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JOSHUA STERN

National Bureau of Standards,
Washington, D.C.

Letters

Support of Science by College Student Body

Associated student bodies of American colleges and universities have yearly budgets for student activities which may include hundreds of thousands of dollars. Monies generally come from the sale of student-body tickets, from admissions, and from publications. Expenditures include the support of athletics, music and arts, publications, publicity, administrative salaries, and general activities. In so far as is known by us, no student body has budgeted funds for the support of scientific research.

The Associated Student Body of Long Beach State College established a research board composed of students and faculty to further basic research on the campus. The purposes are (i) to provide increased opportunity for students to engage in scientific research; (ii) to increase scientific knowledge; (iii) to provide an activity which is a source of interest, pride, and prestige for the student body as a whole, and for the college; and (iv) to emphasize the need for acquainting the public with the goals and values of basic research.

The primary function of the research board, consisting of four students and three faculty members from the various areas of science, is to approve deserving research proposals submitted by student-faculty teams. Funds may be used for equipment, supplies, or salaries. Projects will be supported for a 1-year period; however, additional funds may be requested.

While the amount budgeted the first year is small (\$1000, representing about 0.6 percent of the total student-body budget), it demonstrates that the undergraduate student realizes the value and the importance of supporting basic research.

DONALD J. REISH
RICHARD B. LOOMIS

Department of Biological Sciences,
Long Beach State College,
Long Beach, California

High-Altitude Observation

I have recently read with great interest the article by R. C. Staley "High-altitude observation techniques" [*Science* **130**, 845 (2 Oct. 1959)]. I would like to make the following comments relative to some recent developments.

1) The altitude limit of the rocket-grenade experiment for temperature

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and winds has been pushed upward to 94 km. No appreciable further extension is in sight. [See W. G. Stroud, W. R. Bandeen, W. Nordberg, F. L. Bartman, J. Otterman, P. Titus, "Temperatures and winds in the arctic as obtained by the grenade experiment," *IGY Rocket Rept. Ser. No. 1, Natl. Acad. Sci. U.S. Publ.* (1958), pp. 58-79.]

2) The falling-sphere technique for determining upper-atmosphere density, which uses the transit-time accelerometer invented by L. M. Jones, has yielded atmospheric density data in series of experiments during the last few years. [L. M. Jones, F. F. Fischbach, J. W. Peterson, "Seasonal and latitude variations in upper-air density," *IGY Rocket Rept. Ser. No. 1, Natl. Acad. Sci. U.S. Publ.* (1958), pp. 47-57.]

3) In 1958 I proposed to the Air Force Cambridge Research Center an experiment involving a falling sphere with a stable platform and XYZ accelerometers. The experiment is now under study at the University of Michigan Willow Run Laboratories, under contract AF19(604)-5205. It appears that good density determination can be expected at altitudes up to 150 km and horizontal wind determination, at altitudes up to 120 km. Vertical winds can be estimated.

JOSEPH OTTERMAN
Willow Run Laboratories,
University of Michigan, Ann Arbor

I would like to express my appreciation to Joseph Otterman for his interest in my article and for his amendments to it. It is regrettable that these recent references, although available to me, escaped my attention. The purpose of my article was to call attention to material scattered through the literature. I hope other workers in atmospheric physics will share their discoveries through the pages of *Science* as well as through their own specialized periodicals.

RAYMOND C. STALEY
Department of Meteorology
and Climatology,
University of Washington, Seattle

On Selecting "Immortals"

As a teacher of the history of science, I should like to be instructed by some of your readers. In a recent issue of *Science* [130, 150 (17 July 1959)], a news item lists the 25 "Immortals of Science" whose names will be carved in the walls of the new science building at the University of Bridgeport. I am not interested in the game of fighting for favorite names, but I should like to ask whether anyone can explain how

the electors managed to include the name of Leonardo da Vinci—to be judged a genius, yes, but hardly a scientist, especially on the basis of the criteria set up by the university. In spite of the airplanes and studies of fluid flow, Leonardo did not (i) make "a fundamental discovery regarding the laws of nature," nor was he (ii) "responsible for an invention not based on a previously known fundamental law of nature."

Is this an example of the blind following of tradition? In case there are those who require annotations, let me refer them to the works of Leonardo himself, and to comments by Randall, Duhem, and Sarton.

I. WEBB SURRATT
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Tax Deduction

In a recent issue [*Science* 130, 86 (1959)], in discussion of a congressional bill to stimulate private philanthropy, mention is made of an 80-cent dollar for a person with a taxable income of \$5000. This is only the case, though, if the itemized income-tax form is used. For those of us who take a straight 10-percent deduction, a dollar given away consists of 100 cents, with no tax rebate of 20 cents or even 9 cents.

WILLIAM I. MARTIN
Pittsburgh, Pennsylvania

Science Writing

The editors of *Science* and J. Allen Hynek are to be congratulated for the report "Occultation of the Bright Star Regulus by Venus" [*Science* 130, 707 (18 Sept. 1959)]. To paraphrase Hynek's dramatic opening paragraph: In this age it is no longer often that we are given the opportunity to read so beautifully written and so personalized an account of a scientific observation.

As recently as 25 years ago it was not uncommon for an article in a scientific journal to reflect its author's individuality. Hynek's refreshing style may remind us that the literature antedating our present age of self-imposed and editor-imposed conformity is rich with like examples. Perhaps stylistic excellence might some day be revived if we directed our students more insistently to the finest examples in the "classic" literature of our respective fields.

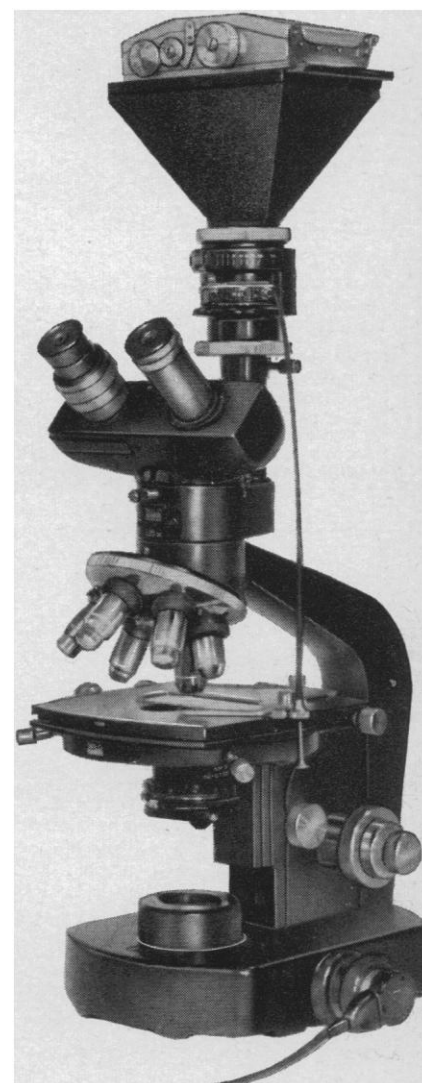
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