#### Swedish science medal

# One way out

Stockholm

Last week, Sweden's new prize for science, endowed by the late Holger Crafoord, inventor of the blood dialysis machine, and his wife Anna-Greta Crafoord, was presented for the first time. The prize was awarded jointly to two mathematicians, Professor Louis Nirenberg of the Courant Institute of Mathematics (New York University) and Professor Vladimir Igorevich Arnold of the State University of Moscow. Only one of the winners, however, was present in Stockholm to receive the prize medal from King Carl Gustaf. Professor Arnold had been unable to obtain an exit visa.

The Crafoord prize is already widely regarded in Sweden as a "mini-Nobel", although Dr Crafoord (who died earlier this year) always found the comparison irritating. There are several significant differences between the two prize funds —

### Biotechnology drain

Like a man trying to fill a bathtub while not knowing whether the plug works, the British Science and Engineering Research Council (SERC) last week asked the Institute of Manpower Studies at the University of Sussex to look into the rate of emigration among qualified British biotechnologists. The council has apparently taken to heart the announced departure of Professor D.C. Burke of the University of Warwick, who is to become research director of a Canadian company.

The project, called a "partial survey" will concentrate on the outgoing flow of people. To begin with, the Sussex institute will attempt a definition of which kind of people are considered "key" by their contemporaries. Thereafter, it will use the scientific network to compile a list of those who have left the United Kingdom in the past two years, and of their destinations.

A spokesman for the institute said this week that he had no idea how many people were at risk of being seduced away from Britain, but that he imagined that the institute would be able to identify a few hundred people in this category. Graduate students would be included where appropriate. The spokesman said that the institute had insisted, in its dealings with SERC, on a guarantee of confidentiality: numbers might be disclosed, but not names and addresses.

Even so, it seems to be part of the intention that there should in future be a means by which British research councils should be able to "keep in touch" with departed biotechnologists, reminding them "when the time is right" of the benefits of returning. The custody of the register remains to be decided.

in particular, the Crafoord prize will be awarded for one subject only each year this year it was the theory and application of non-linear differential equations rotating between mathematics, astronomy, the geosciences and the life sciences. Nevertheless, the value of the prize money - 350,000 Swedish crowns (£35,000) this year - is at least comparable with the Nobel prizes (which are now around £100,000). The fact that, like the Nobel prizes in physics and chemistry, the Crafoord prize winners are selected by the Royal Swedish Academy of Sciences, reinforces the association. The Swedish media, therefore, when Professor Arnold failed to arrive, inevitably compared his absence to that of the three "missing" Novel laureates of recent years — Boris Pasternak (1958), Aleksandr Solzhenitsyn (1970) and Andrei Sakharov (1975). In fact the cases are not entirely comparable. The three Nobel winners — two for literature and Sakharov for peace - received their awards for writings and actions which the Soviet authorities considered hostile. Arnold's absence, although explained by many of his colleagues attending the prize



ceremony and symposium as due to his having signed a protest letter in defence of a colleague some years ago, was not directly related to the research for which he received his prize. Moreover, Solzhenitsyn and Sakharov were not so much prevented from leaving the Soviet Union to collect their prizes as afraid that, if they did leave, they would not be allowed to return.

An even more significant difference, perhaps, was the attitude of the Soviet embassy in Stockholm. In the cases of the three "absent" Nobel laureates, the Soviets boycotted the ceremony completely. At the Crafoord ceremony, however, the embassy was represented by its scientific attaché, who clearly found the situation embarrassing. But he had come equipped with a cutting from Izvestiya, listing the results of the election of new foreign members to the Soviet Academy of Scientists. These included three Swedes: Lennart Carlsson, Jerkar Porath and Lars Ernsfer; three Americans: Russell Bardin, Emil Smith and Gilbert White; and two Britons: John Bertrand Adams and Lord Todd. This, he said, showed the Soviet desire for continuing fruitful international cooperation in science. Vera Rich

### Australian physiology congress

## **ICSU** blacklist

Canberra

The Australian Academy of Science has averted the withdrawal by the International Union of Physiological Science (IUPS) of sponsorship for the physiology congress scheduled to take place in Sydney in August-September next year. As a consequence of the Australian government's refusal to grant visas to two Soviet scientists who were to attend the biochemistry congress held by the International Union of Biochemistry (IUB) in Perth last month (see Nature 9 September, p.97), the International Council of Scientific Unions (ICSU), of which both IUB and IUPS are constituent bodies, proposed to blacklist Australia as a conference centre.

Bowing to pressure from the president of the academy, Professor Arthur Birch, and spurred by the impending crisis, the Australian government has now publicly stated what it had previously implied that it is willing to bend the rules a little to allow Soviet scientists who are also senior officials to attend conferences in Australia, provided sufficient notice is given. This is a softening of its blanket banning of all highranking Soviet nationals regardless of their purpose in seeking entry into the country. On 31 August, the minister for foreign affairs, Mr Anthony Street, wrote to Professor W.N. Christiansen, the foreign secretary of the academy, to say "the government's procedures in relation to the entry of senior Soviet nationals wishing to participate in genuinely international conferences are not inflexible". On 9 September, he wrote: "In cases involving attendance at multilateral conferences, [the government] will weigh [its policy] in seeking to ensure the entry of all bona fide participants provided, of course, normal entry criteria are met. In this respect the government will maintain conditions similar to those applied by like-minded Western countries in their national interest." On 9 September, Mr Street said in the House of Representatives: "The Soviet Union has clearly embarked on preventing Australia being used as a venue for international conferences. We are not prepared to give the Soviet Union that satisfaction.'

By spelling out its policy, the government enabled the academy to reinstate its assurance to IUPS on free circulation while still maintaining its sanctions against the Soviet Union for its invasion of Afghanistan. In addition, however, IUPS asked the government to decide on visa applications no later than 30 days before the physiological congress. The minister agreed, but pointed out that the ICSU rule that visa applications should be made 90 days in advance should apply to Australia in order to give the government as much time as possible to consider applications.

Vimala Sarma