

## Irish make R&D a cross-border cement

### Dublin

Cross-border science and technology will benefit to the tune of IR£7.2 million from the International Fund for Ireland (IFI), the IR£60-million fund set up by the governments of the United States, Canada and New Zealand after the signing of the Anglo-Irish agreement in 1985. The objective of the fund is to encourage industrial and economic development in the six counties of Northern Ireland and the six bordering counties of the Republic of Ireland, although the board of the fund is also prepared to back projects on an all-Ireland basis.

The provisional allocation from the fund to science and technology is reasonably generous. Investment and business will get IR£19 million, agriculture and fisheries IR£4 million. The board is insisting that grants will be repaid out of royalties and other earnings.

Under its science and technology programme, the board has already approved a grant of IR£100,000 to the Queen's University, Belfast, for the provision of technical services to industry and a grant of IR£250,000 to the Magee campus of the University of Ulster (the amalgam of the University of Ulster at Coleraine and the Belfast Polytechnic which came into being two years ago) to found a development chair in information technology.

IFI has also agreed to support for a first planning and evaluation year a centre for environmental processing and analytical chemistry at Queen's University, Belfast. The idea is that the centre will raise funds from industry by inviting companies to become associate members.

A still more ambitious scheme, to which IFI is prepared to commit IR£2 million, is for an all-Ireland centre of technological excellence, possibly concentrating on software, microelectronics or new industrial materials. This will link together institutions north and south of the border, between which the funds will be divided. Queen's (Belfast), Trinity College (Dublin) and University College (Cork) are in the running, but the project is at an early stage, with firm proposals invited.

The programme in science and technology is being administered jointly by the National Board for Science and Technology of the republic and the Department for Economic Development of Northern Ireland. After the present fund has been allocated, the board expects to issue a call for supplementary funds later in the year, but expects that all its money will have been allocated by early in 1988.

Mary Mulvihill

## US under pressure to harpoon Japan's whaling plans

### Washington

JAPAN and the United States may soon be on a collision course over Japan's insistence on continuing its whaling operations in defiance of International Whaling Commission (IWC) recommendations.

The World Wildlife Fund (WWF) last week called on President Ronald Reagan to impose "strict economic sanctions" against Japan's fishing industry if it sends out its whaling fleet to the Antarctic in October. A major campaign to win the support of Congress and the public is following. The president is empowered by the Pell and Packwood Amendments to ban fish imports and to cut catch quotas in US waters of any country that "diminishes the effectiveness" of the IWC. Either move would hit Japan hard.

## Mount Fuji rumbles

### Tokyo

**JAPAN'S Mount Fuji is rumbling. And the Japanese Meteorological Agency has rushed a seismograph to the volcano's summit to monitor the quakes which began at the end of last month. But there seems to be little danger of eruption.**

Mount Fuji, which lies above the subducting Philippine plate where it slices into the mainland of Japan, last erupted in 1707. Explosions occurred about halfway up the south-east flank of the volcano and spewed out about a cubic kilometre of volcanic rock and ash, some of which reached the site of present-day Tokyo, about 100 km from the volcano. But since that time Fuji has been dormant.

On 20 August, personnel in the meteorological agency's observatory perched on the rim of the crater at the summit felt the ground tremble, and by 1 September there had been nine minor earthquakes (magnitude less than two on the Richter scale). With the climbing season on Mount Fuji in full swing and with the eruption of nearby Mount Mihara on Oshima island still fresh in the minds of agency officials (see *Nature* 324, 805; 1986), the agency hurriedly installed a portable seismometer. And scientists now want a permanent summit station.

But researchers at Tokyo University's Earthquake Research Institute, which maintains seismographs on the flanks of the volcano, scoff at the publicity surrounding the event. They point out that about ten similar minor quakes occur every month. Moreover, the sharp P-wave arrivals of the recent earthquakes suggest they are of tectonic rather than volcanic origin, according to Professor Yoshiaki Ida of the institute. Harry Glicken

In 1986, the United States came close to applying sanctions when Japan defied an IWC ruling to stop commercial whaling from 1986 to 1990. But the dispute ended in a compromise agreement by which Japan agreed to stop commercial whaling from 1988. Now the WWF accuses Japan of breaking the terms of the agreement.

Japan argues that it will stop commercial whaling in 1988 as agreed. But it is going to substitute "scientific whaling" which is allowed by an international agreement permitting the killing of whales for scientific research. Japan's "scientific" research plans, which involve killing 875 minke whales and 50 sperm whales per year, have already been castigated by IWC's scientific committee as unlikely to add any useful knowledge. And as the whales will be caught by the same boats, and their meat sold on the commercial market, "scientific" whaling looks very like commercial whaling in disguise.

WWF research scientist Roger Payne is particularly concerned over plans to kill sperm whales. The 50 whales to be killed would be males, which are much larger and thus of greater commercial value than females. The number of sperm whale males has already been reduced to levels where reproduction of the species is endangered, he believes. Minke whales may be under less of a threat, but nobody has sure knowledge of safe catch levels. Data on population biology is sorely needed but, according to WWF president William Reilly, cannot come "from the study of dead whales".

Iceland has also just announced plans for scientific whaling and will be put under pressure by WWF calls for sanctions. But Japan remains the most important target as it controls most of the world market for whale meat.

WWF will try to sway Japanese opinion by collecting one million signatures on a petition to the Japanese government "respectfully requesting" that the moratorium be observed. If the petition is successful, commercial whaling may end for the foreseeable future, well beyond the end of the moratorium in 1990. Once whaling facilities have been closed, it is unlikely that it will be economic to re-establish them. The Soviet Union, which took the largest catch of whales after Japan, has already decided to abandon whaling.

Whether the US administration will take action in time to halt the departure of Japan's whaling fleet for the coming Antarctic summer remains to be seen. Any sanctions will have to be considered in the light of the many problems besetting US-Japan trade relations. Alun Anderson