Miscellany

Change of Address

The American Institute of Physics, as this issue goes to press, is about to vacate its old building on East 55th Street in New York City and to move into its newly purchased and remodeled headquarters on East 45th Street. The work of preparing the new quarters for occupancy has progressed on schedule during the past several months, and it is anticipated that the business of the Institute can be carried on essentially without interruption, thanks to a schedule calling for completion of the moving operation over a weekend.

Correspondents will please note that after Friday, June 7th, the permanent address of the American Institute of Physics will be 335 East 45th Street, New York 17, N. Y. (Telephone: MUrray Hill 5–1940.)

Programs and Facilities

Plans have been approved by the Atomic Energy Commission for the design and construction at the Forrestal Research Center at Princeton University of a new experimental device (the "Model C Stellarator") for studies of controlled thermonuclear reactions. AEC Chairman Lewis L. Strauss indicated in April that the stellarator, which is to be employed exclusively as a research tool, will be "a very much larger model Sherwood project machine" than has yet been built. The stellarator (from stellar + generator) will consist essentially of a hollow tube containing ionized gas, surrounded by external coils which will produce a magnetic field to confine the gas. The object is to heat the gas to temperatures of millions of degrees and at the same time to confine the heated gas within the tube for sufficient time to allow fusion reactions to take place. The Princeton controlled thermonuclear project is directed by Lyman Spitzer, Jr., and is under the general supervision of a committee headed by H. D. Smyth. Architectural and engineering work for construction of the supporting office and laboratory facilities will begin soon, while construction of facilities to house the device is expected to begin next year. It is planned that initial experiments with the stellarator will begin late in 1960 or in 1961.

A four-year, $10 million industrial research program to investigate controlled thermonuclear reactions, meanwhile, has been announced jointly by the newly-formed Texas Atomic Energy Research Foundation, a group of eleven Texas utility companies, and the General Atomic division of the General Dynamics Corp. The research program is to be conducted at General Atomic's John Jay Hopkins Laboratory in San Diego.

The "Hilac", a linear accelerator of new design which is intended primarily for the study of heavy elements and possibly for the syntheses of elements beyond mendelevium in the periodic table, has gone into operation at the University of California Radiation Laboratory at Berkeley. The Hilac (heavy ion linear accelerator) represents, in part, a joint project between the University of California and Yale University. Yale and Berkeley scientists jointly developed the design of the machine, a duplicate of which is now nearing completion in New Haven. The research emphasis at the two institutions will be different—Yale being chiefly interested in problems in physics and Berkeley giving priority to chemical transmutation experiments. The Hilac does not compete in energy with existing or planned ultra-high-energy machines designed to accelerate the nuclei of light elements. Rather, it is built to accelerate the nuclei of atoms ranging up to argon 40 (element 18) in the hope that it may be possible to add large fragments of matter to target material, bringing about big jumps up the periodic table in single transmutations. During its initial operations, the machine accelerated nitrogen-14 nuclei to energies of 140 Mev. Both the Berkeley and New Haven machines were authorized by the Atomic Energy Commission in 1954.

The University of Wisconsin regents have formally approved a contract between the University and the Atomic Energy Commission which will provide the Wisconsin Physics Department with $1 050 000 for the purchase of a new "tandem" electrostatic generator. Conventional electrostatic generators accelerate positive ions to energies in the neighborhood of 5 or 6 Mev, whereas the new machine will initially accelerate negative ions to these energies, and then will reverse the charge and add an additional 5 or 6 Mev to the energy of the particles by means of a tandem arrangement of accelerating tubes. The machine, to be built by a commercial manufacturer, will take some two years to construct and will be used in nuclear research projects conducted by Wisconsin physicists Henry H. Barschall, Raymond G. Herb, and Hugh T. Richards.

The American Lithium Institute, Princeton, N. J., has initiated a program of sponsored research on lithium alloys at Massachusetts Institute of Technology and on lithium-containing glass at Pennsylvania State University. The Institute will establish fellowships at the two schools and is setting up a technical library on lithium at its Princeton offices. Member companies of the Institute are American Potash and Chemical Corp., Foote Mineral Co., and Lithium Corp. of America.

Grants and Fellowships

The US Government has again announced the availability of university lecturing and advanced research grants under the Fulbright Act for the academic

year 1958–59. To be eligible, an applicant must be a US citizen having a doctoral degree and at least one year of college or university teaching experience; he should also be proficient enough in the language of the country for which he is applying to carry out the proposed activity. Awards are issued for one country only and applicants should specify a first choice and may list one alternative country. Fulbright lectureships and advanced research awards in physics for the coming year have so far been listed by Australia, Chile, Pakistan, and Peru; others will be announced in June. Applications must be postmarked no later than October 1, 1957, and should be mailed to the Conference Board of Associated Research Councils, Committee on International Exchange of Persons, 2101 Constitution Avenue, Washington 25, D. C.

In addition, grants for lecturing abroad under the Smith-Mundt Act will be available in approximately forty countries which do not participate in the Fulbright Program. These grants are made available in response to requests submitted by interested institutions abroad to the Department of State through its Foreign Service Posts. Most grants will be for nine-month periods, but several may be issued for a single semester or a summer session. Eligibility consists of US citizenship, and a recognized standing as mature scholars in the field of choice with at least one year of experience teaching on the university level in the US or abroad. In some cases, knowledge of the language of the host country is also necessary. Those interested should register with the Conference Committee from whose register requests of the State Department will be filled.

