

## Spanish universities

**Tenured posts on offer***Barcelona*

LAST year's reforming legislation is now taking effect in Spanish universities and in the Consejo Superior de Investigaciones Científicas (CSIC, the Spanish science research council). In the universities, the process has begun that will allow members of their teaching staff now employed on short-term contracts to become "titular" professors with tenure; and new research positions have been created in CSIC.

The new university selection procedure is a direct consequence of the Law for University Reform (see *Nature* 305, 756; 1983) under which there will be only one way into university teaching. The government intends that the number of professors under contract will be reduced until it represents no more than 20 per cent of the total teaching staff. In some universities, such professors now represent more than 70 per cent of the teaching staff, even though they carry out the same functions as tenured professors. Those now teaching under contract will be free to apply to become titular professors, and this procedure will also be open to Spanish scientists working abroad and to some holders of fellowships.

As many as 8,000 people may be affected by the new law. Only 40–60 per cent of the applicants are expected to be successful; the rest of those now teaching in the universities will have their contracts renewed until 1987, with no possibility of further

renewal. One result of the new procedure will be that most of the teaching staff in Spanish universities will soon be civil servants. Some also fear that there will be very few posts available in the universities for new people, although the government has not gone as far as to accept the view that all the present teaching staff should be given tenure.

The situation in CSIC is quite different. The 56 new posts are not really new, but are vacancies created because people have retired or resigned. Nevertheless, in an institution where the average age of employees is 48, even such a small opening is valuable. When the new presidential team of CSIC took office last year (see *Nature* 304, 202; 1983), it had been hoped that a larger number of new posts would be created. There is likely to be a large number of applicants, some of whom will also be eligible for posts in the universities.

Meanwhile, the Ministry of Education and Science is preparing a Law for Science, and no major science policy decisions are likely until that is approved. The draft now circulating suggests a new structure for the main research institutions which will include the replacement of CSIC by a new body called the Instituto Nacional de Investigaciones Científicas and the provision of more new posts. But even if the bill is eventually passed, its effects are unlikely to be felt for a year or two.

Pedro Puigdoménech

## Soviet earthquake

**Early warning system works**

LAST week's earthquake in the Bukhara *oblast'* of Uzbekistan, which devastated the gas town of Gazli, involved no loss of life, although there were more than 100 injuries. But pumping operations at the main gas compressor, which feeds two trans-continental gas lines, were interrupted for a few hours.

The Uzbek authorities are justifiably proud of their rapid recovery from the disaster, and other seismic early warning system which enabled them not only to alert the public but to plan relief operations in advance. Within a few hours of the earthquake, tents, clothing and food had been rushed into the stricken area, and within 48 hours gas production from the Gazli field was back to normal.

The earthquake of unusual severity — barely a single building in Gazli was left intact even though, since the Tashkent earthquake of 1956, building regulations in Uzbekistan have required that all new buildings should be proof against shocks of 8–9 points on the Soviet 12-point scale.

During recent years several major research projects in the seismic areas of the Soviet Union have been aimed at methods

of forecasting earthquakes. These include the detailed mapping of known or suspected seismic areas, using palaeoseismic evidence in the areas where no historical records are available. Networks of seismic forecasting stations have been set up in vulnerable areas, and major engineering works are carefully monitored for seismic consequences.

Uzbekistan's early warning system relies in part on historical records for the region. Typically, a major earthquake is preceded by a number of weak tremors. In January this year, frequent though weak tremors were recorded in the Fergana valley by a special expedition rushed into the area and a major earthquake occurred on 18 February. A 6-point tremor in western Turkmenia on 22 February was not considered to be related to the Uzbekistan shocks but, according to Dr Nikolai Sheabin, head of the Strong Earthquakes Laboratory of the Institute of Terrestrial Physics of the Soviet Academy of Sciences, was linked instead with the Kumdag earthquake of spring 1983 and even with the Krasnovodsk earthquake of 1895.

Vera Rich

## Biological ethics

**Nakasone takes the lead***Tokyo*

THE first international conference on life sciences and mankind ended in Tokyo on 22 March with a set of conclusions to be presented to the heads of the Western industrial nations countries at the London summit in July.

The conference grew out of the proposal made by Japan's Prime Minister, Yasuhiro Nakasone, at last year's Williamsburg summit that problems presented by the rapid advance of the life sciences should be examined by an international committee. Nineteen scientists, theologians and philosophers — among them François Gros (Collège de France), Sydney Brenner (director of the Laboratory of Molecular Biology, Cambridge), Benno Hess (vice president, Max-Planck Society) and Sir Stuart Hampshire (Wadham College, Oxford) — were chosen to represent the seven summit countries and invited to visit Japan. In opening the conference, Mr Nakasone spoke of the growing public concern over *in vitro* fertilization, artificial determination of the sex of embryos, euthanasia... and the treatment of those in a persistent vegetative state. The conference did not, however, succeed in solving the problem on the spot. Indeed, given that only a week earlier Pope John Paul II, speaking at a conference on Gregor Mendel at the Vatican, had warned genetic engineers against the "moral misuse" of their abilities and reinforced Roman Catholic opposition to techniques that allow fetal abnormalities to be detected, it would have been hard for universally acceptable ethical principles to be spelled out. All the conference could do was to acknowledge that the "more the life sciences are applied, the more they would bear on ethics, customs, politics and law" and that "critical problems might arise in the future" but "no agreement on specific (ethical) norms could be attempted at present". Emphasis was, however, given to the need for scientists to make their discoveries much more "understandable to the public" and to encourage discussion through education and the media.

Conference participants saw their main contribution in setting a precedent for a group of independent scholars, not representing their individual governments, to discuss major scientific issues and directly to advise heads of state. Deliberations are to continue next year, this time with the sponsorship of the French Government. The exact format has yet to be decided but it is hoped that attention will shift to specific problem areas and that representatives from outside the summit countries — particularly from the developing countries — will be permitted to attend.

Alun Anderson