LETTERS

U.S. Withdrawal from Unesco

The National Research Council is assessing the impact for science of the proposed U.S. withdrawal from Unesco, including alternative arrangements, both inside and outside Unesco, for continued participation. As part of the task, we are attempting to collect documentation about the extent and nature of U.S. participation in Unesco natural science programs. Information is fairly readily available with regard to major global programs, such as the International Geological Correlation Program and the Man and the Biosphere Program. However, there are many smaller activities sponsored by Unesco on which data with regard to U.S. participation are scant. American scientists who are currently involved in, or whose institutions are associated with Unesco-funded projects are invited to send documentation, including a brief statement of the program objective, services now provided through the Unesco linkage, funding arrangements, time constraints (if any), and any other information that may be pertinent in considering possible alternative arrangements for continued U.S. involvement. Documentation should be addressed to Mrs. M. M. Treichel, Office of International Affairs, National Research Council, 2101 Constitution Avenue, NW, Washington, D.C. 20418. Such materials should be received no later than the end of May.

VICTOR RABINOWITCH
Office of International Affairs,
National Research Council,
Washington, D.C. 20418

Juarez Radiation Accident

The News and Comment article by Eliot Marshall (16 Mar., p. 1152) on the Juarez radiation accident provides excellent factual information about an otherwise poorly reported, but very important, incident. There appears to be a misprint in the fourth paragraph, however. Each of the 6010 pellets must contain about 70 millicuries (not 70 microcuries) of cobalt-60. If the article were correct as printed, a total of less than half a curie of radiation would be involved.

One can only reasonably expect—unfortunately—that this kind of incident will become more common in the future. A phase of nuclear technology that is just starting is the dismantling and disposal of worn-out reactors. Although the number of reports of radioactive metals is already alarming, the problem is likely to become epidemic as we see the first generation of commercial power reactors go out of service. Many people are not aware that, for instance, the control rods in light water reactors typically contain 70 to 80 percent silver. Perhaps this explains the radioactive gold and silver reportedly showing up in jewelry stores around the country.

It seems to be impossible to convince people that radioactivity really does not just "go away" when they choose to forget about it. That a Mexican scrapyard operator does not use a Geiger counter on a routine basis is understandable, but that a U.S. hospital or x-ray equipment company can dump obsolete equipment containing perhaps 1000 curies of cobalt-60 on a Mexican clinic is unconscionable. We can only hope that government regulations and enforcement of existing regulations will increase in the near future.

LEN PAGLIARO
Department of Biology,
Wesleyan University,
Middletown, Connecticut 06457

Pagliaro is correct. The amount of cobalt-60 in each pellet was 70 millicuries, not 70 microcuries.

—ELIOT MARSHALL

Nuclear Winter Scenario

The editorial by Herbert A. Simon (24 Feb., p. 775) states with admirable clarity the reasons for the changed status of mutual deterrence. Readers of *Science* may be interested to know of current efforts along the lines of his call for "an examination of the scientific reality of the nuclear winter."

A volume resulting from the symposium on Environmental Effects of Nuclear War organized by the AAAS at its Detroit meeting in May 1983 will contain reviews of the present state of knowledge in the field and a summary of major unresolved questions. These include issues relating to the uncertainties of model results for the effects of smoke and dust clouds; the resulting physical, chemical, and dynamic interactions and subsequent changes in climate and ocean-atmospheric circulation; and ecological responses to these changes. The volume is scheduled for publication in the summer of 1984.

A broader review by the Scientific Committee on Problems of the Environment of the International Council of Scientific Unions is also under way. Thus far, the collaboration of scientists from Australia, Canada, France, the Federal Republic of Germany, Hungary, India, Japan, Sweden, the United Kingdom, the United States, and the Soviet Union has been enlisted. Workshops dealing with atmospheric physics and modeling, radiation, and their biological effects now are scheduled for Leningrad and Paris in 1984 and for Budapest and Essex in 1985.

We are convinced that one necessary condition for serious consideration of the nuclear winter prospect by persons concerned with strategic arms policy is something approaching consensus by the world scientific community as to what is known and what is speculative about the environmental consequences of nuclear detonations. It is our hope that, with sufficient effort during the next 18 months, uncertainties in the nuclear winter scenario can be significantly reduced.

GILBERT F. WHITE
Institute of Behavioral Science,
University of Colorado,
Boulder 80309

JULIUS LONDON
Department of Astrophysical,
Planetary and Atmospheric Sciences,
University of Colorado

Illmensee Inquiry

Colin Norman's account of the Illmensee inquiry (News and Comment, 2 Mar. p. 913) does not note several key points in the report of the commission. The chief causes of the investigation, in addition to the ones mentioned by Norman, were (i) a statement that protocols had been "manipulated in a way which is contrary to scientific ethics" signed by Illmensee in the presence of three University of Geneva professors (the commission was finally unable to decide whether it believed the statement); (ii) the numerous corrections, errors, and discrepancies in Illmensee's experimental protocols; and (iii) the report of a nonexistent chimeric mouse in Illmensee's grant application to the National Institutes of Health.

The report is so severe in its criticism of Illmensee that his fellow professors voted on 27 February to create a new commission "to consider the problem of his presence on the faculty."

JAMES GASSER
Université de Neuchâtel,
CdRS, Clos-Brochet 30,
2000 Neuchâtel, Switzerland

Erratum: In the letter "Nuclear test yields" by Jack F. Evernden and Lynn R. Sykes (17 Feb., p. 642), the symbol for surface wave magnitudes was incorrectly given as m_b in line 39 of the second column of page 644. The correct symbol is m_s.