

interview. Sometimes visits are made to the organization's area by the prospective employee; wives are shown housing; offers are made; fringe benefits emphasized, and, in general, the prospective employee is psychologically committed before all aspects of the position are disclosed.

Let me be very clear. I am in no way trying to disparage students and young physicists who feel a responsibility to national security even above personal considerations or those who are not involved with these questions. I am concerned with admittedly a minority of physicists who are going to have ethical or moral problems in working in at least some parts of the national-security field. It is for them we must face this problem and perhaps in the end it is for ourselves; for it is difficult to teach well with a bad conscience.

MARTIN L. PERL
Stanford University

Blame the universities

For some time the hue and cry concerning the decreasing enrollments in both high-school and college physics has been loud and clear. Many different ideas have been proposed to explain the loss, but should not the entrance requirements of our colleges and universities be the culprit?

The young people in high school are like any other segment of the population: They will do only as much as demanded. The college entrance requirements, in most instances, state that *one year* of a laboratory science must be successfully passed in the 11th or 12th grade of high school, this coupled with the demand that the college applicant be in the upper percentile of his graduating class. Now, the question: "What high-school student will risk his grade point average and involve himself in all kinds of work to take a course that no one says he must?"

The athletic departments of the same schools encourage their participants to start their athletic careers from the seventh grade or earlier.

If the colleges do not make more science requirements for application, how can we expect to have any hope of a "farm system"?

How many potential physics students are we losing because they were never exposed to the subject to get an

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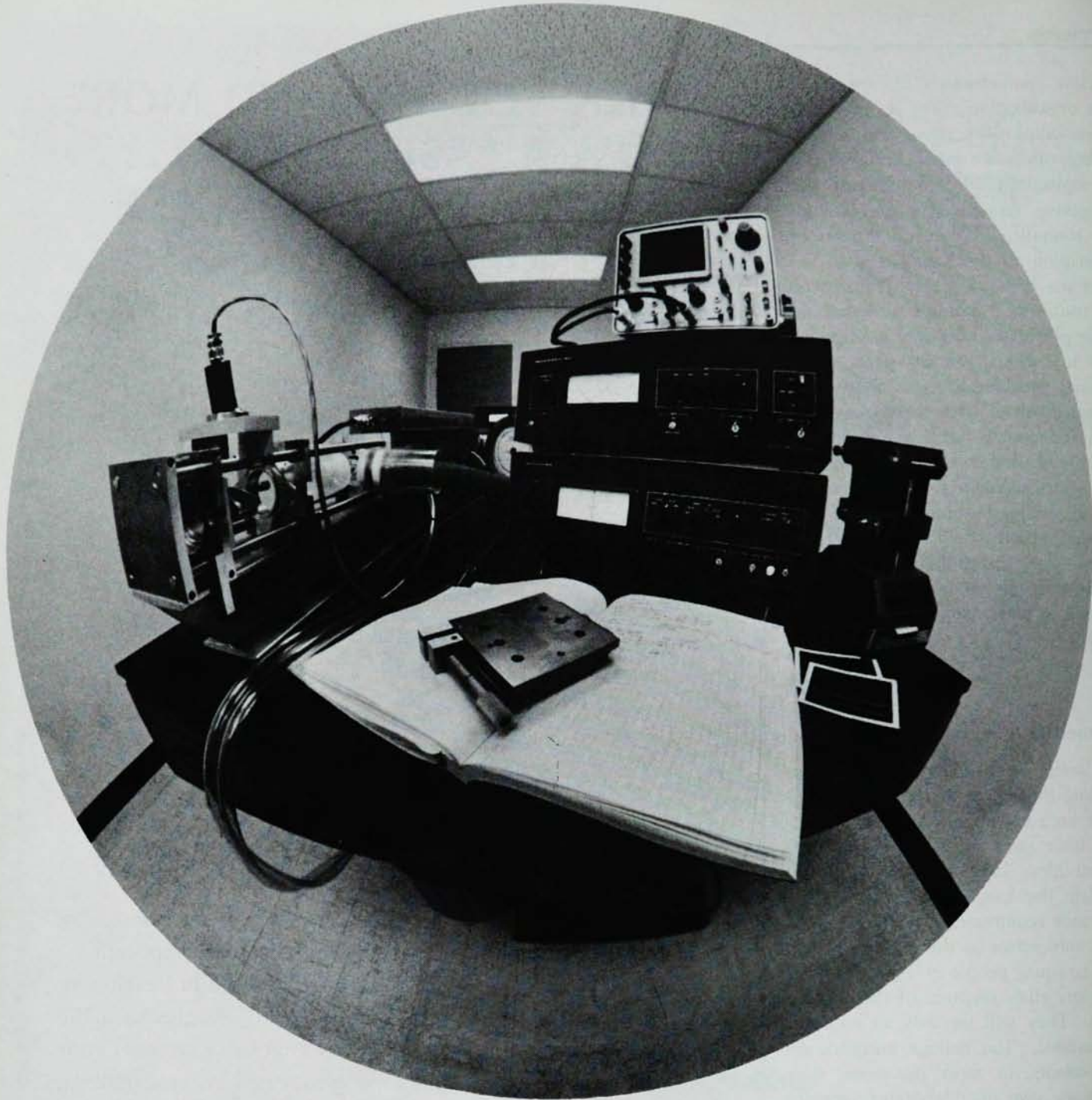


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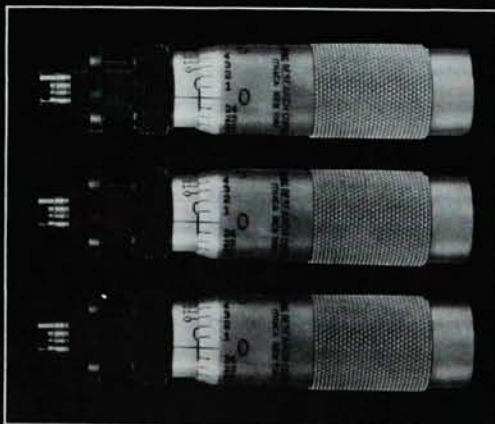
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enthusiasm or feeling for it? How many people now eat ripe olives because they tried them and liked them?

