urge some of these naive, protected physicists to get out into the world and see where their talents are needed, instead of expecting endless support of their narrow little research areas. There are too few smart people working on problems vital to society and too many smart people doing research; the research is still overemphasized in relation to the USA's and the world's problems.

R. C. HANSEN
KMS Industries, Van Nuys, California

•

The letters to PHYSICS TODAY concerning the problems of employment for physics graduates has centered on the failings (real or imagined) of the students themselves, the supporting agencies, and even the AIP! There is another set of culprits, the physics-department leaders in the schools, who are perhaps more to blame than any single group.

The physics departments are not producing a very marketable product for two reasons—they have opted out of certain "classical" fields (acoustics, fluid mechanics, electromagnetics, optics) that do have a market, and they have developed attitudes of purity and narrowness in their graduates that make these men and women less attractive to potential employers.

The arguments for opting out of classical physics sound convincing, but they are specious. It is said that engineering departments are housing these fields adequately. If that is so, the engineering departments are not doing their job—but that is another subject. There are problems in these classical fields that will benefit from the peculiar approach of the physicist, and there are problems in modern physics that will be advanced by analogies from "old physics."

Smaller schools argue that they must concentrate on one or a few areas of physics research because of their limited resources. Fine. But the sociology of physics requires that they choose an area of nuclear or high-energy physics so that they will be respectable. Thus, they contribute young graduates into already overcrowded fields of research.

Commitment to scientific achievement and singlemindedness of purpose are useful attributes when one is learning a subject as difficult as physics. There is a certain exclusivity among those that are successful in it that is perhaps inevitable. Nevertheless, the physicist who wants to practice his profession must relate to the problems of others. Experienced professionals may do this, but the environment of the physics department is more likely to result in a narrow-minded attitude on the part of the graduate. It is this attitude, more than the specialized nature of their training, that is not attractive to employers.

I believe that physics departments are going to do themselves out of a job unless they are ready to do a considerable about face on their academic policies of the last decade or so.

RICHARD H. LYON
Belmont, Mass.

Superconducting priority

In the letters section of the September issue of PHYSICS TODAY (pp. 11 and 13), there appeared a discussion regarding the priority of the concept of transposed superconducting filaments embedded in a normal matrix. Priority was attributed to P. F. Smith who first discussed the concept in the summer of 1968. For the record, I point out that Richard L. Garwin and I explicitly proposed twisting or transposing small diameter super-conducting wires in a normal metal matrix as a technique for fabricating low-loss, stable superconducting cable for power transmission in an article dealing with that subject. The article appeared in the *Proceedings of the IEEE* in April 1967 (55, 538, 1967). The same article also forms a chapter of a book, "Superconductivity in Science and Technology" (M. H. Cohen, Editor, University of Chicago Press 1968). To my knowledge this constitutes the first publication of the concept.

JURI MATISOO
Thomas J. Watson Research Center

Beyond the Schwartz amendment

While the defeat of the "Schwartz amendment" has been interpreted by many different people in many different ways, it is probably correct to say that the clear rejection of that proposal by members of the APS was the expression of a desire to "keep things as they had been." This meant above all that the professional society should not expand upon the narrow traditional statement of its purpose,