

crease the number of awards provided annually under the program from 138 to approximately 285. The expanded program comprises assistance to students in both undergraduate and postgraduate studies and research, grants to colleges either through direct payments or help in purchasing equipment for laboratory and instructional purposes, and summer courses for science and mathematics teachers. Fifteen postgraduate fellowships have been raised in value from a former maximum of \$1500 to a new range of \$1400 to \$2100 plus an added stipend of \$1200 per student to the colleges where the recipients study.

An additional twenty new postgraduate fellowships are now being offered by GE for work in chemistry, physics, and metallurgy. Of these, twelve will be granted in chemistry, four in physics, and four in metallurgy. Physics awards will be given for study at the California Institute of Technology, Cornell University, Harvard University, and the University of Illinois. Another new part of the education program is designed to assist thirty outstanding college students throughout the country during their senior year. These scholarships, amounting to \$500 each, will be awarded primarily to engineering students. The company's established program of making available a fund of \$150,000 for aid to colleges and universities in purchasing needed laboratory equipment will be continued. During the last ten years, according to GE, assistance has been provided to more than 130 colleges and universities in enlarging and modernizing laboratory facilities for instructional and research purposes.

Visibility Laboratory

At Scripps Institute of Oceanography

Specialists in optics, electronics, and other related sciences will be brought together in a cooperative research program to be carried out in a newly created "Visibility Laboratory" which will be located at the University of California's Scripps Institute of Oceanography, La Jolla, California. The new laboratory, sponsored jointly by the U. S. Navy and the Air Force, will be concerned with visibility problems in modern warfare and with techniques for providing new factors of safety in aviation and ship operation. Siebert Q. Duntley, professor of physics at the Massachusetts Institute of Technology, has been granted leave of absence from MIT to become director of the laboratory.

New Edison Laboratory

Ground Broken Near West Orange

Construction has begun on a new one-story laboratory for Thomas A. Edison, Inc. at West Orange, New Jersey. The site is near the original brick structures built by Edison in 1887, which are generally recognized as the first industrial research laboratory, now headquarters for the Thomas Alva Edison Foundation. The half-million dollar laboratory will be devoted to basic and applied research and to technical work directly

supporting the operations of the Company's seven manufacturing divisions. Construction is expected to be completed early next year.

Geophysical Research

New Institution Created in Denmark

Establishment of the Geophysical Research Institution as an independent scientific center at the University of Copenhagen has recently been announced. The new institution is under the direction of Niels Arley and has a governing board consisting of H. M. Hanson, rector of the University of Copenhagen, Niels Bohr, director of the Institute for Theoretical Physics, and Dr. Arley. Current plans call for a research program which will include deep-sea expeditions to measure the oceans' geomagnetic field and to study magnetic characteristics of bottom samples. The Institution also plans to carry out a systematic geophysical survey of Greenland.

New Publications

Annual Reviews of Nuclear Science

Annual Reviews, Inc., a nonprofit corporation which since 1931 has published annual critical reviews designed to cover systematically the current literature in certain major fields of science, has announced the completion of an agreement with the National Research Council of the National Academy of Sciences covering the publication of the *Annual Review of Nuclear Science*. Volume 1, prepared under the editorial supervision of the NRC's Committee on Nuclear Science and containing twenty-six review papers, was issued last month. Future volumes will appear under the editorship of James G. Beckerley, director of classification for the Atomic Energy Commission, who will be aided by three associate editors: Martin D. Kamen (Washington University), Donald F. Mastick (AEC), and Leonard I. Schiff (Stanford University). The Review also has an editorial committee consisting initially of Dr. Schiff, C. D. Coryell (Massachusetts Institute of Technology), L. F. Curtiss (National Bureau of Standards), E. Segré (University of Illinois), and R. E. Zirkle (University of Chicago).

Rational Mechanics and Analysis

The *Journal of Rational Mechanics and Analysis*, published for the first time this year, aims especially "to close the rift between 'pure' and 'applied' mathematics and to foster the discipline of mechanics as a deductive, mathematical science in the classical tradition." The *Journal*, under the editorship of T. Y. Thomas and C. Truesdell (with the assistance of D. Gilbarg, V. Hlavatý, and E. Hopf), is published by the Graduate Institute for Applied Mechanics of Indiana University, Bloomington, Indiana, and will contain articles in English, French, German, and Italian. The editorial board has twenty-six members, of whom the fol-

lowing twelve are in the United States: S. Bergman, N. Levinson, and C. C. Lin (MIT); L. Bers (NYU); S. Chandrasekhar (Yerkes Observatory); Hilda Geiringer (Wheaton College); M. Kac and M. Shiffman (Institute for Advanced Study); C. Loewner (Stanford); W. Magnus (New Rochelle, New York); M. H. Martin (University of Maryland); and P. Neményi (Washington, D. C.). About one volume per year will be issued, each of which will contain about six hundred pages. The subscription rate is \$6.00 per volume to individuals engaged in either research or teaching, and \$18 per volume to all others. Inquiries regarding the *Journal* should be directed to the editors at Indiana University.

