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## Letters

### All that jazz?

I don't like your "jazzy"  
new covers. Your magazine  
is for people who are seri-  
ous about learning all the  
latest information in sci-  
ence. I don't see why you  
need a cover like "The  
Geomagnetic Jerk" (SN:  
10/5/85). It doesn't have to  
be drab, but it should be  
tasteful and appealing to intelligent people.



Judith Kurland  
Spring Valley, N.Y.

### Enzymatic medicine

In "Redesigning Molecules Nature's Way" (SN:  
9/28/85, p. 204), Julie Ann Miller states that "Sci-

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Cover: Scientists have found unexpected similarities between the pineal gland of the brain and the retina of the eye. But, in retrospect, perhaps they shouldn't be surprised, in view of the fact that some lizards sense light with a "pineal eye." In the Western fence lizard, the pineal gland has specialized to include a lens and cornea. Seen here as a whitish spot in upper middle, the pineal gland sits beneath a small hole in the skull centered on the top of the head behind the two true eyes. (Photo: From *The Third Eye* by Richard Eakin, © 1973 U.C. Press)



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entists look forward to the day when they can routinely select a natural enzyme and tailor it for a variety of uses." That day, apparently, has come.

At ENZON, we routinely modify enzymes from a number of sources to impart the therapeutic qualities of enhanced circulating life and reduced immunogenicity. By the covalent attachment of polyethyleneglycol (PEG) onto the surface of enzymes, they are protected from recognition by organ receptors and are allowed to circulate freely in the blood. One of our enzymes, PEG-asparaginase, is presently in Phase II/III testing for the treatment of childhood leukemias and lymphomas. The normal enzyme has a circulating life of 18 hours as compared with 12 days for the PEG-enzyme. Furthermore, these enzymes can be repeatedly injected with little fear of an immune response. PEG also impairs recognition by the immune system. Since the PEG-enzyme is not recog-

nized as foreign, no antibody is produced.

This is not pie-in-the-sky technology. We have successfully modified three dozen enzymes. Two have Investigational New Drug status from the FDA. Two more will enter the clinic within six months. Enzymes are highly specific and thus have an inherently low level of toxicity. We believe that the next decade will give way to the enzymatic rather than chemical method of the treatment of disease.

Abraham Abuchowski  
President  
ENZON Corp.  
South Plainfield, N.J.

*Correction: In the article entitled "... and potential deaths from superfires" (SN: 10/12/85, p. 232), the yield of the Hiroshima bomb was incorrectly given as 0.15 megaton. It should have been 0.015 megaton.*

NOVEMBER 9, 1985

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