

energy converter by Volney (Bill) Wilson in 1957. A half dozen other people, from the US and the USSR, are usually cited as the inventors of the thermionic converter, but none of the devices proposed or demonstrated by these others operated in a practically useful regime. Wilson is just too modest to assert that he is the true inventor of the only practical device to date.

The device that Wilson demonstrated in 1957 operated on the same principles as all the thermionic conversion devices developed in the US, France, Germany and the USSR in the 1960s, the four TOPAZ thermionic reactors actually built and operated in the USSR in the 1970s and the thermionic reactor system that is a leading contender for development in the US SP-100 space reactor program.

Wilson was the first to recognize, in consultation with Irving Langmuir at GE, the elegant and essential dual role of cesium in the device: cesium adsorption for adequate emission and cesium ionization for adequate plasma density. Furthermore, he correctly defined the basic physical principles that prescribe the practical operating regime.

Although Wilson's modesty and the delay of his publications by merciless peer reviewers caused his dominant contribution to be obscured by others, we who have made progress in this field have all stood on Wilson's shoulders.

NED S. RASOR

Sunnyvale, California

1/85

Refereeing process

In an editorial in the 4 March issue of *Physical Review Letters*, the editors announced special changes in the refereeing procedures for papers submitted by particle and field theorists for the purpose of inducing more authors in these fields to publish in their journal. Apparently the refereeing procedures for all other categories of papers will remain unchanged. This triggers a recollection of a recent incident at our local golf club.

Every year, a nationwide tournament is held in which club teams all over Germany play on their home courses, all on the same weekend, and submit their team scores to a national committee for comparison and ranking with the other participating clubs. Because our course contains an inordinate number of internal out-of-bounds restrictions in comparison with other courses, this places our team at a distinct disadvantage, as players who are wild off the tee (I am one) frequently incur, in effect, a two-stroke penalty in any given round. The club rules committee therefore decided to change

the ground rules for this particular tournament only, by lifting the out-of-bounds restrictions, thus improving the team score and placing the club in a more competitive position. After the markedly better score was submitted, the national committee disqualified it, stating that one cannot have one set of ground rules part of the time and another set the rest of the year. The club professional, an Englishman, was enormously amused by all this and said, "As long as they were at it, why didn't they make the holes bigger, too?"

Moral: When you create two sets of rules solely to gain a competitive edge, you risk losing your credibility.

R. A. ESTERLUND

Philipps-Universität

Marburg, West Germany

3/85

THE EDITOR OF *PHYSICAL REVIEW LETTERS* REPLIES: The "rules change" at *Physical Review Letters* is an experiment designed to produce a more balanced journal to serve our readers and contributors better, not to gain some kind of competitive edge. We believe that a physics journal is not a golf tournament. Instead of hooks and slices, our editors have to be concerned with prompt and even-handed refereeing. This was not being obtained in particle theory, which is why we chose to bring our divisional associate editors more closely into the picture in this particular area.

I am sorry to learn that R. A. Esterlund is wild off the tee (they say the woods are full of such golfers), but I hope he and others will not be deterred from continuing to submit their best shots to us.

8/85

GEORGE H. VINEYARD

Physics and the military

I have followed with interest the articles over recent years in *PHYSICS TODAY* on the involvement of US physics and physicists with military development, generally, and with nuclear armaments in particular. From the correspondence that such articles have provoked, it seems that many others too have found them interesting.

I would not presume to express an opinion on the merits of the arguments themselves, for I am not a US citizen. But perhaps I might be permitted an observation that arises directly from the correspondence (March, page 9) concerning Charles Schwartz's Guest Comment (October 1984, page 9).

I take it that the policy of *PHYSICS TODAY* is to print letters for and against any position in proportion to the weight of opinion perceived from an editorial perusal of the doubtless heavy postbag. If this is the case, then it would seem on the face of it that most US physicists

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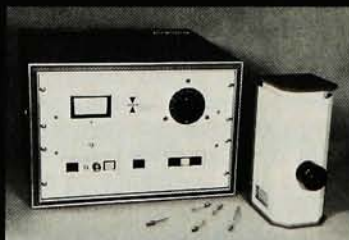
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letters

believe (to put it rather crudely) that the USSR is so awful that it should be opposed by all right-thinking physicists by any means and at almost any cost.

Is this really the case, I wonder? Could it be that perhaps there are pressure groups within the US who encourage those who hold such views to write "letters to the editor" whenever an opportunity to do so arises? Or is my perception of the correspondence simply inadequate?

B. T. SUTCLIFFE
University of York
Heslington, York

4/85

The letters in the March issue criticizing Charles Schwartz's Guest Comment (October 1984, page 9) seem to be written as though the technology of overkill and global annihilation had never been developed. The continuing increase in size and sophistication of nuclear arsenals can no longer strengthen deterrence, any more than increasing the voltage and power capability of an already lethal electric chair can make it a more terrible threat. It is reasonable for a physicist to conclude that contributing to the nuclear-arms race weakens our security by bringing us closer to the point where we will be in the grip of events beyond our control.

EDGAR VILLCHUR
Foundation for Hearing Aid Research
3/85 Woodstock, New York

View from the Volga

Upon reading the letter of Valentin Turchin (April, page 104) devoted to an attack on Timothy Toohig's Guest Comment describing a period Toohig spent at Dubna in the USSR (January 1984, page 9), I thought: "What has happened to my old friend Tim? Has he exchanged Vatican for Kremlin?" And then I had an even worse thought: "What has happened to me that I didn't notice that Tim was spouting the communist line? Am I a victim of galloping senility?" A sponsor of Scientists for Sakharov, Orlov and Shcharansky, I would not seem to hold views on the USSR too dissimilar to those of Turchin, but I did not recall being exercised in the slightest by Toohig's note—indeed, I remembered that I had enjoyed it. So I reread Toohig's article and came to the firm conclusion that while someone may be around the bend, neither Toohig nor I have become irrational. And I found no evidence that Father Tim is any more a fellow traveler than Pope John Paul.

I suggest that most of us believe that American physicists should respond to