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letters

continued from page 15

ny, the point I was trying to make was deadly serious. Since that point appears to have been missed, perhaps I should make it again in a less oblique manner. Let me call your attention to the recent article by George A. Kolstad (February, page 23) and in particular, to table 6 of that article. We can see that in fiscal 1971, the last year for which exact figures are available, out of \$118.6 million spent by the AEC on high-energy physics, \$89.2 million went to the seven largest accelerators, and it is probably the case that the bulk of the remaining \$29.4 million went to "users" groups of the same machines. The budget of either SLAC or the AGS is almost as much as the total AEC budget for low-energy physics in fiscal 1971 and almost twice the budget for medium-energy physics. We can expect that the situation will become even more lopsided when NAL becomes fully operational, the recently performed act of euthanasia on Princeton-Penn notwithstanding. Yet, while these tens of millions of dollars are being lavished on the accelerators and their "users," many individual researchers who may need a few thousand dollars for computer time, publication costs or to hire a postdoc are unable to obtain support, and younger physicists, like myself, who want only to work at their own profession in their own country (I am now in Germany because I was unable to find employment in the US) are treated as though they were asking for the moon.

High-energy physics could undoubtedly survive, in the US, with fewer than six large accelerators. It would probably survive even without NAL. However, physics cannot survive without physicists, and it will not survive as a viable discipline in the US for any great length of time if the next generation of physicists continues to be systematically decimated so that the accelerators and their "users" can continue to be supported at the level to which they have become accustomed.

One could only wish that the science administrators and "decision makers," upon whose good judgment, according to Kolstad, we must rely and for whose attention we must constantly compete, had enough foresight to have anticipated the effect of the costs of a machine such as NAL on the rest of physics. If they were concerned with the long-range welfare of physics (not to mention that of their fellow physicists) instead of their own narrow interests, then the first priority would be preserving the pool of highly trained manpower that we now have and maintaining an atmosphere in which our brightest young people will continue to enter the field (anyone clever

enough to make a significant contribution to physics is also bright enough to know better than to enter a field where his chances of eventually finding permanent employment are getting smaller and smaller). This would be done even at the cost of cutting back on the accelerators' budgets and sacrificing entirely such "goodies" as summer salaries and large travel budgets. Instead, we seem to have a deliberate policy of "equipment first and people second." Those of us who are the victims of this policy can only regard it, and those responsible for it, with bitterness, anger and cynicism, which we may sometimes attempt to express in a humorous way.

ROBERT J. YAES

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Name for surface tension

When, in 1924, the Deutsche Physikalische Gesellschaft proposed the name "Hertz" for the unit of frequency per second, Nernst objected, saying: "I do not see the necessity of introducing a new name; by the same reasoning one could as well call one liter per second one 'Falstaff'."

Today, in the age of quasars, no physicist will deny the convenience and usefulness of the "Hertz."

With this in mind, I herewith propose in honor of Josiah Willard Gibbs that the unit of surface tension be named 1 "Gibbs" = 1 erg/cm².

HANS M. CASSEL

Miami Beach, Florida

Part time for both sexes

I am strongly in favor of the suggestion of J. C. Jackson in this column (June, page 76) that faculty positions of less than full time become accepted policy at all universities. I myself have been working at less than full time this past year, and plan to continue this schedule for many reasons outlined by Jackson. I would like to participate in raising our small children and in doing my share of the household chores, while my wife, who has almost as much schooling as I have, wanted very much to get back to her career. The current financial problems at our university have made it possible to overcome the administrative problems connected with a less than full-time appointment. There is at least one other faculty member in my department working at less than full time, and between us we may be making it possible for the department to pull through the financial crisis without being forced to

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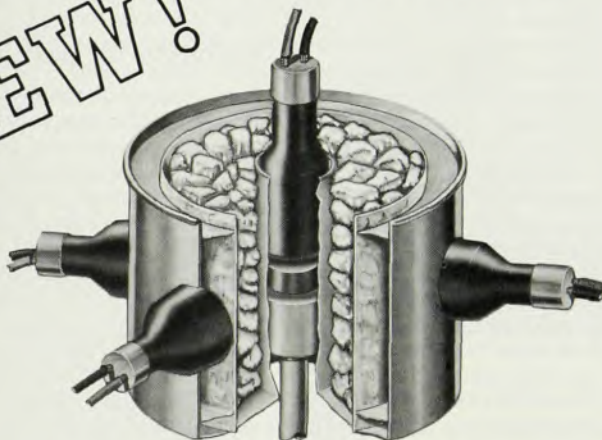
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fire one of the few untenured faculty members.

From my experience it seems clear to me that less than full-time positions should be made official policy throughout the university, and not just in the physics department, and that this policy be recognized as desirable even when there is no financial crisis. I would also suggest that there be some latitude in the percentage of time permitted. Jackson suggests only two-thirds time as an alternative to full time, but I for example could not have worked with a percentage quite that low.

I would also like to suggest to Jackson, and others guilty of the same distortions of fact, that it is incorrect to refer to all physics faculty members as being male. In her letter, a faculty member was always referred to as "he" or "him." Other comments in the letter more explicitly limited sex, such as the statement "Still others have wives who contribute to the family income." The word "spouses" could have easily been substituted for "wives" to make the statement accurate.

A sexist bias in terminology should not be taken lightly. It is well known that our thinking is very much shaped by our language. For example, Ms Jackson in her letter does not mention the significant plight of the female physics PhD raising children who would like to teach at less than full time. Perhaps Jackson, whose motivations are obviously in the right direction, has been unconsciously biased by her own rhetoric.

M. ROTHENBERG
Syracuse University
Syracuse, New York

Corrections

April, page 55—The price of *Physics of Solid State Devices* by T. H. Beeforth and H. J. Goldsmid (Pion, 1970) is £3.00, not \$3.00.

July, page 60—*Resources for the History of Physics*, edited by Stephen Brush (Univ. Press of New England, 1972) is 188 pages in length, not 90.

August, page 35, column 2—The first full sentence should be: "The combination of cold cap, baffles and cold trap greatly diminishes the backstreaming, but it also greatly impedes the pumping speed."

July, page 30—In the caption to figure 7, several of the "extrinsic merit" criteria have been listed out of their correct order. To arrive at agreement with the histogram, transpose 7 with 8, 9 with 10 and 11 with 12. □

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