Research Corporation, a nonprofit foundation which distributes its total net income as grants-in-aid of research to colleges, universities, and scientific institutions, has distributed over $1.2 million in 377 grants during 1956. These grants have been awarded in physics, astronomy, mathematics, chemistry, engineering, and nutrition. Grants were awarded on an international basis and special programs include one in West Germany and a secondary-school science teachers program in Connecticut.

The Eastman Kodak Company has awarded thirty-three fellowships for advanced study in physics, chemistry, and chemical engineering. Thirty-one of the fellowships will go to colleges and universities in the US and two fellowships at Canadian universities will be sponsored by Canadian Kodak Co., Ltd. The institutions will select the fellowship recipients. The program is part of Kodak's over-all aid-to-education plan, which this year will amount to about $700 000 and will benefit more than 100 educational institutions and organizations. Each fellowship recipient in the US will be granted at least $1600; married persons with dependent children will receive $2400. The grant provides tuition and fees, an additional $1000 to help defray the student's research expenses, and funds for the student to attend one scientific or professional meeting appropriate to his field of study. Institutions receiving fellowships

are the Universities of California (Berkeley), Chicago, Colorado, Connecticut, Delaware, Florida, Illinois, Kansas, Michigan, North Carolina, Notre Dame, Rochester, Tennessee, Texas, Toronto, Virginia; California Institute of Technology, Carnegie Institute of Technology, State University of Iowa, Massachusetts Institute of Technology, Oklahoma A&M, and Columbia, Cornell, Duke, Florida State, Harvard, Indiana, McGill, Ohio State, Princeton, and Yale Universities.

Bell Telephone Laboratories has announced the awarding of 20 graduate fellowships to outstanding doctoral students in the physical sciences and engineering for 1957–58. This is five more than last year and includes four awards to previous recipients who are completing work for their PhD degrees. Each fellowship carries a grant of $2000 to the fellow and an additional $2000 to cover tuition, fees, and other costs to the school of his choice.

Illinois Institute of Technology is now accepting applications for graduate study under a new $5000 fellowship established by the Ohmite Manufacturing Co. of Skokie, Ill. The Ohmite Fellowship award provides a $2500 stipend plus full tuition for study toward a master's degree in physics or in chemical, electrical, or mechanical engineering.

Education and Training Programs

A graduate study center will be established by New York University at Bell Telephone Laboratories this fall. At the center, certain Laboratories employees will be able to earn advanced engineering degrees by attending classes during regular business hours while receiving full-time pay. Studies in physics, mathematics, and basic communications will be emphasized. The NYU program, offered under the Graduate Division of the College of Engineering, will replace a part of the Communications Development Training Program now in operation at Bell Laboratories. The Laboratories' program, established in 1948 as a three-year company course to provide additional education and training for newly employed engineers, will continue to offer courses in certain areas of specific interest to the Bell System.

A plan for regional consultants in science and mathematics to serve colleges and universities has been established by the Science Teaching Improvement Program (STIP) of the American Association for the Advancement of Science. Of the program's twenty consultants, four are physicists, seven represent mathematics, four are chemists, and the rest are in the fields of biology or zoology. The consultants will be available for visits to colleges and universities in their regions in order to meet with science and education staff members to consider problems of science and mathematics teacher education. The regional consultant service, which has been made possible by a grant to AAAS from the General Electric Educational and Charitable Fund, was created by STIP in response to frequent suggestions that visits to a campus from a representative of a national scientific society can be of value in the stimulation of local activity in matters concerning science education.

The Atomic Energy Commission has enlarged its program under which privately employed nuclear scientists and engineers may obtain specialized work experience in Commission laboratories and plants as an aid in the further development and use of atomic energy for peaceful purposes. The program will be administered by Commission field offices, assisted by the Commission's Division of Civilian Application. Its primary purpose is to help people already generally educated and trained in nuclear science and technology to become familiar with specific uses. Firms and organizations interested in the program should address their inquiries to the Commission's Field Operations Office having jurisdiction over the facility in which work experience is sought. Inquiry may be made, too, of the Director, Division of Civilian Application, Atomic Energy Commission, Washington, D. C. Applications will be considered on the basis of (1) whether the knowledge and training desired are available outside the Commission's facilities, (2) whether the employees to be assigned appear to be qualified to take full advantage of the work experience, and (3) whether the assignments can be arranged without undue burden on the regular work of the Commission facility. Those accepted for the program will be paid by the firms employing them and all must receive appropriate security clearance.

The Commission will also sponsor summer institutes in nuclear energy technology for university faculty members at five AEC facilities in 1957. Approximately 150 faculty members will attend two-month sessions at the Commission's Brookhaven, Argonne, and Oak Ridge National Laboratories, The Ames Laboratory, and The Hanford Plant. Basic courses in nuclear energy technology will be offered at Brookhaven, while courses offered at the other four installations will be of a more advanced and specialized nature. The AEC will provide cost-of-living stipends up to $750 per faculty member, matching amounts provided by each participant's academic institution, and will defray travel expenses. These funds will be administered by the American Society for Engineering Education. No tuition will be charged. Inquiries concerning the program should be addressed to: W. Leighton Collins, American Society for Engineering Education, University of Illinois, Urbana, Ill.

Organizations

The National Academy of Sciences has elected Farrington Daniels of the University of Wisconsin as vice president for a four-year term beginning on July 1. He succeeds George W. Corner of the Rockefeller Institute of Medical Research. New additions to the Academy's council include Frederick Seitz, professor of physics at the University of Illinois. The following are