

Miscellany

Research and Education

On the basis of a year's study of fundamental research in this country, The Alfred P. Sloan Foundation, Inc., of New York City, has established a \$5 million program devoted to promoting basic research in the physical sciences. According to the announcement made late in May, basic research will be aided in two ways: researchers will be relieved, in whole or in part, of their academic duties so they may devote themselves to "such areas of basic research in the physical sciences as seem to offer the greatest promise"; and funds will be supplied to cover the cost of special services or equipment and to provide for predoctoral or postdoctoral fellows as assistants to the senior researcher. Trustees of the Foundation expect that grants to staff members will contribute toward easing the financial problems of universities and technological institutions. A program committee has been set up consisting of Arthur C. Cope, Massachusetts Institute of Technology (Chairman), James B. Fisk, Bell Telephone Laboratories, K. S. Pitzer, University of California, F. Seitz, University of Illinois, and A. W. Tucker, Princeton University. Richard T. Arnold, professor of chemistry at the University of Minnesota, has been appointed administrator of the program.

Georgia Institute of Technology has established an advisory committee on nuclear science to examine the steps which the Institute should take to render the maximum service in the expansion of research, development work, and teaching in the field of nuclear science. The committee, headed by James E. Boyd, assistant director and head of the physics division of the Engineering Experiment Station, will survey faculty and departments to determine existing facilities and experience in nuclear science, courses under consideration, desirable new facilities, and consultative and other experience gained at Oak Ridge and other Atomic Energy Commission installations.

Florida State University has announced a new curriculum in radiation physics which leads to a bachelor's degree with a major in radiation physics and is designed to offer the necessary background for specialization in a variety of fields. By appropriate choice of electives during their junior or senior year, students may qualify for work in such fields as radiation physics, chemical physics, biophysics, and geophysics, or prepare for high school science teaching, medicine, or engineering. For further information and outlines of suggested four-year curricula, write to Guenter Schwarz,

Chairman, Department of Physics, Florida State University, Tallahassee, Florida.

Establishment of a nuclear engineering option in the undergraduate engineering curriculum at Cornell University was announced in May. The new elective program, consisting of approximately 12 hours of lecture and laboratory work in atomic, solid-state, and nuclear physics, will use the facilities and staff of the Newman Laboratory of Nuclear Studies and the physics and engineering physics departments. Acquisition of a nuclear reactor is under study. Meanwhile there will be experiments in neutron physics and other fields pertinent to work with actual reactors.

Grants and Fellowships

The National Science Foundation has announced 297 grants totalling over 2.8 million for basic research. This is the third group of awards made in fiscal year 1955. Awards made in physics and related sciences are: Brown University (H. E. Farnsworth), catalytic action of crystal faces, and (L. Maximon), evaluation of the integral cross section for Bremsstrahlung; University of California (F. A. Jenkins), nuclear moments from observations on hyperfine structure in the optical region; Carnegie Institute of Technology (S. DeBenedetti), slow positrons in solids; Columbia University (G. G. Harris), emulsion study of high energy nuclear interactions; University of Denver (M. Iona), asymmetry of extensive air showers; DePauw University (M. Correll), characteristics of active region prominences of the sun; Illinois Institute of Technology (W. E. Bennett), nuclear reactions with alpha-particles of low energy, and (F. F. Cleveland), spectroscopic determination of molecular thermodynamic properties; University of Illinois (F. Seitz), imperfections in crystalline materials; Kent State University (A. A. Silvadi), continuous cloud chamber; University of Maryland (J. S. Toll), particle theory and foundations of field theory; New Mexico Institute of Mining and Technology (E. J. Workman), geochemical effects of freezing of terrestrial waters; University of Oregon (B. Crasemann), decay schemes of long lived positron emitters; University of Pittsburgh (T. M. Donahue), sodium and oxygen air-glow; Purdue Research Foundation (S. N. Gupta), quantum theory of fields, and (K. W. Meissner), an atomic beam source for wavelength standard; Smith College (N. M. Mohler), studies with nuclear plates, and (W. T. Scott), nuclear scattering of mesons; Stanford University (G. E. Pake), hyperfine structure of paramagnetic resonances; Syracuse University (P. G. Bergmann), quantum theory of gravitation; University of Utah (G. R. Fowles), isotope shifts in the spectra; and University of Virginia (N. Cabrera), dislocations in crystal growth and plastic deformation.

In addition to the basic research grants, NSF funds have been made available for other, more general, studies and projects. The Foundation is, for example, supporting summer institutes for high school science