



ENGINEERS:
Systems, Design,
Development
PHYSICISTS

opportunity and advancement are 'GO' at VITRO!

DYNAMIC EXPANSION CREATES NEW CAREER POSITIONS

Vitro Laboratories is expanding on all fronts . . . missile systems engineering . . . design and development . . . analysis . . . research and study. We are stretching the parameters of knowledge in space, in the air, on the ground and underseas. We invite you to enter the "go" climate of Vitro.

Vitro is a good place to work. Here you will find a professional atmosphere conducive to original and imaginative thinking. Skilled clerical and technical support frees you to concentrate on the creative aspects of your assignments, and salaries are at a level worthy of your attention. You will advance as fast as your talents allow.

Career appointments are available immediately in the following areas:

MISSILE SYSTEMS ENGINEERING Polaris, Typhon, Talos, Tartar

DESIGN & DEVELOPMENT

Digital equipment

ASW equipment

Underwater vehicles

Simulators • Torpedoes

Electro-mechanical launching equipment

ANALYSIS

Radar and IR systems

Digital and analog equipment

Fire control systems

RESEARCH & STUDY

Reliability and feasibility studies

Basic and applied research

Weapons systems analysis

Acoustic studies

ASW studies

WRITE OR PHONE COLLECT for details:
Manager, Professional Employment

Vitro LABORATORIES

Division of Vitro Corporation of America
Dept. 227, 14000 Georgia Ave.
Silver Spring, Maryland
(Residential suburb of Washington, D. C.)
Phone: WHitehall 2-7200
An equal opportunity employer

LETTERS

Testing

In connection with recent discussions of the multiple-choice physics tests administered by the Educational Testing Service,* it should be pointed out that there are no restrictions on how many times a student can take the Graduate Record Examination. Many students are aware of this and take the examination repeatedly. For example, students could take and did take identical advanced physics tests in November 1961 and in January 1962. In many cases students who got low scores the first time, received excellent scores the second time. Many of them submitted only the excellent scores with their applications.

It would appear that the scores should not be taken seriously unless all the scores are available that a student has obtained previously and unless it is known how many times he took identical tests. In the past, the Educational Testing Service has not provided this information, but ETS has indicated that it might be willing to do so in the future.

When the danger of using the same test repeatedly was called to the attention of ETS in 1961, the reply was, "Since each of the Advanced Tests is a three-hour, comprehensive test which keeps the examinee busy, it is unlikely that he will be able to reproduce many questions with any appreciable degree of accuracy." After evidence was submitted to ETS showing the dramatic improvement in scores upon repetition of tests and after much prodding, ETS finally agreed to look into this problem. For this purpose it sent its "security officer" to interview repeaters and discovered that "the scores have been affected by the fact that the candidates were able to recall specific topics covered by the test. The fact that the same form was used was cited as being of help to the repeater." This finding came apparently as a great surprise to ETS although it had been known to many physics departments for a long time.

H. H. Barschall
University of Wisconsin

* References

1. B. Hoffmann, Testing, *Physics Today*, October 1961, p. 38.
2. R. B. Gray, letter, *Physics Today*, February 1962, p. 62.
3. R. Hart, letter, *Physics Today*, February 1962, p. 62.
4. F. J. Fornoff, Objective Tests—All Bad?, *Physics Today*, April 1962, p. 36.
5. B. Hoffmann, letter, *Physics Today*, June 1962, p. 80.
6. R. Hart, letter, *Physics Today*, July 1962, p. 66.

Material on Michelson Wanted

For a biography of my father, the late Albert A. Michelson (1852–1931), physicist and first American Nobel Laureate in the sciences, I would appreciate manuscripts, letters, photographic material, or memories.

Mrs. William D. Stevens
209 East 72nd Street
New York 21, New York

PHYSICS TODAY