

## letters

solar sea power plants would be returned to the depth corresponding to its temperature. Following Fishman's suggestion, one would space these plants across the Caribbean, for example, across the Yucatan Channel. One could then rapidly establish a "hurricane line" by changing to a surface discharge from a depth discharge. The natural ocean currents would presumably spread, within one day, the line to a sufficient width to stop a hurricane.

CLARENCE ZENER  
Carnegie-Mellon University  
Pittsburgh, Pennsylvania

### Addition

My article ("Is There a Pecking Order in Physics Journals?") in the May issue should have noted that Eugene Garfield (reference 11) devised the concepts of "impact factor" and "immediacy index."

HERBERT INHABER  
Environment Canada  
Ottawa, Ontario

### Help public understanding

Those of us at the American Association for the Advancement of Science who are involved in its public understanding of science programs were grateful for the words of encouragement offered to us in your August editorial (page 80). While the Association would welcome the cooperation you call for from other professional scientific societies in formulating a coordinated, steady-state series of public understanding of science efforts, it might also be appropriate to point out that there exists at present a number of opportunities for individual scientists and small groups of scientists to become involved in activities of this nature which are coordinated through our Washington office.

For example, NOVA, the weekly television science series aired through the channels of the Public Broadcasting System, has now completed its first season, and has enjoyed both critical and popular success. Producer Michael Ambrosino at WGBH-Boston has received numerous requests for further information on each of the topics covered in the series, many of which his staff is not equipped to answer adequately. Since NOVA is being produced with the cooperation of the AAAS, he has forwarded several such requests to our office, and we have done our best to reply in an *ad hoc* manner. One can anticipate a large number of similar requests following each of the sixteen programs in the 1974-75 series of programs, which premiers in November. Furthermore, one can argue that a

serious reply to a thoughtful request has the potential for improving the understanding of science of the person who was moved to respond to NOVA by writing to its producer. For these reasons, the AAAS is now compiling a registry of those scientists and science teachers who are willing to answer requests for background information on particular topics treated by NOVA, and perhaps on occasion make a personal contact with a correspondent in their localities.

The Boston Public Library compiled a series of bibliographies for each of last season's NOVA offerings, and also organized a series of Tuesday evening discussion groups, each of them led by a different Boston-area scientist who is expert in the subject matter of a particular NOVA program. It plans to expand these activities next season. If scientists and science teachers in other localities who are interested in organizing similar programs will make themselves known, the AAAS will undertake to supply them, on a regular basis, with both the Boston bibliographies and with other background material on each program to assist them in their efforts.

The Association is also embarking on a Mass Media Intern Program starting in the summer of 1975 through which up to ten outstanding graduate students in the natural and social sciences will spend their summers as working members of specific mass-media organizations. We hope this program will have a positive effect on the quality of science coverage in these particular media, and at the same time will give outstanding science students an insight into media operations at a critical stage in their careers. Scientists in colleges and universities can assist the Association in implementing this program by directing their qualified students to it.

Those members of the physics community who would like to become involved in these and other Association activities, or who have thoughts on other means by which the Association can assist them in their own efforts, can write to the Communications Department, AAAS, 1776 Massachusetts Ave., NW, Washington, DC 20036.

WILLIAM A. BLANPIED  
Director, Public Understanding of Science  
Programs  
American Association for the Advancement  
of Science  
Washington, D.C.

### Hazards of fusion

The view is often expressed that dangers from radioactivity will be much less if we derive our electric power from fusion reactions rather than from fission. This is easy to say at a time when all details of fission reactors are available to

*continued on page 71*

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## letters

continued from page 15

us and vulnerable to criticism, while we know very little of the form fusion reactors will eventually take. However, one interesting counter point derives from the fact that the principal danger from fission reactors is tritium; of the 0.3 mrem projected as the average exposure to members of the general public in the year 2000, 0.15 mrem is from tritium releases.<sup>1</sup> This exposure should induce fatal cancers in above five Americans per year.<sup>2</sup> By contrast, best estimates of the average death rates from the nuclear accidents that are drawing so much attention will be 0.3 Americans per year, and even if the emergency-core-cooling system *never* works, it will be only 30 per year. (This is still a thousand times fewer than the deaths that would be caused by a coal-fueled electric power system.)

The counter point is that if our electric power were produced from fusion, the amount of tritium produced would be  $10^5$  times greater than if it is produced from fission. The details of how this tritium is to be handled are not yet known, but can anyone really believe that  $10^5$  times as much tritium can be handled without releasing more to the environment?

### References

1. U.S. Environmental Protection Agency Report ORP-CSD 72-1 (1972).
2. "The Effects on Populations of Exposure to Low Levels of Ionizing Radiation," Report of BEIR Committee, National Academy of Sciences, National Research Council.

BERNARD L. COHEN  
University of Pittsburgh  
Pittsburgh, Pennsylvania

### Developing countries

I would like to announce to your readers a special session to be held at the 1975 Annual Meeting in Anaheim, sponsored jointly by the American Association of Physics Teachers and the Forum on Physics and Society, and to call for contributed talks.

The session will be called "Physics in the Developing Countries," and there will be three invited talks. One will be by a member of the Committee on International Education in Physics to describe the Physics Interviewing Project; he will describe the state of physics in the countries he visited as well as the attitude of students and faculty toward these unofficial representatives of US physics departments. (At one university, our visit touched off a formal day-long debate on the political implications of the interviews). Another invited talk will be a distinguished physicist from a developing country and the third by an American who has worked for an

extended period teaching physics in another society. We would welcome suggestions, particularly for this latter speaker.

"Contributed" talks will be welcome but, regrettably, there must be some selection. Since there is to be only one session, which already has three scheduled half-hour talks, there can be no more than an hour for ten-minute contributions. We will be forced to select from those that appear to have the most general interest in order to have a geographical distribution and to include both higher and secondary education.

We would be pleased to hear from anyone who might like to describe his experiences at Anaheim. Not all can be accepted, but, in any case, the CIEP is looking forward to discovering more people with interest and experience in developing countries who might be called upon in future projects.

MICHAEL P. GREENE  
Chairman, Committee on  
International Education in Physics  
Department of Physics and Astronomy  
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### Boyle's Law not his

The letter of H. K. Schurmann (October 1973, page 15) contains an interesting error. Boyle's Law may indeed have been "discovered deliberately" but not by Boyle. Boyle himself credited Richard Townley with it.<sup>1</sup>

It is both amusing and instructive to chase the incorrect labels of various items. For fun one could chase the originators of the "Faraday Ice Pail Experiment," the "Wheatstone Bridge" and many many more. In general one cannot trust *any* historical statement in a physics textbook, or often on monuments.

### Reference

1. R. Boyle, *A defense of the Doctrine Touching the Spring and Weight of the Air* . . . London (1662); pages 60 and 63.

STANLEY E. BABB, JR.  
The University of Oklahoma  
Norman, Oklahoma

THE AUTHOR COMMENTS: Should we call it "Townley's law" rather than "Boyle's law"? Once firmly applied a label is hard to remove or replace; and Stanley Babb's further remarks suggest that this is not the only instance when it is neither the one who first proposed it, nor the one who first tested it, but usually the man with the best public relations who wins out. I fully agree with his last sentence and feel that too many of us take the two lines from Goethe's "Faust" too seriously: "Was man Schwarz auf Weiss besitzt/Kann

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