

over \$18.4 million to 330 institutions for equipment. Many of these institutions have also received nuclear materials (valued at about \$10 million) on loan from the Commission. Two thirds of the funds provided under the last group of equipment grants were awarded to 59 institutions for equipment in the physical sciences and engineering.

Engineering educators attending a sectional session of the American Association of Land-Grant Colleges and State Universities last November were told by spokesmen for the AEC that educational institutions can expect to receive increased support for education, research, and facilities related to programs in atomic energy. Walter E. Hughes, chief of program analysis in the AEC's Division of Research, stated that the Commission plans to finance buildings needed for on-campus nuclear projects: "the problems of research buildings and facilities . . . will be resolved. . . . The universities have a need for about \$5 billion for facilities. The facilities will be provided one way or another."

Speaking at the same meeting, John C. Cera, in charge of education and training in the Commission's Division of Reactor Development, said that while most nuclear equipment grants have in the past been awarded to engineering schools, the AEC will in the future make such grants available to colleges of arts and sciences as well. Cera called for strengthening higher education in nuclear science and engineering and indicated that the AEC plans to assist in reaching that goal by providing colleges with equipment and material that will stimulate nuclear studies in chemistry, physics, metallurgy, and engineering. A third Commission spokesman, A. Tammaro, assistant general manager for research and industrial development, reported that an increased percentage of AEC support for basic physical research will be shifted to educational institutions and away from the AEC's own national laboratories.

Surplus electronic components valued at \$15 000 were recently contributed by Baird-Atomic, Inc., to the New England School Science Advisory Council for distribution to high schools throughout the New England states. The Council was formed a year ago by a group of professional and scientific organizations to encourage training in science and mathematics at the secondary-school level.

The establishment of a reservoir of surplus and replaced industrial equipment for use in the science classroom is only one aspect of the Council's program. NESSAC also provides speakers for science classes, arranges demonstrations to supplement lectures, offers career guidance and scholarship information, arranges tours to industrial plants, and provides consulting services to teachers and students.

For additional information concerning the NESSAC program, write to C. W. Grinnell, Public Relations Director of the New England Council, Statler Building, Boston 16, Mass.

School Facilities and Programs

Yale University has received a gift of approximately \$10 million from C. Mahlon Kline of Philadelphia for the construction of a new science center in New Haven. To be known as the "Kline Science Center", it will consist of a chemistry laboratory, a library and laboratories for the biological sciences, a geology building, and an auditorium.

Although the center will not include facilities for physics, it will permit a reallocation of space now used for biological study in the Gibbs Laboratories and will thus provide Yale's Physics Department with considerably more working space. The new chemistry building, to be devoted exclusively to research, will extend from the Sterling Chemistry Laboratory to the atomic accelerator buildings, forming one end of an open court of science buildings on the Yale campus.

Pensacola Junior College in Florida has installed a Lockheed 501 subcritical training reactor as part of its newly established program in nuclear education. The curriculum, which now consists primarily of a survey of nuclear science and technology, will eventually include the study of radioisotopes in physics, chemistry, and biology, as well as instruction in nuclear instrumentation and reactor design. The school decided to acquire the instrument as a result of a community workshop on nuclear technical education which was held a year ago in Pensacola, and the training program will be developed with the help of a local advisory committee consisting of representatives of industry and the Navy. Support for the project was supplied by Lockheed Nuclear Products.

Equipment for Carleton College's new Olin Hall of Science will include an electron microscope costing \$34 750, a gift from the Olin Foundation of New York City. An earlier award from the Foundation for \$1.51 million has made possible the College's science hall for biology and physics, now under construction and scheduled for completion in August of this year.

A program of affiliation, beginning with the 1961-62 academic year, has been announced by Rensselaer Polytechnic Institute and Russell Sage College, located on nearly adjoining properties in Troy, N. Y. The two schools have decided that women science and engineering students living at Sage will in the future study at Rensselaer. Although coeducational by charter, Rensselaer has had no dormitory facilities for women and has therefore been able to accept only those female students who have been residents of the local area.

Under the new program, prospective women students will apply directly to Rensselaer for admission and will be admitted in open competition with male applicants. Successful candidates will take all academic work at RPI and their academic status will be entirely under the control of that institution's faculty. The program is intended "to have the twofold benefit of helping to increase the nation's professional engineering and sci-

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Hofstra College of Hempstead, Long Island, intends to expand its present nuclear physics training program at both the undergraduate and graduate levels by the introduction of three new laboratory courses, the first of which will begin next September. This planned expansion has been aided by the award to Hofstra of an AEC grant of \$26 000 which is to be used by the College to acquire nuclear detection and measurement apparatus. The Physics Department will also give courses in nuclear engineering as part of newly established degree programs leading to either the bachelor of arts or the bachelor of science in engineering science.

Courses and Lectures

McCrone Research Institute has announced that courses in applied microscopy will be offered in three cities (Chicago, London, and San Francisco) this year. Each course provides lecture and laboratory time equivalent to four semester hours at college level, is three weeks long, and covers optics, photomicrography, micrometry, crystallography, and the application of the microscope in fields such as air pollution, forensic science, synthetic fibers, and other industrial areas. The course in San Francisco will be offered in cooperation with Arthur D. Little, Inc., from March 6 to 24, 1961. In London the dates are June 26-July 7, and in Chicago, July 10-28. Inquiries may be sent to D. Grabar, McCrone Research Institute, 449 East 31st Street, Chicago 16, Ill.

Ten lectures on semiconductors are to be given under the sponsorship of the North Jersey Section of the American Chemical Society. They will be held from 7 to 9 p.m. on ten consecutive Tuesdays, starting with February 7, in the cafeteria auditorium of Merck & Co., Inc., in Rahway, N. J. Dates, titles, and names of the lecturers are listed below:

- Feb. 7. Introduction to Semiconductors, Harvey Brooks (Harvard)
- Feb. 14. Chemical Classification of Semiconductors, W. B. Pearson (National Research Council, Canada)
- Feb. 21. Structural and Chemical Defects in Semiconductor Crystals, M. J. Sinnott (U. of Michigan)
- Feb. 28. Physical Measurements in Semiconductors and Their Interpretation, Eli Burstein (U. of Pennsylvania)
- Mar. 7. Phase Equilibria in Semiconductor Systems, Irving Cadoff (New York U.)
- Mar. 14. Chemistry of the Preparation of Monocrystalline Semiconductors, F. Hubbard Horn (GE Knolls Research Lab.)
- Mar. 21. Control of Composition of Single-Crystal Semiconductors (Zone Refining), William A. Tiller (Westinghouse Research Labs.)
- Mar. 28. The Chemistry of Semiconductor Surfaces, Jacob F. Dewald (Bell Telephone Labs.)
- Apr. 4. Diffusion in Semiconductor Single Crystals, Calvin S. Fuller (Bell Telephone Labs.)
- Apr. 11. Current Chemical Problems in Semiconductors, Peter I. Pollak (Merck Sharp & Dohme Research Labs.)