

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