

## NEWS IN BRIEF

### Livermore earthquake raises safety concerns

A debate about the safety of nuclear research facilities at the University of California's Lawrence Livermore Laboratories has been rekindled by an earthquake which hit the laboratory last Thursday causing minor injuries to almost 30 employees, and leakage in a storage tank containing tritium contaminated water. According to the laboratory, no radioactive material was released into the atmosphere or the environment as a result of the accident and key research buildings containing plutonium and tritium sources were undamaged. However, the laboratory added that a 30,000 gallon tank containing 50 microcuries/cc of tritium had leaked about 50 gallons into an asphalt basin on the ground, although none had escaped from the containment building.

The earthquake is also reported to have caused \$1 million worth of damage to the Shiva facility. The bolts, holding down the metal frame holding the 132 ft facility, sheared. Other damage at the laboratory included the displacement of filing cabinets and office trailers which were knocked off their stands. Last year, the earthquake hazards faced by the laboratory became a major source of controversy when local groups seeking to curtail nuclear weapons research at the laboratory claimed that earthquake damage could lead to a major leak of radioactivity. Last week's earthquake which measured 5.5 on the Richter scale and was centered 10 miles from Livermore was one of the severest to hit the San Francisco region since the major earthquake of 1906.

### Plan to dump toxic wastes in Third World

A number of US waste disposal companies are drawing up plans to dispose of toxic wastes in Third World countries as a result of the imminent introduction of strict regulations covering the dumping of such substances by the Environmental Protection Agency.

One Colorado company was reported last week to have plans to open waste recycling plants in three foreign countries, thought to be Sierra Leone, Liberia and Chile. Officials from the company, Nedlog Technology Group Inc., said that the plants are planned to extract metals such as copper, cadmium and zinc from industrial wastes.

Under new regulations it might prove impossible to dispose of wastes from this process in the US. The company was therefore "looking overseas to find countries that need foreign exchange and jobs and have the plant sites," said company vice-president James R. Wolfe.

State Department officials, however, are

worried that any such moves by US corporations could generate a backlash in the developing countries, which might decide jointly to "condemn the US for dumping its wastes in the black man's backyard".

### Deutch to resign from Energy Department

THE US Department of Energy confirmed last week that Dr John Deutch, previously director of the Office of Energy Research, and currently Under-Secretary of Energy — the third ranking position in the department — had submitted his resignation to the White House.

During his nomination hearings before the US Senate in 1977, Deutch made it clear that he intended to remain in Washington only for a limited period of time before returning to his position as professor of chemistry at the Massachusetts Institute of Technology.

However, speculation about Dr Deutch's future plans have been raised by reports that he may join President Carter's re-election campaign as an energy adviser and that White House aides are said to be increasingly disappointed with the political performance of Energy Secretary Charles Duncan. In particular, they are critical of his failure to "politicise" the department, for example by not taking a strong public stand criticising Senator Edward Kennedy's opposition to the decontrol of oil prices.

### Nobel Prize changes Pakistan's science

Science in Pakistan has received a major boost after the award of the 1979 Nobel Prize for physics to Abdus Salam. Pakistan's President, General Muhammad Zia-ul-Haq has publicly promised to allocate 1% of the country's GNP for scientific and technological research in accordance with suggestions made by Salam. This would mean an expenditure of \$100 million annually instead of only \$20 million at present.

The President has also agreed to give serious consideration to another far reaching proposal made by Salam at the Special Convocation held at the University of Islamabad during his recent two week visit to Pakistan. That is to make science, like religion, a compulsory subject at all levels of education. Since Salam's visit, scientists have been made exempt from the general ban on travel abroad.

Azim Kidwai

### French cracks cause new nuclear start up delay

THE French Ministry of Industry announced last week that it would

postpone by "several weeks" the scheduled start up of the troubled nuclear reactors, Gravelines I and Tricastin I. Cracks in the tubular base plates of the heat exchangers in the primary cooling circuits have already caused delays because of strike action by the trade unions involved who have demanded additional safety measures. The new delay will permit further tests to be made on equipment that has been designed to follow automatically the evolution of the cracks during the lifetime of the reactors. Preliminary tests of the monitoring equipment by the manufacturer, Framatome, have been inconclusive because they have been done on surplus plates, originally scheduled for export to Iran, that have no cracks.

In the meantime, a petition campaign launched last June by 22 organisations for "an alternative energy policy and for a democratic debate on energy" has received 500,000 signatures.

### Ariane given to private industry

THE council of the European Space Agency made final last week the French proposal to transfer the Agency's launch capability to the private firm Ariane-Espace. Ariane-Espace will be responsible for production and launching of all future ESA satellites. It will charge the Agency the following prices for various kinds of launches: 175mFFr for a launch requiring full Ariane power, 150mFFr for a satellite launch requiring only part power, and 95mFFr for a satellite that can be launched along with another in a double payload. The director-general of ESA will engage in discussions with the directors of Ariane-Espace to elaborate the details of the arrangement.

The ESA council also voted approval of the delayed 1980 budget and made the Earthnet programme of earth and meteorological satellite observations part of the official ESA budget. Earthnet had been previously funded on a voluntary basis by member states. The council also voted the funds for the Spacelab programme. In a related development, Switzerland, which is not an ESA member state, voted a sum of 7mFFr to participate in future improvements of the Ariane launcher.

### Correction

In *Nature* 17 January, page 237, the statement by the Scientific and Medical Committee for Soviet Jewry should read: "not only should the Hamburg meeting include on its agenda the question of the freedom of movement of scientists, also any scientific body that may arise from the meeting must ensure that a clause dealing with this problem is written into its constitution".