The Annals of American Research

A new medium for the publication of scholarly papers has been launched under the title "The Annals of American Research" by the Public Affairs Press of Washington, D. C. Established "to broaden the channels of communication between the world of learning and the public at large," this monograph series is to be devoted chiefly to authoritative contributions to the liberal arts and sciences ranging between 5,000 and 25,000 words in length. Inquiries regarding papers believed suitable for inclusion in the series should be addressed to the Editor, *Annals of American Research*, 2153 Florida Avenue, Washington 8, D. C. Manuscripts should not be forwarded unless specifically requested.

Applied Statistics

Volume 1, No. 1 of a new journal appearing in Great Britain under the title *Applied Statistics* was issued last March. Published for the Royal Statistical Society, the journal is edited by L. H. C. Tippett and will come out three times each year: March, June, and November. The stated aim of the journal is to provide articles of sufficient scope and variety to satisfy scientists, administrators, and other professional workers having an interest in the applications of statistical methods. The annual subscription rate is \$4.00, payable to Oliver and Boyd Ltd., Tweeddale Court, High Street, Edinburgh, 1.

Summer Sessions

Pennsylvania State College

The accelerated program inaugurated last summer for Master of Education candidates majoring in physical science has been expanded by the department of physics at the Pennsylvania State College. By attending three sessions during the coming summer, a candidate will now be able to complete forty percent of the entire master of education program in a twelve-week period. The sessions open June 10, June 30, and August 11. A series of three independent courses, covering the field of classical physics, will be supplemented by a fourth course devoted to the atomic and nuclear field. These courses, it is explained, are organized around the needs of secondary school science teachers and hence

differ substantially from the usual technical courses in physics.

Harvard University

A special program for science teachers will be offered by Harvard University this summer, featuring three general courses in science education. The first of these, "The Methods of Science", is to be taught by Harvard's president, James B. Conant, with the assistance of F. G. Watson of Harvard and P. F. Brandwein, head of the science department of Forest Hills High School in New York, and lecturer at Columbia University. Dr. Brandwein will also teach a course on "Methods, Procedures, and Materials of Science Teaching in the Secondary School", while Professor Watson will give a third, "Science in the Elementary School". Several courses in physics, mathematics, and astronomy are also being offered during the summer session, which begins July 1.

Brooklyn Polytechnic

The Graduate School of Physics and the Institute of Polymer Research of the Polytechnic Institute of Brooklyn have announced that their ninth annual series of summer laboratory courses will take place during the period from June 2nd through August 1st, 1952. The first course (June 2-13) is entitled "Industrial Applications of X-Ray Diffraction" and although some background work in physics, chemistry, and mathematics is desirable, no previous X-ray experience will be assumed. Special advanced work may be carried out under special arrangements. The course will be presented under the direction of I. Fankuchen.

The course on "Molecular Weight and Shape of Macromolecules in Solution; Including Polyelectrolytes" (July 21-25) will involve laboratory procedures in theoretical evaluations of the various methods for molecular weight determination of polymers. H. F. Mark will be in charge.

The third course, under C. G. Overberger, will deal with "Progress in Polymerization and Copolymerization Techniques" (July 28-August 1). Further information may be obtained by writing to Prof. I. Fankuchen, Polytechnic Institute of Brooklyn, 85 Livingston Street, Brooklyn 2, N. Y.

Boston College

Boston College has announced a special two weeks intensive course in Modern Industrial Spectrography at Chestnut Hill, Boston, Massachusetts, from July 21 to August 1. The course is particularly designed for chemists and physicists from industries in the process of installing spectrographic equipment. Information on the course can be obtained from Professor James J. Devlin, S. J., Physics Department, Boston College, Chestnut Hill 67, Boston, Massachusetts.

Cornell University

Cornell University's summer laboratory course in techniques and applications of the electron microscope