

# No respite from politics

*Attempts to lift environmental decisions above US politics are misguided.*

THIS month marks the founding in the United States of a new scientific organization dedicated to "bridging the gap between the world of scientific discovery and the social and political centres which must act on these discoveries to conserve life". Dubbed the Collegium Ramazzini (after the seventeenth century Italian physician who pioneered occupational medicine), the organization hopes to bring government, labour, industry and scientists together to speak with a "single voice" on the regulation of occupational and environmental health. This goal is as noble as it is doomed. To be sure, the need to elevate the level of debate on these issues is great. The tactics of interested parties has seemed to drift more and more from science. Environmentalists continue to be guilty of over-reliance on emotional appeal and the public bandwagon (the environmental equivalent of the "disease-of-the-month club"), witness the storm over Love Canal, where — as inexcusable as Hooker Chemicals' actions were — no link between the waste dump and health problems among local residents has so far been proved.

Industry, on the other hand, is increasingly invoking the specious argument that regulation is improper without "scientific certainty" — a regulatory nirvana unattainable by mortal man, to judge by the industry definition of "certainty". It should not be necessary to have to point out what the consequences would have been of waiting for "certainty" before requiring chlorination of water, pasteurization of milk or, for that matter vaccination against smallpox.

Worse has been the emergence of nothing less than hired guns, experts who repeatedly appear as witnesses for one side or the other or, worse still, design experimental protocols that curiously yield results desired by their sponsors. This was embarrassingly apparent several years ago during the debate in the United States over regulation of emissions from diesel automobiles. All the tests run by the Environmental Protection Agency (EPA) — this was when EPA was still in the business of issuing regulations — showed a mutagenic hazard of diesel exhaust; all the tests run by General Motors (GM) showed the opposite. The difference lay almost completely in the experimental designs followed by the two groups. EPA researchers extracted their samples from diesel particulates using organic solvents, GM researchers used "simulated biological fluids", which they considered more realistic.

So one aim of the collegium — to be a "conscience" among scientists in this field — is apt; so too is the aim of publicizing the availability of information relating to critical occupational and environmental issues. But the notion that science will settle all disputes, that under the auspices of scientific guidance labour, industry and government will speak with one voice, is not only wrong but dangerous. The recent history of the National Academy of Sciences tells why.

The academy, like the collegium, was founded to provide high-level, impartial advice to policy-makers. But the academy's weight in prestige and impartiality has on at least two recent occasions been no match for the weight of political interests that it has crossed. When an academy report found the link between sulphur dioxide emissions and acidification of lakes convincing — and recommended an immediate cutback in acid deposition of 50 per cent — the White House declared the academy too biased to carry out a scientific review of acid rain in connection with the US-Canadian agreement. The White House empanelled its own hand-picked group of experts instead. And when academy members came down against a general recommendation that Americans should, across the board, reduce intake of cholesterol (and there is still no proof that dietary cholesterol affects serum cholesterol levels), consumer groups that had accepted the evils of dietary cholesterol and fat as gospel launched personal attacks on the committee members' motives and reputations.

The lesson is that when scientists enter the political arena, they are judged on political terms. It is simply not possible to declare

oneself impartial when making policy recommendations. The collegium should realize that rather than tempering conflict with their recommendations, as they hope, they are much more likely to be dragged into the conflict. A representative of Monsanto Chemicals, which is contributing to the support of the collegium, went so far as to say that the group's founding was at long last an acknowledgement that not only science but the interpretation of scientific results should be left to scientists — it is not for reporters or the public to interpret, and it is certainly not something to be debated on the front page of the *New York Times* or on television. In fact, he was completely wrong. Like it or not, regulation is a political matter, and scientists should not delude themselves that they, with their superior knowledge and superior impartiality, will somehow keep their hands clean as they delve into the sticky machinery of politics. Better that the process should be explicitly recognized as political — that what constitutes acceptable risk should be acknowledged as a matter for all of society to consider. The alternative is the very great danger that the genuine objectivity that science can bring to bear on society's problems will be tarnished as scientists are dragged into a political taking up of sides. □

## Keith Joseph's mantle

*British universities would profit from a radical suggestion from an outgoing education minister.*

SIR Keith Joseph, the Secretary of State for Education and Science in the British Government at least until 10 June (the day after the election), has during the past two years enjoyed the bad luck of having to administer the contraction of British education, in the schools as well as higher education, and has also had a flair for digging pits into which he has promptly fallen. (The great row with the universities about the cost of retiring academics early, for example, remains unsettled — the universities suppose that the government will pay, the government that the University Grants Committee will find the money somewhere in its budget.) As a result, Sir Keith has been an unpopular minister. But he has also been, in his way, a kind of radical, willing to consider schemes for running this or that part of the educational system that differ sharply from present practice. One of the unfortunate consequences of the election is that it may never be known how Sir Keith would have handled a meeting arranged with half a dozen British universities to consider a proposal that some of them should become genuinely financially autonomous.

The meeting has been postponed, but the agenda has seen the light of day. The proposal is that a small number of British universities should, for an unspecified experimental period, be given an annual subvention by the government, linked with their present grant, and that they should afterwards be free to use their funds without external restraint. Sir Keith's agenda paper for the meeting that never happened suggests that in such a system, universities would be free to recruit as many students as they chose, that they should fix tuition fees without reference to external authority (but no doubt the market would have an influence) and that they should also become the channel by which this government helps with the cost of maintaining students, distributing those funds as they think best. In due course, the argument continues, universities would also be free to dispose of their capital assets.

Because of the legend that Sir Keith is universally to be distrusted, these proposals will be scoffed at in many British universities. They deserve a better hearing than that. For the kind of financial independence that Sir Keith has been flirting with is precisely the kind of independence needed to cultivate diversity within the British university system. Even if Sir Keith reappears after the election in some other guise, it is to be hoped that his successor will give them another airing. The objective of giving a handful of universities the freedom to make their own way in the world — and to be the victims of their own misjudgement — is admirable. What academic can object? □