

their work to such a registry. The supervisory and monitoring machinery would remain a national responsibility. There is a further recommendation that the code of practice drawn up by the Williams committee be followed rather than the NIH code since Williams specifies a greater degree of physical containment for most experiments, and is more flexible.

The EMBO guidelines also support the idea of national advisory groups, which would specify the conditions of containment to be used. EMBO says that either the Williams or the NIH codes of practice may be followed, but not a mixture of both. The different degrees of emphasis on biological and physical containment in the two codes, it contends, could lead to confusion.

Both organisations emphasise the need for regulations to operate at the same level in different countries and

therefore suggest that the national advisory committees should meet regularly. In addition they both propose that suitable experiments should be undertaken to assess the conjectural risks associated with recombinant DNAs and to pave the way towards eventual adjustments to the guidelines.

In Britain, however, many biologists are unhappy about the draft Health and Safety Commission (HSC) regulations now being circulated for comment. The regulations require among other things compulsory notification to the HSC of any experiment intended "to alter or likely to alter the constitution of any microorganism". Although the HSC has asked which experiments should be excluded, this type of blanket regulation, and the fear that proposals submitted to the HSC would be delayed interminably by bureaucratic machinery, have stimulated a group of

scientists to ask government that the HSC regulations should be withdrawn completely. They wish to see the voluntary procedures recommended by Williams followed instead.

There is strong feeling that in this instance the HSC is not the most appropriate body to deal with the complex scientific issues involved and that public interest would be better served if they were considered by an expert committee such as the Genetic Advisory Manipulation Group for example. The Health and Safety Commission would still have powers under the present Health and Safety at Work Act to inspect laboratories to see whether the containment procedures recommended by Williams were being implemented, and could probably be brought in by GMAG to prevent experiments considered unsafe being carried out. □

COMECON

● Scientific cooperation between Comecon countries is still "incommensurable" with the requirements and potentialities of the member countries, according to the Polish journal *Sprawy Międzynarodowe*. The relatively slow development of joint research and development projects is to a certain degree attributed to "subjective factors" such as lack of personal initiative, but also to the "excessive autarchic tendencies" of individual bodies which often necessitate intervention by the "central authorities" (that is, Party and Government) of the member countries.

A number of remedies are proposed to help the integration of research which is a fundamental tenet of Comecon planning. Most of these relate to improvements in organisation and management, the integration of science and industry and so on. One, however, suggests a basic lack in the whole policy of cooperation. This involves the question of funding. At present, it appears, the necessary funds are obtained often only after protracted negotiations between the countries concerned. To speed up the process, it is suggested that a special fund should be created within the International Bank (in Moscow) for the integration of research and development in the Comecon countries, with, in due course, the possible establishment of a Comecon bank especially for the financing of research.

● Since the discovery of lasers, laser research has been seen as a modern and progressive subject, eminently suitable for Socialist countries. The Second International Conference on

Luminescence at Szeged in Hungary last month showed that interest continues unabated. In particular, a Hungarian team described the use of lasers to determine "hitherto-undiscovered properties of substances", while Soviet, Polish and East German specialists reported considerable success in the use of lasers to investigate photosynthesis.



● Cosmonauts from all the Comecon countries—including Cuba and Mongolia—are to take part in manned space-flights between 1978 and 1983 as part of the Interkosmos programme. Until now, the programme has consisted solely of the launching of unmanned satellites, put into orbit by Soviet rockets and carrying experiments and equipment provided mainly by the Soviet Union with some participation from the European members of Comecon, notably East Germany and Czechoslovakia. Not surprisingly, Soviet participation in the new programme will also be considerable: as well as providing the spacecraft, orbiting stations, and launch facilities,

the Soviet Union will train the cosmonauts—training will take place at the Soviet "Yuri Gagarin" training centre. And the wording of a recent TASS communique suggests that at least one crew member in each flight will be from the Soviet Union.

● *Chemicisation*, the massive, widespread, undesirable use of artificial fertilisers, has long been a cornerstone of Soviet agricultural policy, and, not surprisingly, has become standard practice in other Comecon countries. In certain cases, however, the results have not been entirely successful. In Hungary, for example, excessive use of fertilisers has considerably reduced the sugar content of sugar beet in recent years, so that while the yield of beet itself has increased steadily, the overall sugar yield has remained constant. To encourage the production of maximum-yield crops rather than overall gross bulk, the Director-General of the Hungarian Sugar industry recently announced a new scheme of payment for sugar-beet crops under which farmers will receive a premium based on sugar content. The Hungarian experience is, apparently, not unique; recent Soviet resolutions on the further improvement of agriculture stress the need "to increase research on the study of the effect of mineral fertilisers and other chemical products on the quality and biological total value of agricultural production". This marks a radical change from traditional attitudes: until now the largest crops rather than the best have always won official acclaim.

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