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COVER: High in the French Pyrenees, the world's largest solar furnace provides a pure radiant energy for a variety of experiments that would be difficult or impossible in ordinary electrical units. Eight stories tall, with an energy flux of 1000 kilowatts on a target, the giant parabola may be a prototype of similar, commercial devices. See page 235. (Photo: C. N. R. S. Research No. 2: Courtesy Saint-Gobain-J.P. Bonal)

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APRIL 10, 1976

LETTERS

Inventors and companies

Mr. Iler's reaction to your article on corporate scientists (SN: 3/20/76, p. 179) is very disturbing to me. I'm a former engineer who has done important work for two different major corporations during my career, and it is my observation that the failure of the employers to pay royalties to its engineer (or other) inventors does more harm to the corporations than to the engineers. I have been granted almost 50 U.S. and foreign patents; my inventions have made literally millions for the companies. Until I left and became an independent consulting engineer I received "peanuts" from my employers.

When an engineer accepts employment he makes no guarantee that he will invent. Many excellent and successful engineers do not invent. Those who do make inventions contribute something over and above what they were employed to do, and they should be rewarded accordingly.

I have witnessed what happens to the company under the present system, many times over. The best and most prolific inventors invariably leave for better jobs, taking with them technical wealth not otherwise available to the company's competitors. Perhaps the most valuable part of this technical transfer never appears in the patents themselves and would never be lost to the employer if he adequately rewarded his own inventors.

William B. Elmer
Consulting Engineer
Andover, Mass.

Antiviral compound

As a speaker at the conference on antiviral drugs (SN: 3/20/76, p. 186), I am pleased to see the extensive coverage your magazine devoted to the subject.

Your reporting was more perceptive than that presented in a number of other publications. I believe, however, that you and the other news sources missed a very important and exciting point. At the present time only ara-A (Vira-A) and to a lesser extent ribavirin (Virazole) have shown promise in widespread clinical trials. Both drugs have antiviral activity at dose levels sufficiently below toxic levels to permit their systemic use. We believe—as you reported—this may be related to the drugs' ability to preferentially inhibit virus-associated functions while partially sparing cellular functions.

The point you missed is that there are compounds in earlier stages of biochemical and pharmacological development which inhibit viral functions while sparing cellular

functions absolutely. A compound developed by Dr. W. H. Prusoff of the Yale University best exemplifies this principle. The drug is referred to as AIU and can be phosphorylated (activated) only in cells infected with herpes simplex virus type I. The virus actually specifies the enzyme which is responsible for its own destruction.

As uninfected cells do not contain this form of the enzyme, such compounds should be highly specific and free of the toxicities usually associated with drugs that inhibit nucleic acid synthesis. The report of the accomplishment of such high specificity was the highlight of the conference for me. I believe this type of specificity is what we must aim for in developing antiviral drugs of the future.

J. C. Drach, Ph.D.
Associate Professor
The University of Michigan
School of Dentistry
Ann Arbor, Mich.

Federal energy centers

Your report on the McCormack subcommittee (of the Joint Committee on Atomic Energy) evaluation of the national Liquid Metal Fast Breeder Reactor Program (SN: 2/21/76, p. 117) neglected to mention an important point made by the Nuclear Regulatory Commission on federal "energy centers."

The NRC study referred to in the news story stated that it might be practical to design and build energy centers (with up to 20 nuclear power plants at each site), but it added that "it does not indicate any great or unequivocal advantage or compelling need for such centers." This conclusion was partially based on the fact that energy costs in transmitting electricity from the centers would offset the value of building them.

It is ironic that this news story failed to indicate the potential disadvantages of large nuclear power centers in the same issue of SCIENCE NEWS which carries a full page of letters critiquing your reporting of the national nuclear debate. It is no surprise that Mr. McCormack is in favor of breeder reactors, but it is surprising that your news coverage is not particularly objective.

Wilson Clark
Environmental Policy Institute
Washington, D.C.

("Objective reporting" has two aspects: In a brief news story, to accurately present the facts at hand; in a longer in-depth analysis, to fairly present both sides. As noted, this was strictly a news item about the breeder reactor report, with energy centers mentioned peripherally. We reported it "straight" and will continue to present and analyze both sides of these issues in signed, research roundups.—Ed.)

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