

machinery to below 84 dB(A) if possible. The commission has no estimate of the cost of its proposal.

On this occasion, Britain's Health and Safety Commission seems to be a step ahead of the European Commission, whose directive is still some way off. But the signs are that Europe will go for a limit of 85 dB(A). **Judy Redfearn**

## Bulgarian astrophysics

### Cosmic celebrations

The "Interkosmos-Bulgaria-1300" satellite, Bulgaria's cosmic celebration of 1,300 years of statehood, was launched last Friday (7 August) to the surprise of the Bulgarian public, who had expected it would form the climax of the celebrations in October.

The designation of the satellite was equally unexpected — although the original plan was for a single celebratory satellite, analogous to the Polish Interkosmos-Kopernik-500 in 1972, it was announced earlier this year that there would be two satellites, one containing Bulgarian experiments only and the other a mixed Soviet and Bulgarian payload. However, only in the Moscow radio coverage of last Friday's launch was it made clear that the mixed payload was already in orbit — aboard the Priroda-Meteor satellite launched on 10 July.

In the Bulgarian celebrations, the timing has proved unfortunate, since the head of the jubilee committee, Lyudmila Zhivkova (the daughter of First Secretary Todor Zhivkov) died suddenly on 20 July.

Scientifically, however, the satellite is operating well, and has done much to offset Bulgarian disappointment that the Interkosmos manned programme did not allow them a second chance of a cosmonaut aboard a Salyut craft. By way of consolation, Georgi Ivanov, whose Soyuz transporter failed to achieve a link-up with Salyut, was invited to attend the launch and spoke warmly of Soviet-Bulgarian cooperation.

Although the experiments on the satellite (a modified "Meteor" meteorological probe) are said to have been produced "with the assistance of Soviet scientists", the twelve experiments comprising the 350-kg payload are of Bulgarian design, and concentrate on those branches of space physics of particular interest to the Bulgarian space team, including plasma, high energy charged particle studies, atmospheric luminescence and magnetosphere studies. According to Dr Kiril Serafimov, chairman of the Bulgarian Space Research Council, a special study will be made of ionosphere troughs and equatorial anomalies in the magnetosphere, which it is hoped will provide valuable data for such applied fields as radio-wave propagation, the mechanism of rare meteorological anomalies and the radiation balance of the Earth. **Vera Rich**

## Carcinogenicity testing

### Well, yes and no

#### Washington

Semantic juggling has allowed US health officials to escape the embarrassment of discovering two reports on the widely-used chemical dimethyl terephthalate (DMT) which are virtually identical but contain directly conflicting conclusions about its carcinogenicity.

Re-examination of the test data has raised a dilemma for scientists with the Department of Health and Human Services' National Toxicology Program (NTP) that is frequently faced by regulatory agencies: how to present policy-makers with the results of ambiguous animal tests.

The solution proposed by NTP's peer review committee is to describe data on increased cancer rates in male mice as being "statistically significant" but "biologically equivocal".

DMT is widely used to provide flexibility in plastic products from food wrapping to bottles. The source of the confusion is a technical report on its potential carcinogenicity prepared in the 1970s for the now-defunct Clearinghouse on Environmental Carcinogens of the National Cancer Institute (NCI).

The tests were carried out by a private contractor, Hazleton Laboratories. They revealed no evidence of increased cancer rates among male and female rats, or among female mice exposed to low or high doses of DMT. However, a 27 per cent incidence of lung tumours was found among male mice receiving the high doses, considerably higher than the 4 per cent incidence in a group of matched controls. On the basis of these data, which were approved by an NCI peer review group, a report was published describing DMT as a carcinogen in male mice.

Soon afterwards, however, the report was challenged by scientists working with Hercules Incorporated, a major manufacturer of DMT. They claimed that the relatively low incidence of lung tumours among the matched controls was out of line with results from other control groups. NCI scientists reassessed the Hazleton data, this time using for comparison not the matched control group, but pooled results from three other control groups associated with different experiments which had spent overlapping periods of time in the same room. The latter groups revealed a lung tumour incidence of between 10 and 18 per cent over a two-year period, much closer to the 27 per cent of the exposed group.

A revised version of the technical report was subsequently issued through the National Technical Information Service (this time without peer review) which stated in the summary that the new data indicated that DMT was not a carcinogen.

Several research libraries, however, still

have copies of the first version on their shelves. And the apparent discrepancy between the two reports was brought to the attention of NTP, which has taken on the responsibilities of the NCI clearinghouse, three months ago.

Re-examination of the data revealed that the tests appeared to have been properly conducted, even though the incidence of tumours in the matched controls seemed inordinately low. "We view the incidences of total lung tumours in the matched male controls with some suspicion" reported Dr John Moore, deputy director of NTP.

A report on the NTP staff review was brought before the peer review panel of the programme's board of scientific counsellors last month. Discussion soon focused on whether, in revising the original report, the NCI staff had been correct in ignoring the matched control data and

### One more journal

A new scientific journal is to be launched at the beginning of 1982 by the European Molecular Biology Organisation (EMBO). One of the objectives of *The EMBO Journal* is to redress the balance between Europe and the United States where, it is argued, the predominant and preeminent position won by American journals in the publication of molecular biology has put European molecular biologists at a disadvantage.

The new journal, which has been in the air for the past three years, was finally agreed after a ballot of the 500 members of the organization held in January. The journal will resemble *Proceedings of the National Academy of Sciences of the United States of America* in that it will publish papers communicated by any of its members, each of whom will be rationed to a maximum of five papers a year by non-members of the organization.

A statement by the publishers of the new journal, IRL Press Limited of Oxford, England, says that EMBO members will be expected to take responsibility for the "scientific standard" of the papers they communicate. One of the obvious difficulties will stem from the heterogeneity of the membership, which is elected, and the differing interpretation of what molecular biology consists of in various European countries.

The editor of *The EMBO Journal* will be Dr John Tooze, executive secretary of EMBO and also, at present, the editor of *Trends in Biochemical Sciences*. One feature of the new journal is said to be speed of publication — the publishers have undertaken to print manuscripts accepted by the editor within twelve weeks of their receipt. A pilot issue of the journal is to be made available in September.