

sponsored by the Alumni Fund, range in value from \$1000 to \$1400. In addition, a postdoctoral fellowship, open only to U. S. citizens and worth \$3000, is offered for research in any field for which the College has appropriate facilities. Information may be obtained from the Dean of the School of Graduate Studies, Michigan State College, East Lansing, Michigan.

A detailed final report on the AEC fellowship programs in the physical and biological sciences, which provided support for 920 pre- and postdoctoral fellows from 1948 to 1953, has been published by the Oak Ridge Institute of Nuclear Studies. The AEC program was terminated following establishment of the National Science Foundation fellowship program in the sciences. Copies of the report may be obtained by offices or officials concerned with the administration of fellowship programs from the University Relations Division, Oak Ridge Institute of Nuclear Studies, P. O. Box 117, Oak Ridge, Tennessee.

Education

The Selective Service System has announced the signing of a Presidential Order raising the criteria for the deferment of students entering graduate schools after January 1, 1955, to standing within the highest quarter of the senior class or attainment of a minimum score of 80 in the Qualification Test. According to the Bulletin of the American Council on Education, the action was taken without prior consultation with the Council's Committee on Relationships of Higher Education to the Federal Government, a procedure usually followed in the past.

Selective Service Director Lewis B. Hershey, in an amended operations bulletin issued on September 28th, notified local boards that a "continuing flow of highly qualified and well trained men is needed by the Armed Forces and by essential defense supporting activities" and that careful consideration should therefore be given to "the deferment of sufficient numbers of qualified graduate students to assure an adequate supply of such personnel". When a local board is considering the case of a registrant previously deferred for graduate study, the directive continued, it should weigh carefully the advisability of permitting him to complete the work for his graduate degree, provided he is making satisfactory progress and will attain the master's degree in not more than two calendar years or the doctoral degree in not more than five calendar years of graduate study beyond the bachelor's degree.

The physics department of Florida State University at Tallahassee is now offering work leading to a PhD degree in physics, according to Guenter Schwarz, chairman of the department, who may be contacted for further information.

Laboratories

The irradiation facilities of Argonne National Laboratory, which include the experimental breeder reactor in Idaho, as well as the CP-5 heavy water re-

actor and the 60-inch cyclotron at Argonne, have been made available to educational, research, and industrial organizations which can obtain AEC authorization for their projects. Argonne's services supplement those of Oak Ridge in the sense that special objects or substances can be irradiated and that isotopes with short half-lives or high specific activities can be supplied to Midwestern institutions more conveniently from Argonne. Charges for the reactor irradiations range upward from \$15 per week, and for the cyclotron irradiations from \$50 per hour. Further information can be obtained from Argonne National Laboratory, Special Materials Division, P. O. Box 299, Lemont, Illinois.

An isotope laboratory is to be constructed at the General Motors Technical Center north of Detroit to provide the wherewithal for radioisotope studies to be undertaken by the GM Research Laboratories. A General Motors spokesman said he believed that when the new laboratory is completed it will be one of the largest privately owned industrial isotope facilities in the United States. Plans for the proposed installation resulted from design conferences with the AEC's Isotope Division at Oak Ridge.

Formal dedication of the new International Business Machine Corporation research laboratory took place in Poughkeepsie, N. Y., on October 9th. The building adds 179 000 square feet to IBM's existing laboratory floor space, contains 155 laboratories and offices, and is intended to accommodate some 600 engineers and researchers. One wing of the laboratory is used for basic research projects and the other for applied research. Technical meetings and demonstrations are to be held in an acoustically designed auditorium where "voices at conversation level can be heard without echo in all parts of the room".

Publications

Protection requirements for operating personnel and others against the potential hazards of electron accelerators of the betatron and synchrotron types have been outlined in a 52-page NBS handbook containing the recommendations of the National Committee on Radiation Protection. Hazards resulting from the various radiations produced by the sources are included, as well as those from certain associated effects, such as noise and electricity. Recommendations are also given on a consistent system of units and measurement procedures that can be applied to radiations with energies above 5 Mev. The publication, issued as National Bureau of Standards Handbook 55 under the title, *Protection Against Betatron-Synchrotron Radiations up to 100 Mev*, can be obtained for 25 cents from the Government Printing Office, Washington 25, D. C.

Numerous high-altitude research stations exist throughout the world, but few of them are widely known. The lack of adequate information has delayed the efficient utilization of expensive and perhaps unique