editorial

Steering a middle course on manpower

Unemployment in physics has decreased significantly since the time it shot upward three years ago. This is the conclusion drawn from a preliminary sample of the results from the APS–AIP 1973 Register of Physicists and Related Scientists questionaire sent out for the first time earlier this year to all physicists. Current unemployment is now estimated to be 2%, half the peak figure of 4% in 1971, and is continuing to fall towards the 1% figure of the middle 1960's. The preliminary findings for employment of physicists with PhD's look even better. Admittedly, the remaining 2% unemployment is not uniformly distributed, so that the situation is not as rosy as this for certain subfields and certain age groups. However, assuming the results of the complete survey bear out the conclusions of the sample, we are entitled to believe that on the whole the worst of the job crisis is over.

Even more plentiful job opportunities in the future seem assured by the figures on physics graduate enrollment contained in this year's report by AIP's Manpower Division. A sharp decline is found in the number of graduating PhD's. Compared to the peak figure of 1550 in 1970, the crop of PhD's this year numbered 1300 and is projected to fall to 950 by 1977.

Although the individual physicist competing in the job market has every right to take comfort in these two dramatic downward trends, the physics community as a whole must, in the interests of the country, begin to consider at what point these trends signify an overcorrection that will result in a serious shortage of trained physicists. We have learned from recent experience that it takes five years or so before the full impact due to a given shift in manpower policy shows up in the output of the graduate training pipeline.

One factor that points to the possibility of an impending manpower shortage is that the observed increase in employment does not yet include the new jobs for physicists expected to be generated by high-priority government programs just getting underway, such as the energy program. On the other hand, it may be that the decline in opportunities for physicists at the universities has still not reached bottom. These and numerous other, often conflicting, factors need to be continually analyzed to provide direction for national policy makers. In our editorial in January 1971, at the height of the unemployment crunch, we called attention to the urgent need to establish a unified, vigorous national science policy. Now, nearly three years later with the employment picture easing, the need for such a policy is no less urgent.

Hopefully, the results of the new APS–AIP physics register and other data generated by the AIP manpower program and various society committees will provide the nation with the accurate, up-to-date information needed to reach intelligent decisions that will enable the policy makers, once they shoulder the responsibility, to steer a middle course between too few jobs and too few physicists.

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