JOSEPH D. STOECKLEIN
Edgewood (Calif.) High School

Magnetic fields in biology

In my recent paper "Magnetic Fields in Biology" (PHYSICS TODAY, November, page 38), a statement omitted from the original manuscript called attention to work on magnetocardiography preceding that of David Cohen of MIT and referred the reader to his summary of prior results. In 1963 Gerhard Baule and Richard McFee used an ingenious scheme employing two coils to record for the first time magnetic fields generated by the electrical activity of the human heart without the necessity of elaborate magnetic shielding. I am indebted to Cohen for calling attention to this omission.

An error in the artist's copy of Audus' diagram (figure 2) displaced the green curve vertically against the black curve so that its zero point no longer lines up as it should, with the maximum of the latter. In equation 1 the factor $\frac{1}{2}$ has been omitted.

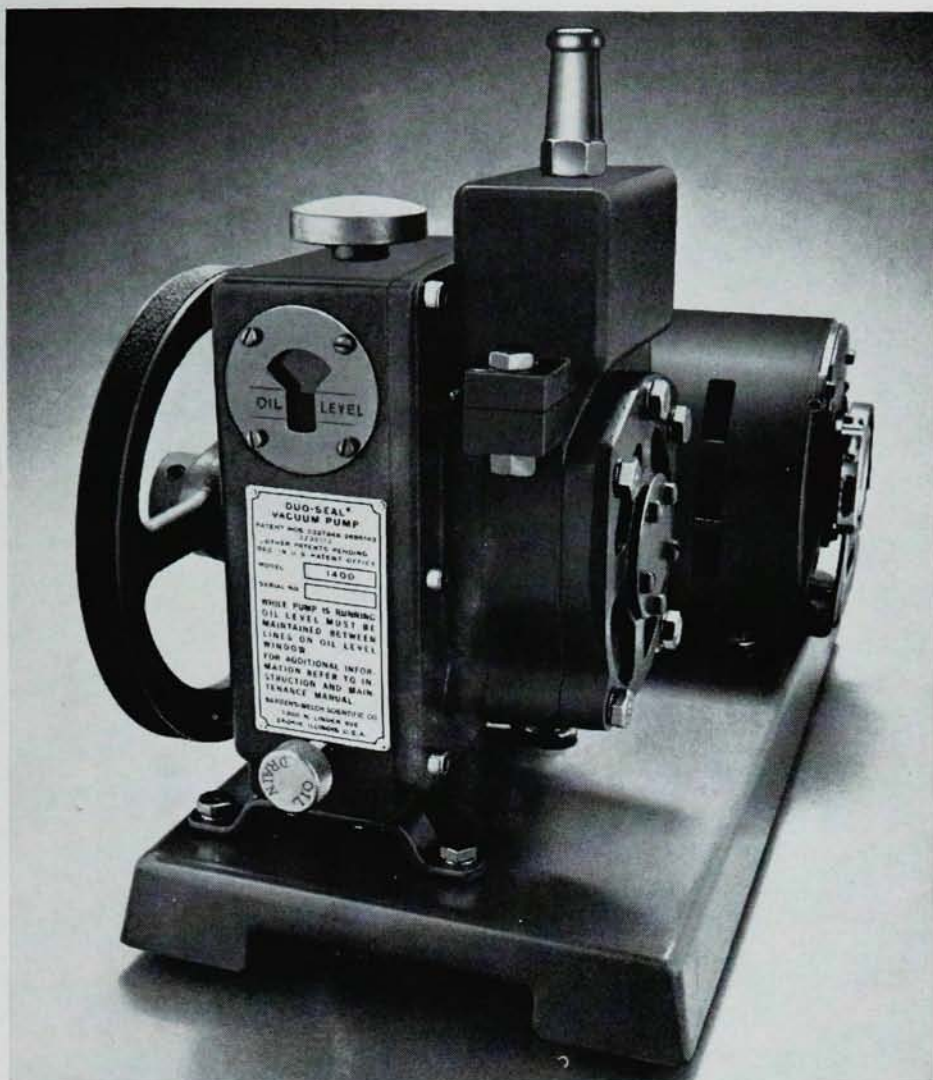
ALEXANDER KOLIN
University of California Medical
Center, Los Angeles

Make page charges compulsory

The recent editorial in *Physical Review Letters* (21, 1301, 1968) concerning the failure of many authors to honor page charges is cause for deep concern on the part of the entire physics community. The journals published by the American Institute of Physics are superlative and serve as a model for other fields of science. They owe their success in no small measure to the AIP policy of dividing the cost between readers and authors.

If voluntary page charges are not honored, I suggest that the AIP make them compulsory but that authors who are forced to pay from their own personal funds be charged a reduced rate, perhaps depending on their income, their organizational arrangements or the number of pages involved. Such a mechanism would ensure continued success of AIP journals without making an unreasonable hardship on anyone.

W. S. BROWN
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