## EMBO\_

## **Transatlantic translation**

A unique proposal for regulating genetic research in Europe has been developed. Colin Norman reports

A MECHANISM for controlling potentially hazardous genetic manipulation experiments in Europe will soon be proposed by the European Molecular Biology Organisation (EMBO). A special EMBO committee, consisting of 10 leading European biologists, agreed at a meeting last week that regulations already drafted to control such research in the United States are more than strict enough to protect public health, and a statement expected next week will recommend that they should be implemented in Europe.

Although EMBO is purely an advisory body, with no authority to regulate research, its recommendations will probably carry considerable weight. Its proposals are especially relevant for smaller countries which are unlikely to establish their own mechanisms for controlling genetic manipulation experiments, and, if implemented, they would set up a unique arrangement for regulating scientific research on an international basis.

The experiments involve the use of

## **Tailoring tactics to suit**

Vera Rich reports from Brussels, where the Second World Conference of Jewish Communities on Soviet Jewry was held last week.

THE problem of Jewish scientists and other academics wishing to emigrate from the USSR to Israel continues to arouse debate. So too does the degree to which scientists should commit themselves to helping and campaigning for their disadvantaged colleagues. At the conference on World Jewry, a Special Commission on Science and the Humanities, chaired by Professor Yuval Neeman of the Israel Committee for Soviet Jewry, resolved to set up an International Federation of Concerned Scientists. Professor Denis Schiame of Oxford explained that its purpose would be to gather and disseminate information and to coordinate the activities of its affiliates from all countries where committees already exist or are being formed.

But the precise policy to be followed provoked lively discussion. A large

newly discovered enzymes to transplant genes from virtually any living organism into viruses or bacteria, and the proposed US regulations, drafted last December but not yet finalised, would outlaw some of the more hazardous experiments and require that others be performed under special safety conditions. In particular, they specify that several types of experiments should only be carried out by transplanting genes into bacteria or viruses which have been genetically crippled to render them incapable of surviving outside an artificial laboratory environment.

Some members of the EMBO committee considered those regulations stricter than necessary to protect public health, but agreed that not all European countries should repeat the tortuous process of drafting their own regulations. So, with the proviso that the US controls are not made yet more stringent, the committee recommends that each country should establish its own national committee to vet applications for research grants involving gene transplant experiments and decide whether they conform to the US regulations. EMBO also suggests that an international committee, possibly under the auspices of the European Science Foundation, should deal with problem cases.

One possible problem area involves the certification of crippled strains of bacteria or viruses. The US regulations detail the criteria by which modified microorganisms should be judged sufficiently crippled for use in gene transplant experiments, and one strain of bacterium recently produced at the University of Alabama is expected to meet the criteria. Although strains produced in the USA will be made available throughout the world, other modified strains may be produced in Europe.

National committees would be responsible for certifying whether or not such strains meet the criteria, but the EMBO committee is willing to offer its advice in specific instances. It has also offered to advise European governments and individual scientists about technical aspects of genetic manipulation research and safety precautions, a service that could be particularly useful for countries with small numbers of researchers.

While some European countries, including Britain, are already developing their own regulations and are unlikely to adopt the US version lock, stock and barrel, the idea of an international committee to discuss problem cases is likely to have considerable support throughout Europe.

contingent, headed by the Nobel Prizewinner for Physics Dr Polykarp Kusch, stressed the importance of using international scientific cooperation agreements, which at present tend to favour the USSR, to exert pressure on behalf of disadvantaged scientists. The case of refusnik Aleksandr Lerner and the Fourth International Conference on Artificial Intelligence was cited: his attendance and active participation was secured after pressure was applied that threatened to change the venue from Thilisi to a location outside the Soviet Union, But Dr Gabor Dessau of Pisa stressed the beneficial effect which foreign contacts could have on Soviet scientists who, he said, are often themselves secretly in favour of a greater freedom of movement. The idea of a total boycott of Soviet science was ultimately firmly rejected. It was agreed that the tactics to be used should rather be tailored to each specific problem as it arose.

Golda Meir referred to the "education tax" on Soviet academics, and cast doubt on the possibility of a mass emigration of scientists seriously depleting the Soviet Union: dismissal was the immediate consequence of a visa application, she argued, so that "their brains are drained already". Aleksandr and Evgenii Levich, refering to the problem of classified information, recalled that their father, Academician Venyamin Levich, had been promised an exit visa at the end of 1975, when his knowledge would no longer be "classified"; this promise was later withdrawn.

Mention was also made of Soviet delegations to international conferences which regularly consisted of "representatives" chosen for their standing with the authorities and not their scientific knowledge or relevance.

The absorption of scientists from the Soviet Union into the Israeli economy, although not a direct concern of the conference, was discussed in various formal and informal gatherings. The current policy, said Dr. Eliezer Rafaeli, Rector of the University of Haifa, is to absorb them into existing institutions, establishing new departments or laboratories if necessary, but not setting up new universities.