LETTERS

Irked by the IRS

At the AAAS annual meeting in Boston in 1976, I described the scientific journal as "an endangered species" (*1*). After reciting a long litany of grave problems that were besetting the journals, I managed a weak smile and concluded with the hope that the journals would somehow escape extinction. It then seemed that the problems, economic in nature, might possibly be resolved.

Unfortunately, the problems look worse today than they did then. Printing and production costs continue to escalate at an alarming rate, at the same time that our principal (library) market is increasingly impoverished. To further unbalance this equation, the Postal Service is increasing second-class mail rates at a dizzying pace, and the new Copyright Act, by requiring *individual* transfer of copyright from author to publisher, is giving publishers an administrative (and expensive) nightmare.

And now, poised to administer the coup de grace, the Internal Revenue Service (IRS) rears its unlovely head. The frontal attack by IRS on six of our major scientific and engineering societies, as described by John Walsh (News and Comment, 23 June, p. 1369), may ultimately turn out to be life-threatening to at least some of our journals (and perhaps societies). A threat by IRS to change an organization's status from 501(c)(3) to 501(c)(6) is worrisome; their threat to revoke entirely the tax-exempt status of the American Chemical Society (ACS) and the American Institute of Physics is frightening.

As to our scientific journals, the ominous position taken by IRS in finding fault with the "practice of setting nonmember subscription rates for ACS publications higher than for members" goes right to the jugular of almost all society journals. The practice of providing journals to members as "part of dues" or through some similar mechanism is almost universal among scientific societies. And it always has been. For the IRS to suddenly find something sinister or illegal in this basic function of scientific societies is incredible.

In fact, "cheap" prices to members also means "cheap" (although higher) prices to nonmembers. A major reason that journals published by societies are "cheap" (compared with commercial journals), even for nonmembers, is that the mass distribution to members translates to relatively low unit printing costs, making the cost reasonably low to all subscribers.

Many society journals already pay taxes on journal advertising, as "unrelated business income." Walsh is misleading in indicating that c(6) organizations pay taxes on journal advertising revenue, whereas c(3) organizations do not. Both types of nonprofit organizations must pay taxes on ad revenue when it is classified as unrelated business income.

Perhaps it is possible that ACS will be able to convince the IRS that a reasonable number of tax dollars will continue to flow into the U.S. Treasury if societies are allowed to continue with their longstanding and reasonably successful pricing policies. If, instead, societies must price their own members out of the market, society journals could well move from the "endangered" list to the "extinct" list; and Uncle Sam, as well as scientists everywhere, will be left empty-handed.

ROBERT A. DAY
Council of Biology Editors, Inc., 1913 I Street, NW, Washington, D.C. 20006

References

1. R. A. Day, *Am. Soc. Microbiol. News* **42**, 288 (1976).

Beryllium: Carcinogenicity Studies

Both government and independent scientists involved in research leading to the identification of beryllium as a carcinogen in humans have had numerous inquiries concerning the accuracy of Deborah Shapley's article "Occupational cancer: Government challenged in beryllium proceeding" (News and Comment, 2 Dec. 1977, p. 898). In view of the misleading nature of that article, we feel a factual response is necessary.

In the article, concern is expressed about fair play in the conduct of epidemiological studies and government regulatory processes. With regard to this issue, it should be recognized that, in 1975, the beryllium industry and its consultants proposed (*1*) that past studies of workers exposed to beryllium be updated and that additional studies of several working populations exposed to beryllium be initiated. After those proposals were made, the National Institute for Occupational Safety and Health (NIOSH) independently undertook and completed one of the recommended studies, an update (*2*)—referred to as "Bayliss III"—of a previous study of mortality among employees of a beryllium production plant in Reading, Pennsylvania. NIOSH also completed a study (*3*) of mortality among subjects in the U.S. Beryllium Case Registry. Concurrently, Mancuso (*4*) updated his previous study of cancer mortality among workers from two beryllium production facilities. In contrast, during this same time period, and despite their recommendations, industry and its consultants neither sponsored nor undertook a single epidemiological study.

Although other studies are briefly mentioned, discussion in the *Science* article is restricted to the NIOSH update of the study of workers at the Reading beryllium production facility. The important results of the other epidemiological studies (*3–5*) also indicated an increased risk of lung cancer mortality among subjects exposed to beryllium. Using data from the Social Security Administration, Mancuso (*4*) found an increased risk of lung cancer mortality among workers occupationally exposed to beryllium at two production facilities, a Kawecki Berylco Industries, Inc. (KBI) facility in Pennsylvania and a Brush Wellman Inc. (BW) facility in Ohio. Similarly, NIOSH (*3*) found an excess of lung cancer mortality in a subcohort of individuals entered in the Beryllium Case Registry with a diagnosis of prior beryllium-related pneumonitis or bronchitis. These individuals had had short-term exposure to beryllium, an observation consistent with findings in the NIOSH study of KBI workers (*2*), the recent Mancuso study of KBI workers and BW workers (*4*), and an earlier Mancuso study of workers who had previously had beryllium-related pneumonitis (*5*). Also, the results of these epidemiological studies are consistent in general with numerous animal bioassay studies (*6*) demonstrating that beryllium is carcinogenic by several routes of administration and in many species, and specifically with animal bioassay results (*7*) demonstrating induction of lung cancer in 51 percent of the exposed animals by a single dose of beryllium oxide. The significance of the positive findings of these particular studies are not mentioned in the news article.

It is stated in the article that "in the early 1970's, few people paid much attention to the carcinogenic potential of beryllium to humans, particularly since the only two well-known studies of the subject . . . found no unusual incidence of lung cancer." This statement does not acknowledge the existence of Mancuso's 1970 study (*5*), the beryllium industry's awareness of that study, and its desire for NIOSH to refute the findings of the study, as verbally expressed in 1973 (*8*). The statement also does not acknowledge the many shortcomings of the previous NIOSH epidemiological studies of populations exposed to beryllium—referred to as "Bayliss I" (*9*) and "Bayliss II" (*10*). Some of these shortcomings