

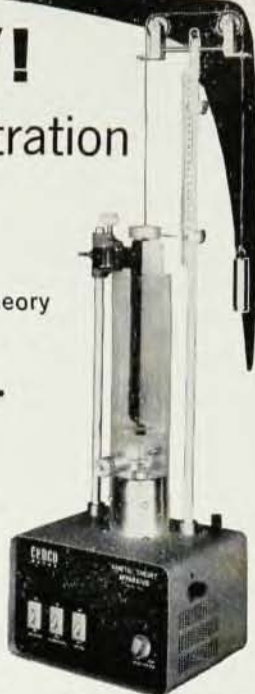
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The American Institute of Physics Student Section program is designed to encourage the study of physics, to enhance the professional pride and responsibility of physics majors and to provide a way for student organizations at accredited institutions to become part of the national organization of physics.

Fifty-Five Sections now exist in various colleges and universities throughout the United States as well as one at the American University of Beirut, Lebanon.

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The Institute provides PHYSICS TODAY for each member of a Student Section at \$2.00 yearly, which is one-half of the journal's regular subscription price.

Applications of student organizations for status as AIP Student Sections should be addressed to Mrs. Ethel E. Snider, National Secretary for Student Sections, American Institute of Physics, 335 East 45th Street, New York 17, N. Y.

production, testing, and evaluation of nuclear and high-temperature materials.

A metallurgical research center for the development of high-temperature metals for jet engines, rockets and missiles, atomic power generators, and other "hardware" of advanced design, will be constructed at the Du Pont Company's Baltimore plant. The installation will contain equipment to forge, extrude, roll, draw, and heat treat such refractory metals as niobium, tantalum, titanium, zirconium, tungsten, and chromium and to produce mill products. It is scheduled for completion by the fall of 1960.

Education

Colleges, universities, and nonprofit research institutions are invited by the National Science Foundation to submit proposals for summer (1960) and academic-year (1960-61) study-training-research projects designed to provide educational opportunities for college undergraduates and teachers. The Undergraduate Research Participation Program and the Undergraduate Research Training Program are intended to help colleges and universities provide means for high-ability students to advance in their understanding of scientific methods and in their ability to employ investigative procedures. One approach is to introduce more actual research activity into undergraduate education, as in the Foundation's Undergraduate Research Participation Program under which students participate in established programs financed primarily for objectives other than undergraduate education. Another is to make it possible for colleges and universities to initiate new programs with the primary objective of providing educational experience for undergraduates and financed largely from funds for educational purposes, as in the Undergraduate Research Training Program. Proposals for these programs beginning in the summer of 1960 should be postmarked not later than midnight November 15, 1959; those beginning in the 1960-61 academic year, not later than January 8, 1960.

The Research Participation for Teacher Training Program is designed to encourage colleges and universities to provide research experience for science and mathematics teachers in high schools, and for instructors in science, mathematics, and engineering in colleges (including junior colleges) which have few, if any, research facilities. Training in these cases is to be provided through participation in research activity under the tutelage of experienced scientific investigators. Actual research experience, full time in the laboratory, in the field, or in theoretical investigations, should form the basis of a research participation program. These are summer programs only, and proposals should be postmarked before midnight October 26, 1959.

Suggestions for the preparation of proposals may be obtained from the Special Projects in Science Education Section, Scientific Personnel and Education Division, National Science Foundation, Washington 25, D. C.

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Newark College of Engineering, Newark, N. J., has established a Research Foundation with the following stated objectives: "the creation of opportunities for the professional development of the teaching staff by providing them with broadly fundamental research activities in science and engineering; the attraction of capable young engineering graduates to the engineering teaching profession by offering them a combined program of education, teaching, and research; and the development of programs at the College to assist secondary school teachers of science and mathematics in their own professional advancement". James B. Fisk, president of the Bell Telephone Laboratories, will serve as chairman of the Foundation's 15-member Board of Directors. Formation of the new Research Foundation was made possible by a \$300 000 gift to the College from Thomas M. Cole, president of the Federal Pacific Electric Co.

The University of Delaware in Newark is inaugurating a new interdisciplinary doctoral program in applied sciences which will have as its principal purposes "the preparation of individuals capable of research and investigation at the doctoral level and the utilization of the talents of faculty in each of the cooperating departments, engineering, mathematics, and physics".

Films and Records

Six new audio-visual aids to science education have been produced by the Bell Telephone Laboratories following a survey of engineering colleges, which the Laboratories conducted to determine the need for advanced-level science and engineering films. Intended to complement regular classroom lectures, the three motion pictures, two filmstrips, and one record album are part of BTL's several-year-old Aid to Science Education Program.

The motion pictures are: (1) *Crystals—An Introduction*, which is designed to provide an introduction to crystallography for electrical engineering students, is also appropriate for some courses in physics, chemistry, and metallurgy, and was prepared in close cooperation with Elizabeth A. Wood, a past president of the American Crystallographic Association; (2) *Brattain on Semiconductor Physics*, which is an introductory college-level lecture on the physics of semiconductors by Nobel Laureate Walter H. Brattain; and (3) *Submarine Cable System Development*, which describes the work in designing and developing underwater communication systems and was prepared under the technical supervision of N. H. Upthegrove.

The film strips are: (1) *Zone Melting*, which describes this method of ultrapurifying solids and controlling the distribution of impurities in solids and was prepared by William G. Pfann; and (2) *The Formation of Ferromagnetic Domains*, which discusses the physical principles of domain formation with particular emphasis on the energies involved in the process and was prepared under the supervision of H. J. Williams.