

letters

curricula of different physics departments should occur.

Faculty attitude. The attitude of physics faculties toward careers in applied physics, engineering physics, and public-interest physics should change toward a greater acceptance of these careers. They should be accepted as equal to the traditional careers in the hierarchy of values of the physics community. A change in the reward structure of physics to reinforce the change in attitude should be considered.

Applied physics. Physics departments should establish ties with applied research laboratories in industry, government and other institutions. These ties may influence the selection of research areas at the university departments, may lead to greater awareness by the faculty of emerging technologies, and bring about a greater involvement by faculty and students in cross-disciplinary contacts.

Nontraditional fields. It should be made clear to each student early in graduate school that there is at least a 50% probability that he will have to build a permanent career in a nontraditional field of physics or in a field completely out of physics. The student should design his graduate program accordingly.

Teaching in non-PhD granting institutions. Although there is no total growth in the physics faculties of masters-granting or bachelors-granting institutions, there are some career opportunities in these institutions for physicists who know and can teach nontraditional fields such as oceanography or atmospheric physics. There are also teaching career opportunities in junior colleges and high schools. But a PhD will often be too expensive for the school district. Physicists heading for those careers might better stop at the bachelor, master or doctor of arts level.

Career mobility among older physicists. Career changes are highly desirable and could benefit everyone. For example, during his sabbatical a professor might be encouraged by his institution to work in an area outside his speciality. He might end up liking the new area, leave his old career, and make a job for a young physicist. Department policies might, through the offer of seed money or reduced course load, encourage faculty members to try nontraditional fields, thus producing openings for young physicists in a traditional field.

The entire conference was greatly indebted for much of its financial support to the Ford Motor Company Fund, Esso Research and Engineering Company, E. I. du Pont de Nemours and Company, and Corning Glass Works.

An account of the conference with short versions of many of the papers will be published in an issue of the

Newsletter of the Forum on Physics and Society [Vol. 4, No. 1 (1975)]. The abstracts of the conference appeared in the July 1974 issue of the *Bulletin of the American Physical Society*.

References

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Ode to charm

The world of nuclear power is full of sinister "charm." They make the electrons glow at a three-billion electron-volt arm.

This "charm" seems only forthcoming in the wake of an unheard of smack—A gentler approach is producing a mere bit of "strangeness"—alack.

Oh man, were you made of that matter! Would you too exude charm on attack!! But, alas, you react to the latter with nothing but counter-attack.

TRUDE WEISSKOPF

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Extending the interferometer

In his excellent article "Michelson and his interferometer," Robert S. Shankland retraced the history, indeed most fascinating, of Michelson and his work (April, page 37). This account, however, omitted almost entirely a recent extension of the interferometer, namely the Fourier Interferometer Polarimeter (FIP).

In recounting the narrow-slit experiment, Shankland stresses Michelson's "remarkable observational ability as he describes precisely the . . . polarization . . ." He also suggests that the optical phenomena observed in this experiment were precursors to the invention of the interferometer. It does not appear, however, (and Shankland never hinted even at the possibility) that Michelson ever thought of using his interferometer for measuring the polarization of light within spectral lines.

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