

SCIENCE EDUCATION

Planning a building?

Latest design features for 26 new physics buildings are presented in *Physics Buildings Today* recently issued by the American Institute of Physics. Floor plans, cost data, and department statistics accompany full-page illustrations as well as explanatory texts. The booklet is a supplement to a 1961 volume, *Modern Physics Buildings: Design and Function*, which is still recommended as a basic information source on design elements and equipment features.

The new supplement as well as the earlier volume result from AIP's awareness of the need for reliable and up-to-date information on new building design. Institutions of higher learning in America now spend yearly an estimated \$300 million on new classrooms, \$126 million for instructional laboratories, and about \$104 million for new research facilities. In the later 1950's AIP and the American Association of Physics Teachers started a building design project which reported its findings in *Modern Physics Buildings*. Recently, AIP inquired in the physics community and found need for a supplement to the earlier volume.

Physics Buildings Today includes facilities devoted entirely to physics, like Clemson University's physics building, quarters that are shared with other disciplines, such as Stokes Hall at Haverford College, as well as research buildings like Florida State University's physics research laboratory.

Particular attention is focused on design flexibility, economy, and good visibility and acoustics. In Bryn Mawr's physical-sciences building, for example, flexibility for future change is achieved by using movable concrete-block partitions and mechanical and electrical services supported from channels cast into ceilings. Economy at Kansas State University is effected through modular laboratory and office design, using only one supporting pillar in each lab, and spraying with acoustic plaster instead of paint.

Design features in Macalester College's physics lecture room include a stepped-floor system, acoustically treated walls, recessed incandescent fixtures on a dimmer control, and strip-line diffusion for cross ventilation. The problem of fitting a large science complex into an academic setting is solved by Lake Forest College by building three small units, linked by an enclosed bridge at the second-floor level.

The publication also lists sources providing financial help for constructing physics facilities.

As a companion volume AIP has also issued *Checklist For Physics Buildings*. The *Checklist* is intended to prevent oversights in building construction and encourage cooperation between architect and client. Included are more than 300 ideas and suggestions under 28 headings, ranging from "general structural considerations" to "hardware, locks, and keys". A list of references has also been provided to pertinent reports on various aspects of planning and construction.

Compilation and publication of both *Physics Buildings Today* and *Checklist For Physics Buildings* were made possible by a grant from Educational Facilities Laboratories, Inc. Copies of the reports are being distributed to all physics departments in colleges and universities; further copies can be obtained from AIP's Education and Manpower Department.

Expansion at Stony Brook

Physics is growing at the Stony Brook campus of the State University of New York. Stony Brook, some 25 miles from Brookhaven National Laboratory on Long Island, is one of 58 branches in the New York State University system. Large state and federal support has enabled the physics department to triple its staff and quadruple the number of graduate students in the past few years. New laboratories are being built for re-

search in radioactivity, solid-state physics, and nuclear structure, the last to include a 15-MeV Van de Graaff.

Pedagogical interests have kept pace with the Department's research emphasis. All members of the faculty, including full professors, teach undergraduate and beginning courses. Several members are engaged in the development of new curricular methods for physics and liberal-arts majors as well as high-school students, and recently the Department organized a conference on physics teaching at two-year schools in the state system. This fall, the Department has 80 undergraduate physics majors.

A few years back the Stony Brook Physics Department had few attractions to offer prospective faculty or students—a small teaching staff, and little in the way of advanced equipment. The State University was without a director, and Stony Brook itself did not have a president. There was promise, though, for the future. The State of New York gave its university a mandate with its 1960 Master Plan, which proposed that the state system establish comprehensive graduate centers at four campuses: Stony Brook, Buffalo, Albany, and Harpur. A \$726 million capital budget was drawn up for the decade, and of this amount Stony Brook was to receive \$82.7 million, plus \$75 million for a medical school and hospital.

It took some time, however, before any results of the plans became evident at Stony Brook. As one faculty member put it, "We had to live through a long period of frustration and mixed mandates." During these early days, Leonard Eisenbud, well known for his theoretical work on nuclear structure, was head of the Department. Since there was no adequate supply of apparatus for experimental work, Eisenbud concentrated on developing a faculty strong in theoretical areas, especially in nuclear structure. In the fall of 1962, when T. Alexander Pond assumed chairmanship of the Department, the faculty that Eisenbud had assembled was