members of the staff, the true costs of moving have not been deducted from the savings and they doubt that the vacated site could be sold at market value during a recession.

Similarly, staff at the National Physical Laboratory claim that the proposal to close 200,000 square feet of buildings on the main site makes no economic sense. Some of the buildings recommended for closure are said to contain equipment such as standard force measurement machines and a vibration-free table whose removal would cost far more than the proposed savings. **Judy Redfearn**

Levich in New York

Down to work

New York

The fourth "Levich" conference held last month in New York was more like a routine scientific conference than a human rights protest. Organized by the New York Academy of Sciences and the City College of the City of New York, the Fourth International Conference on Physico-Chemical Hydrodynamics squeezed its concern for scientists' freedom in Eastern Europe into only a short tea-break. Professor Benjamin Levich, of the Weizmann Institute in Israel and simultaneously Einstein professor of physics at City College, participated as honorary chairman.

Five years ago at the first conference, Professor Levich was still in Moscow, a "refusnik" refused a visa to emigrate to Israel but also prevented from continuing his scientific work. Deprived of the sixtieth birthday conference normally accorded to Corresponding Members of the Soviet Academy of Science, Professor Levich was instead honoured with a conference organized by his colleagues in the West. The Soviet scientific establishment castigated this as an attempt to "set the scientific world in the West against the Soviet Union" — a charge strongly denied by Sir Derek Barton and Professor Brian Spalding, who stressed the "high importance" of physico-chemical hydrodynamics and of Levich's work in the field.

Nevertheless, the fact that the conference took place without the guest of honour inevitably publicized — and was intended to publicize — Levich's plight. When, the following year, a similar "Levich birthday" conference was convened in Washington DC, presumably n honour of his sixty-first birthday, the scientific purpose of the conference was again coupled with the desire of Levich's colleagues to win him the right to emigrate.

By the third conference (Madrid 1980), this aim had been achieved; Professor Levich had been in the West for more than two years and could preside in person. At the fourth conference human rights were referred to only in passing — in a review of the current situation presented by the Committee of Concerned Scientists and in an evening entertainment by a drama workshop from City College.

The conference, with its papers ranging from Czochralski crystal growth to three-phase coal slurries and from the haemodynamics of arterial flow with stenosis to two-dimensional flame propagation, honoured Levich rather by implication, indicating the wide ramifications of the discipline he helped to develop. Invited participants from the Soviet Union were unable to attend. **Vera Rich**

Acid rain

UK unrepentant

Stockholm

The Swedish government scored a modest success last week with its *ad hoc* meeting of the signatories to the 1979 Geneva Convention on long-range transboundary air pollution. The ministerial meeting accepted an expert report on the state of knowledge on acid rain, produced at a meeting the previous week, and it now seems likely that the convention will come into force by the end of the year.

Under the Geneva Convention, polluting countries must reduce sulphur emission, and the expert report effectively removed many of the objections that have been raised. There is no longer any doubt that sulphur dioxide and nitrogen oxides are responsible for the damage done to 20,000 Scandinavian lakes and a million hectares of central European forests.

Even so, Sweden's attempt to revive the "spirit of 72" when the UN Conference on the Environment was held in Stockholm was a flop. Some of the worst polluters, such as the United Kingdom, France and the United States, were complacent. Britain's Giles Shaw, Under-Secretary of State for the Environment, admitted the United Kingdom's burden of responsibility as Western Europe's biggest source of sulphur dioxide emission, but said that considerable strides had been made since 1972. Britain claims to have reduced sulphur dioxide emission by more than 20 per cent but mainly as a consequence of economic recession, the use of natural gas and low-sulphur North Sea oil and a greater use of coal.

The real surprise at the conference, however, was the change of heart by West Germany, where Chancellor Helmut Schmidt is anxious to win back the ecological vote after his party's near-defeat in the Hamburg elections. Another factor is the research carried out by Professor Bernhard Ulrich of the University of Göttingen which shows that 40 per cent of German forests have started to die, almost certainly as a result of air pollution. The expert report, however, considered as inconclusive the evidence that acid rain directly affects tree growth.

Scandinavian forests are not so far affected, principally because of the lower concentrations of sulphur dioxide and nitrogen oxides there. An ability to predict the speed at which acid rain will affect soils outside Scandinavia or the forests in that region, as well as the exact relationships between emissions and long-range precipitation, is crucial if the Scandinavians are to persuade other countries to spend money on pollution control. But the experts say that more research will be required before this can be done.

Some action at least is being taken. The Netherlands proposed reducing yearly per capita emissions of sulphur dioxide to 35 kilogrammes (the figure for the United Kingdom is about 88 kilogrammes) and nitrogen oxide emissions from 40 to 20 kilogrammes, which should halve the average wet deposition of sulphur in Europe. Although this proposal has not yet been accepted, the conference agreed that "even if deposition remains stable, deterioration of soil and water will continue and may increase unless additional control measures are implemented". **Jasper Becker**

US 1983 budget

Tighter still

Washington

The 30 per cent of US researchers who depend on federal funds are now a little closer to knowing how much money they will have when the new fiscal year begins on 1 October. The House of Representatives and the Senate have finally approved a budget resolution setting targets for government appropriations, that is, how much money may actually be spent in the 12 months starting in October. The Appropriations Committees of the House and Senate, each with 13 subcommittees, will now start working out individual spending figures.

A parallel but related process in Congress determines authorizations — the upper limits of what can be spent as well as approval for future years' programmes. Each process can modify the original budget request by the President but he has a veto. President Reagan has already vetoed a supplemental appropriation that contained, among other things, money for student loans, because it also included a housing measure he disliked. (Another supplemental appropriation, with the loans but without the housing, is expected to be passed soon.)

But last month's resolution may not put an end to the budget controversy that has dogged the Administration and Congress for most of the year, for the figures are somewhat higher than the President requested in domestic programmes, and somewhat lower for defence. If the appropriations committees agree these figures, the President could veto their measures. Even Washington has been bemused by the budget high jinks this year.

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