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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.

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The record album, entitled *The Science of Sound*, demonstrates 19 different acoustic phenomena with narration written by Bell Laboratories scientists.

All six are loaned without charge to professional groups as well as to educational institutions through local Bell Telephone Company offices.

A series of twenty films on the teaching of mathematics, prepared under the sponsorship of the Illinois School of Mathematics and the National Educational Television and Radio Center, is to be evaluated in terms of their effectiveness in the training of mathematics teachers. The two groups have received a grant of $266 000 from the US Office of Education in order to carry out the program.

Grants and Fellowships

Grants totalling $189 000 to support the development of new science teaching aids have been made by the National Science Foundation. The purpose of the grants is to encourage mathematicians, scientists, and engineers to devise new laboratory equipment of potentially wide usefulness for high-school- and college-level courses. Grantees are expected to supply teachers with full information about apparatus they devise and this may be done in the form of reports, articles in professional journals, or presentations at professional meetings. They are also expected to permit interested commercial suppliers to enter negotiations for the production and marketing of the equipment once it is developed. Support for the program will be extended during the current fiscal year, and proposals must be received by the Foundation by December 31. Further information may be obtained from the Course Content Improvement Section, National Science Foundation, Washington 25, D. C.

Interhemispheric exchange of scholars is to be encouraged under the terms of a $130 000 grant made by the Carnegie Corporation of New York to the Institute of International Education. The funds will be used to support the work of the Council on Higher Education in the American Republics, whose program is intended to strengthen the relationships among institutions of higher learning in North and South America through the exchange of university personnel.

Owens-Illinois Glass Company, Toledo, Ohio, has established two fellowships for advanced studies in glass as part of the company's expanding activities in fundamental research. One has been set up at Ohio State University under the direction of E. Leonard Jossem of the Physics Department. The second is at Brown University and is under the direction of physics professor Philip J. Bray. Each fellowship offers $3500 for the support of the student and additional funds for equipment, materials, and supplies.

Awards for postdoctoral study in statistics by persons whose primary field is not statistics but one of the physical, biological, or social sciences to which statistics can be applied are again offered by the Depart-