue to fund the laboratory.

The laboratory seems unlikely to go out of business, according to DoE, but it may be substantially redirected. For instance, Senator Charles Percy wants to bolster the laboratory's flagging mission by transferring civilian research activities now at Los Alamos and Livermore laboratories to Argonne.

**Deborah Shapley**

Behind a broad willingness to change in the universities, however, a number of difficult issues lurk. For example, one of the hottest and perhaps most important for French science is the reform of the French PhD system, presently a two-step exercise which is both weaker and stronger than an American PhD. The weak step is the more contentious: the troisième cycle (essentially a two- or three-year MSc course). A good result in the troisième cycle is enough to get a graduate an effectively tenured post as a researcher (assistant at a university, or attaché in a government laboratory). The second step — the major thesis, leading to a doctorat d'état — can take seven years.

Science minister Jean-Pierre Chevènement's law for research and technology, in its present form, contains a commitment to change the system, but no details about how it is to be done; that is up to Jeantet and Savary.

Tenure is, however, a very closely regarded right in France, and the unions, whose influence over the government is strong, will defend it vehemently. One University of Paris professor, whose left-wing leanings combined with a desire to see France do good research perhaps make him typical, said last week that he was "schizophrenic" over the issue. The French system leaves a large pool of relatively untalented researchers at work in France, half of whom would not be in research if they were in the United States.

**Robert Walgate**

## Franco-Soviet space-flight

# Up and away

The space-flight of the Frenchman Jean-Loup Chrétien, the first West European in orbit, has been hailed as a triumph for détente and cooperation in both France and the Soviet Union. Although events in Poland had moved a number of French scientists to sign petitions advocating withdrawal from the flight, the Centre National d'Etudes Spatiales (CNES) says that Chrétien's is merely the logical next step in a cooperation programme that has been flourishing for fifteen years.

The coincidence of Chrétien's flight and the final test-run of the US shuttle prompted *Le Monde* to draw a contrast between the French approach and the "cold-war" aspects of *Columbia*. (The fact that, in spite of frequent official denials, the Soviets also appear to be working on a shuttle with, presumably, a similar military potential, was overlooked.)

In their run-up to the flight, the French have exercised considerable tact, even coining the word "spacionaute" to avoid using either the American or the Russian terminology. In return, the Soviet side has permitted a degree of openness about the preparations for the flight that has not been seen since the preparations for the Soyuz-Apollo flight in 1975. While some of this