

ate degree program in physics. Thus I am delighted to relate on behalf of our physics department that the report of its death is an exaggeration (*pace* Mark Twain).

We look forward to continuing a successful undergraduate degree program, as well as two graduate degree programs, in physics at Portland State University.

WILLIAM W. PAUDLER
Dean, College of Liberal Arts
and Sciences
Portland State University
Portland, Oregon

7/91

Magnet Lab: A Near Miss for New Mexico?

The news story "Coming Attraction: NSF Rejects MIT, Picks Florida State for Magnet Lab" (January 1991, page 53) gives some misimpressions. First, the NSF team visited New Mexico State University as well as Florida State University and MIT. Second, those of us close to the process did not find the choice of FSU "shocking" at all and are very supportive of NSF's decision. The NMSU-Sandia National Laboratory team was outstanding and could have met the challenge of regaining the world leadership lost to France, Germany and Japan over the past 30 years. We had a very competitive proposal, one that presented a viable alternative to MIT or FSU and had many of the same characteristics as the Florida State proposal. Furthermore, we are a growing Carnegie Research Category I Minority Institution with aggressive and forward-thinking upper-level and college management of research programs. We just were not selected.

It is probably a shock to many that there are numerous institutions like NMSU that, although not usually considered to be on the list of the top 10 research universities, are highly competitive and have world-class capabilities in engineering and science research.

J. DERALD MORGAN
New Mexico State University
Las Cruces, New Mexico

3/91

A Short Exposure to 'Doc' Edgerton

When I saw the obituary of Harold Edgerton in your April issue (page 126) I was reminded of my sadness upon hearing of his death in January. I met "Doc" Edgerton by chance one day in 1976. I was a freshman physics student at Rutgers, visiting a high school classmate of mine who was

attending MIT. We were wandering the hallway on the way back from her classes, looking at the pictures on the walls. By now almost everyone has seen them: the bursting balloon, the exploding apple, the drop of milk. But they were brand new to us, and we were fascinated.

Suddenly an elderly gentleman charged out of a nearby office, said, "You like those pictures? Come here, I'll show you something," and hustled us into one of the labs. He took us on a whirlwind tour of the place and then installed us at one of the sinks, where green-dyed drops of water could appear to stand still or even flow backward, depending on the speed of flow in relation to the frequency of the adjacent strobe light. He spent a few minutes asking us about what classes we were taking and why we were interested in physics. Then he looked at his watch and ran out of the room, stopping only to say over his shoulder, "Turn off the lights when you're done."

"Who is that guy?" I asked my friend.

"I have no idea," she answered.

"Well, it's nice of him to let us play in his lab."

It wasn't until much later that I heard of the famous Doc Edgerton: Reading an article about the inventor, entrepreneur and, above all, teacher, I suddenly realized that I was reading about someone whom I had been privileged to meet. All who were his students, whether for five years or five minutes, are richer for having known him.

SHERRI CHASIN CALVO
Goddard Space Flight Center
Greenbelt, Maryland

4/91

Hamamatsu Photonics Lab: Given to Gotham

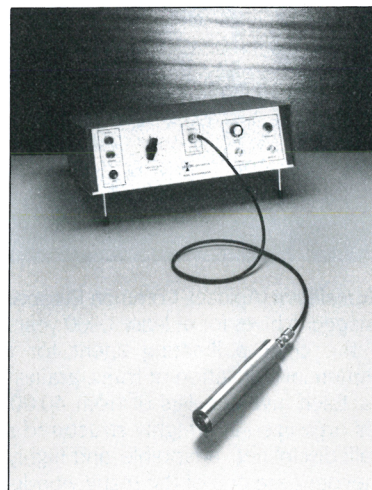
I found the news story entitled "Several Japanese Corporations Establish New Labs in United States" (February 1991, page 81) very interesting and informative.

However, I must point out that it overlooked Hamamatsu Photonics KK, which in 1986 selected the City College of the City University of New York to house and operate the Photonics Application Laboratory—the first such lab in the United States.

The laboratory, which was supported by an initial \$625 000 grant from Hamamatsu, conducts research into the basic nature of light; light scattering in random and turbid media; three-dimensional optical imaging in the time and angular domains; ultra-

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fast phenomena in superconducting materials; cross-phase modulation and pulse compression and amplification of ultrashort laser pulses; and ultrafast semiconductor structures, optical physics and devices. Hamamatsu has continued to support the core research at the laboratory at approximately \$200 000 annually.

R. R. ALFANO
City College of the City University
3/91 of New York

'Distinguished' Universities Redefined

The Carnegie Foundation has recently called for a broadened definition of what is acceptable scholarship for a university professor. I would like to point out that a broadened definition of what constitutes a distinguished university could well solve many of the nation's problems in higher education.

