Monograph Prizes, American Academy of Arts and Sciences, 280 Newton Street, Brookline Station, Boston 46, Mass.

Facilities

The library and the nuclear emulsion laboratory of the Brazilian Center of Physical Research were destroyed by fire on May 23, and it is understood that contributions such as journals, books, reprints, preprints, lecture notes (old and new), scientific material, or any other pertinent donations will be greatly appreciated by the Brazilian physicists who are trying to repair the damage. The Center, which was founded ten years ago, is a private institution which works in close collaboration with the Universities of Brazil and São Paulo. The following are among the scientists of the Centro Brasileiro de Pesquisas Fisicas: U. Camerini, C. M. G. Lattes, G. Schwachheim, and A. Wataghin (nuclear physics and cosmic radiation); H. G. de Carvalho and L. Marquez (physical chemistry and nuclear chemistry); J. Danon (solid state); G. Beck, G. E. A. Fialho, J. Leite Lopes, and J. Tiomno (theoretical physics); and F. M. O. Castro, L. Nachbin, and C. Hönig (mathematics). The address is: Centro Brasileiro de Pesquisas Fisicas, Av. Wenceslau Braz, 71, Rio de Janeiro, Brazil.

Avco Corporation's new $23 million Research Center in Wilmington, Mass., which was built to house the firm's Research and Advanced Development Division, was dedicated in ceremonies held on May 14. Concerned primarily with the design, development, and testing of ICBM nose cones and related work in support of the nation's long-range ballistic missile program, the Center consists of six buildings, including two research laboratory structures and associated facilities. An added feature at the time of the dedication ceremony was Avco's announcement that "interplanetary shock waves" had been simulated in shock-tube experiments at the firm's Everett Research Laboratory. In an effort to confirm the hypothesis that thin, high-velocity shock waves arising from solar flares are responsible for the earth's magnetic storms, Avco researchers succeeded in producing shock waves with velocities of 45 cm/μsec which were thinner than the mean free path of the particles in the gas through which they passed, thus demonstrating a mechanism that would explain the propagation of shock fronts through the relative emptiness of interplanetary space.

The new $1.2 million addition to Sterling Hall on the University of Wisconsin campus in Madison, a gift to the University from the Wisconsin Alumni Research Foundation, was formally dedicated on April 22. The building will house the US Army Mathematics Center, Numerical Analysis Laboratory, Astronomy Department, and part of the Physics Department. Physics facilities in the building include laboratories for research in high-energy, nuclear, and solid-state physics, and in vacuum pump techniques. Three adjacent rooms will

house a new $1 million accelerator and associated equipment.

A new firm, to be named Goodrich—High Voltage Astronautics, Inc., has been formed as a joint enterprise by The B. F. Goodrich Company and High Voltage Engineering Corporation. The new company will engage in research, development, and manufacture of ion propulsion devices for use by vehicles in space flight. Development is already underway on a laboratory ion thrust unit and work will proceed at High Voltage Engineering Company's plant in Burlington, Mass., where the new firm will have its headquarters. The president of the new corporation is A. John Gale, vice president and director of applied physics at High Voltage, and the chairman of the Board is P. W. Perdriau, general manager of the B. F. Goodrich Aviation Products Division.

Publications

As of July 1, 1959, the National Bureau of Standards began publication of its *Journal of Research* in four separate sections, each of which may be subscribed to individually. The editorial scope of the *Journal* will be broadened to present, in addition to research reports, review articles and compilations of information on subjects closely related to the Bureau's basic mission. Much of the material which the Bureau has been publishing in nonperiodical form will henceforth be directed to the *Journal*. The publication is being divided into the following sections, each available upon subscription from the US Government Printing Office:

Section A, *Physics and Chemistry*, will cover a broad range of physical and chemical research, with major emphasis on standards of physical measurement, fundamental constants, and properties of matter. It will be issued six times a year, and the annual subscription rate will be $4 in the US and $4.75 elsewhere. U. Fano has been named as editor of Section A with D. D. Wagman and J. M. Richardson as associate editors.

Section B, *Mathematics and Mathematical Physics*, will present studies and compilations designed mainly for the mathematician and theoretical physicist. It will include topics in mathematical statistics, theory of experiment design, and programming of computers. Short numerical tables will also be included from time to time. Section B will be issued quarterly, and the annual subscription rate will be $2.25 in the US and $2.75 elsewhere. It will be edited by Chester H. Page with F. L. Alt and E. L. Crow as associate editors.

Section C, *Engineering and Instrumentation*, will report results chiefly of engineering interest. It will include new developments in instrumentation resulting from the Bureau's work in physical measurement, data processing, and development of test methods, and will also cover some work in applied mechanics, properties of engineering materials, building research, and cryogenic engineering. It will be issued quarterly at an annual subscription cost of $2.25 in the US and $2.75 elsewhere. The editor of Section C is William A. Wildhack. G. F. Montgomery and R. B. Jacobs will serve as associate editors.