



Complete Nuclear Physics Teaching Laboratory

At last! An accelerator-based teaching system for less than \$50,000. A lot less if you already have some of the electronics.

By system, we mean first, the equipment: a 400 KeV Van de Graaff accelerator, vacuum equipment, magnet, scattering chamber, detectors, radioactive sources, support electronics, pulse height analyzer, and radiation monitor.

Second, our teaching manual: 30 graded experiments in nuclear physics, explained step by step, enough to fill a 3-semester laboratory course. By then the student will have performed the fundamental experiments of nuclear physics and encountered a great deal of quantum mechanics, atomic physics, and solid state physics.

Research? Yes. In nuclear physics, solid state physics, atomic physics, and activation analysis. The magnet provides for additional research stations where your staff and graduate students can do original work.

It's everything a teaching/research system should be: simple to operate, virtually maintenance-free, easily modified for different experiments, low initial cost, expandable with optional equipment.



Our booklet, "The Van de Graaff Nuclear Physics Teaching Laboratory," shows just how this equipment and course book combine theory and practice in the modern physics curriculum. We'll be glad to send it to you.



HIGH VOLTAGE ENGINEERING
Burlington, Massachusetts

Name _____

Position _____

Organization _____

Address _____

Zip _____

Weber, Freud, Fromm or McLuhan. With the help of a dictionary I can still translate Latin and Greek authors et al, and I am up to date on current events. The foundations and initial momentum for these interests were laid during my school years at an age when these were much easier achieved than is possible at the university level. And I am by no means exceptional as anyone will probably be able to confirm from his own experience with Europeans of similar background. Also, every available evidence indicates that there is absolutely no innate difference between European and North American youth.

It appears to me that for purely historical reasons any serious educational efforts in North America are delayed and relegated to the university with progressively more disastrous results: The present strains—both economic and social strains—under which our universities creak appear to me to result from the dual and nearly incompatible roles forced upon the universities: (1) to train scholars in depth and (2) to provide a broad education for the masses—and to do both in a traditionally fixed number of years. Everything—motivations, interest, breadth and depth—has to be generated and provided for in one institution, and this is compounded by society's insistence on the university degree for almost any job, forcing kids into institutions for which they are not equipped by motivation, talent or ability.

I have a high respect for the competent electronic technician, car mechanic, paper hanger, who never came close to a university. They are usually bright, successful and happy people. The fellow who with many groans and after endless frustrations finally barely manages to get a BSc is a sorry and useless creature. He is more often than not frustrated and hence unhappy and moreover doesn't usually know what to do with himself. Nor does anybody else know what to do with him.

I believe it is high time we seriously questioned the purposes served by our universities at this time. Let our schools provide what they could and should provide: an education. And let us create a multitude of channels by which people, according to their talents, abilities, interests and motivations, can develop successfully to

some competence. Then the university can return to the role for which it is uniquely equipped and be a training ground for scholars and professionals.

Let's face the facts: a BA or BSc for everyone does *not* constitute a passport for success, nor is it a guarantee of becoming an educated person, nor is it the only way to become educated.

K. E. RIECKHOFF
Simon Fraser University

High standards and education

It appears to me that the editorial "D. Phil or D. Phys.?" (PHYSICS TODAY January, page 154) belonged in a sociology journal. If one wishes to study education or sociology, let him do so. However, I find it unconvincing that he then is better prepared to analyze the issues of the day. I believe the two indicated solutions—to put physics education into the hands of educators and to keep standards high—are mutually exclusive. Having corrupted our elementary schools and high schools, shall we now corrupt the universities?

GEORGE ADOMIAN
University of Georgia

Not-so-special rates

I should like to urge strongly that the placement of notices in the *Bulletin of the American Physical Society* advertising "possible flight arrangements at reduced rates" available to APS members traveling to meetings be stopped immediately unless special APS rates are in fact being offered.

Recently in accordance with the instructions of these notices, I wrote to ("contacted") Emily Wolf of the American Institute of Physics inquiring about reduced rates for travel to the coming New York meeting. In response I received a form letter from the Galatti Travel Service, Inc., of New York offering a 25% reduction in air fare between New York and 14 named American cities "based on the 30-Day See America Excursion Fare." Some APS members may not already know that the 30-day excursion fares are offered by any travel agent in the United States on round-trip flights between any two American cities to be made by anybody whose schedule meets the conditions on time of departure and return stated in the Galatti letter. Therefore I suggest that these notices in the *Bulletin*,