

letters

growing technology to science. Surely if financial support for research is not linked to economic history, we would expect little permanence to this mutually beneficial interaction.

Granted that cost-effectiveness would be desirable in research funding, Zernik then states, however, that laymen are persuaded by "superficial arguments" and most physicists are "utterly incapable of assessing the importance of their daily work." Who is left to pass judgment on all the vast trivial research, Mr Zernik? I think the physics profession has an elaborate system (probably it could be improved) to referee the quality and significance of research and judge publication or funding. It is always easy to shout "Trivial!" after the fact.

Concerning cost-effectiveness, I'd rather trust the profession's judgment than the machinery that gives millions toward developing university and industry research capabilities, graduate student and faculty fellowships, and national laboratories, then only to waste these very resources it has spent tax money to produce. I think the "job crisis" will exist until the output of physicists becomes commensurate with their use.

Lloyd A. Case

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Boston workshop

physics today (February, page 64) reported that physicists are welcome to attend the AIAA employment workshop programs. Telephone numbers for 14 cities were listed, for use in making reservations.

The program is also operating in Boston, with the cooperation of IEEE Boston Section. For reservations or further information, call (617) 862-3880.

Paul Penfield, Jr
Boston Section IEEE

Women in physics

I sent a letter to my congressman and to my two senators that reads as follows:

"I have recently read Congresswoman Green's Hearings on Discrimination Against Women. I urge you to support Section 805 of HR 16098 (or the Senate version of this bill) barring discrimination against women. (This bill was re-introduced in the 92nd Congress as HJ 208 and SJ 8 and 9.)

"In the meantime I hope that you will press HEW to enforce Executive Orders 11246 and 11375, which prohibit discrimination against women in federally assisted programs."

... I recently chaired a panel on

'Women in Physics' at the annual American Physical Society meeting. In physics, as in all the professions, we find that there is severe discrimination—at all levels—against women. It is foolish and a waste, and it should not be permitted when federal funds are involved."

I urge the readers of *physics today* to obtain copies of the Hearings from their congressmen and to communicate their views on this matter to their representatives and to their senators.

Fay Ajzenberg-Selove
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Philadelphia

More far infrared

I must express my disappointment at the article by W. G. Rothschild and K. D. Möller in September (page 44) on far infrared spectroscopy.

Some of the points that I feel deserve inclusion pertain to the whole development of interferometric spectroscopy. Michelson saw the general possibilities in the 1890's; in Strong's laboratory at the John Hopkins University early attempts by Gebbie and Vanasse (1956) were followed by the effective instrumentation developed by Gebbie and his group at the National Physical Laboratory, Teddington, England. The September article omits the significant virtue of the refractive-index dispersion being available simultaneously with the absorption; the production of continuous spectra down to two wave numbers by 1967, which is more than two octaves below the ten wave numbers mentioned in the article; the production for the first time of the total rotational absorption spectrum of gaseous molecules at resolutions of 0.01 wave number; the observation of the Poley-predicted absorption seen in all polar liquids between 20 and 100 wave numbers; and the delineation of the quasi-resonant broad absorption in nonpolar liquids arising from collisional interactions of their molecules.

These features, to mention no others, provide essentially new formation on molecular behavior. The fact that the British-designed interferometric system is now being largely and very effectively sold by a well-known US corporation will surprise few people who are familiar with both British and US instrument manufacturers.

Mansel Davies

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The author comments: While it is true that the specific topics of far-infrared research mentioned by Mansel Davies had not been included in our article, it should be realized that our article,

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