In a report entitled "Scholarship Reconsidered: Priorities of the Professoriate," the Carnegie Foundation calls for acceptable scholarship to include not only the discovery of new knowledge (that is, research) but also its integration, application and teaching. If universities could be considered distinguished for being excellent in some but not necessarily all of these areas, then not all would feel the necessity of becoming research universities. This obviously would allow some to concentrate on teaching or other areas of scholarship.

The flow of money influences the flow of events. People (including physics professors) tend to change their activities so as to intercept the flow of money. Thus Federal money means Federal control. The nation has seen this happen in detail in its subsidy of farming: The nature of farming has drastically changed. As a person who was raised on a farm, I see some similarity between what has happened to American farms and what is happening in our physics departments. The fact that there is money for research means professors are strongly encouraged to seek it. If there were money for all four of the above-mentioned areas of scholarship, things would balance out a bit. Further, since there is never going to be enough money to support all the universities that want to be research universities, something has to be done. Supporting research is very expensive. Supporting some of the other areas is not so much so.

Finally, I would like to make a plea for having the people who actually do

the jobs make recommendations on how the taxpayers' money is spent. For example, professors who are in the trenches doing the teaching should have a large say in how money to improve teaching is divided up. It is too easy to use people who are more grantsman than researcher, teacher or scholar to write the guidelines and review the proposals. At all levels of society we need to have reasonable expectations of our productive workers. There is no better way than to have the workers define those expectations.

JAMES D. PATTERSON
Florida Institute of Technology
12/90 Melbourne, Florida

Fastie Spectrometer Recollections

It was a pleasure to read the piece by Bill Fastie entitled "Ebert Spectrometer Reflections" (January 1991, page 37). In the opinion of one person who was present at the creation, Fastie has always given too much credit to Hermann Ebert for the realization of the so-called Ebert-Fastie spectrometer. My solution has always been to reverse the order of the names. Indeed, I would prefer to call it the Fastie spectrometer. To those who ask how to tell the difference between an Ebert spectrometer and a Fastie spectrometer, I should explain the method that was recommended at Johns Hopkins: "The Fastie spectrometer is the one with the thumbprint on the grating."

THOMAS M. DONAHUE
2/91 University of Michigan, Ann Arbor

I read with pleasure the splendid article by William G. Fastie on the Ebert spectrometer. As he wrote in the article, I gave him a small transmission diffraction grating when he was 17 and with it he went around Baltimore looking at the spectra of neon signs and getting hooked on spectroscopy.

A few days after he got the grating, he showed me a spectrum of iron nails he had made with a spectroscopic outfit contrived from the grating, a box camera and an induction coil from a Model T Ford as a source of high voltage. Of the many spectrographs and spectrometers that benefited from his touch, including that of Ebert, this surely was one of significance.

JOHN A. SANDERSON
1/91 Clemson, South Carolina

FASTIE REPLIES: The most significant fact is that John A. Sanderson is a

generous, kind and superb teacher.

My great and good friend Tom Donahue has confused the resurrection with the creation. I forgive him.

WILLIAM G. FASTIE
The Johns Hopkins University
6/91 Baltimore, Maryland

Aid to Minorities and Women /s Physics Aid

There is a disturbing sentence in Alexander Kaplan's reply to a letter from Michele Kaufman (February 1991, page 120). He contrasts existing programs for aiding minorities with his proposal (October 1990, page 121) for aiding immigrant scientists: "While those programs are aimed basically at promoting *representation* of minorities in science, my proposal is meant to strengthen US *science*." The emphasis is his. No doubt he also means the reader to put some stress on "strengthen." Kaufman had pointed out that his proposal, which would amount to discrimination on the basis of national origin, would work against American blacks and women.

My understanding of the existing programs differs from Kaplan's. They aim to be fair to those who were victims of unfair discrimination, and also to *strengthen science* by attracting them. Increased representation is simply a clue that we are succeeding. Or am I wrong? Are we more concerned with statistics than with the effect on potential scientists or on science?

In 1876 Maria Mitchell, America's first woman astronomer, had something to say on the matter: "In my younger days when I was pained by the half-educated loose and inaccurate ways which we all had, I used to say, 'How much women need exact science.' But since I have known some workers in science who were not always true to the teachings of nature, who have loved self more than science, I have said, 'How much science needs women.'"¹

Reference

1. H. Wright, *Sweeper in the Sky*, Macmillan, New York (1949).

EMILIA P. BELSERENE
Maria Mitchell Observatory
2/91 Nantucket, Massachusetts

A Thornton on EPSCOR's Side

The news story in the February 1991 issue (page 77) about NSF's Experimental Program to Stimulate Competitive Research accurately describes