

was not mentioned by the company managers until 10 days after the explosion and to the consequent disbelief and confusion—after it was disclosed that dioxin had been released—of the local authorities. Nor does it note that a legal inquiry is being made by an Italian court to establish who is financially responsible for the accident and whether any criminal charges should be made.

Neither the toxicity nor the cumulative, long-term effects of dioxin need to be proved. The comprehensible desire of the local people to go home and forget their nightmare should not be exploited by using them as “guinea pigs,” nor should it be reinforced with unsubstantiated claims by scientists. The suggestion by Hoffman-LaRoche that growth of surface vegetation would accelerate the breakdown of dioxin and thus solve the problem of Seveso represents such a scientific breakthrough as to deserve some experimental support. Finally, the “grounds for optimism” claimed in the *Science* article need to be supported by more convincing evidence that the consequences of the tragic industrial accident are dealt with seriously, and not whitewashed.

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The Golden Fleece Award: A Control?

I have read a number of items in *Science* about Senator Proxmire's “golden fleece” awards, yet no one has suggested what I would call the scientific approach to the situation. The scientific community is permitting this uncontrolled experiment to continue when it seems relatively easy to create a control group.

Once a month a senior member of the scientific community would announce the “congressional golden fleece of the month award.” After reviewing the appropriations Congress has made that month, the scientist would select one that the scientific community felt was a waste of federal funds which might bet-

ter have gone to support scientific research. The public would then be able to decide whether an individually chosen scientific report was really aberrant when compared with an individually chosen gob of money from Congress.

A few final thoughts about the experimental design are necessary. There appears to be no way of balancing for congressional immunity when Senator Proxmire makes remarks on the floor of Congress unless a spokesperson within Congress could be found for the control part of the study. Thus “senior members of the scientific community” should be senior in age as well as reputation to discourage any interaction between the two halves of the study. This study design is offered freely to any member or members of the scientific community who wish to pursue it in its current or some modified form; I am now busy with other research.

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Electron Probe Microanalysis: Uses in Plant Physiology

In his interesting and informative article “Electron probe microanalysis: New uses in physiology” (Research News, 22 July, p. 356) Thomas H. Maugh II makes no mention of the important applications of this technique to plant physiology. The method is ideally suited to the study of the pathways and partitioning of mineral elements in the plant, down to the level of the cell and its organelles. Use of the method in plant physiology was pioneered in 1966 by Lächli and Schwander (1). As early as 1968, Lächli (2) and Rasmussen *et al.* (3) could review a considerable amount of research done with this new tool, and it is coming into increasingly widespread use.

Maugh emphasizes the difficulty of artifacts arising from the movement of elements in solution within (animal) tissues and cells, during their preparation for electron probe analysis. The same problem must be overcome in applications of the technique to the study of the distribution of elements in plant materials (4). Freeze-substitution has been found suitable (5), and so have use of deep-frozen, hydrated specimens (6) and precipitation techniques (7).

Significant findings include evidence that xylem parenchyma cells play a role in the transfer of inorganic ions to the vessels, where they then move toward the shoot (8), and confirmation of the function of the potassium ion in the opening of stomates in light (9).

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Flickering Schoolchildren

Norway is oversupplied with long nights, narrow roads, hazardous surface conditions, and a growing population of aggressive drivers. The result is approximately one traffic fatality per 10,000 inhabitants per year, and many such casualties are very likely pedestrians hit in darkness.

Most people who walk about in darkness—and this includes all schoolchildren on fall and winter mornings—have good reason to fear for their safety. Hence most pedestrians in this country wear a reflective tag the size of a visiting card dangling from a coat pocket, school satchel, or briefcase. Schools hand them out, garages sell them, and firms distribute them instead of ballpoint pens. Even cats and dogs wear them, although their eyes—as most motorists know—have the reflective tag built in.

On a wet and black November morning, a file of schoolchildren is picked up in an automobile's headlights as dancing fireflies at a safe distance, instead of not at all. I am surprised that such a simple, safe, efficient, and cheap lifesaver has not caught on elsewhere. Are there too few pedestrians left in the United States?

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