

each school before the books arrive. A copy of the résumé will also be inserted in the front of each book.

The teachers and the school librarian will be asked to make known the availability of the books and to encourage students to read them. Class assignments may be used to stimulate interest in reading the books available during a given period, but the teachers in the participating schools will be requested not to make required reading of the volumes in the libraries. Nothing should be done to kill spontaneity. Each school will be expected to take all steps practicable to insure that as many students as possible have an opportunity to read the books during the time each unit is available.

Direction. Hilary J. Deason has been appointed director of the traveling science libraries program. Born in Utah and educated at the University of Michigan, he was granted his Ph.D. degree in 1936. After several years of work in fishery biology and limnology on the Great Lakes for the U.S. Bureau of Fisheries, he served as an administrator in the Fish and Wildlife Service in Washington. There he was responsible for the program of technical cooperation with foreign countries and training programs for foreign students. He was a member of the former Interdepartmental Committee on Scientific and Cultural Cooperation of the Department of State and has served as a delegate to various international conferences on conservation of biological resources and technical cooperation.

Recommendations from scientists, librarians, and teachers on books for the library list will be welcome and should be sent to Deason at the AAAS office. The selected books and a longer supplementary list will be given wide publicity.

—JOHN A. BEHNKE

Virology, a New Journal

The founding of a new scientific journal for the publication of basic research papers in the rapidly developing field of virology [*Science* 122, 29 (1 July 1955)] is welcome news to scientists. This bi-monthly journal, *Virology*, will publish papers dealing with biological, biochemical, and biophysical aspects of research on animal, plant, and bacterial viruses. It is hoped to bring together in one place some of the papers in these fields that previously have been scattered in at least 20 different journals. The publishers do not wish to monopolize the virus literature but rather they hope that, by publishing a representative sample of the research work in the several fields of virology, in a few years this journal may serve through its references as a key to

the virus literature. A brief synopsis of the contents of the first issue, May 1955, indicates the scope of the journal.

F. O. Holmes describes the effects of thiouracil treatment on the course of infection of mosaic-hypersensitive tobacco plants with tobacco mosaic virus. This particular virus-host combination seems to be unique among plant virus diseases in that it is susceptible to cure by chemotherapeutic agents.

Quantitative studies of the multiplication of potato viruses X and Y in tobacco plants reported by Rochow and Ross indicate that the yield of virus X is greater in mixedly infected plants than in those infected with virus X alone. The actual excess of virus X varied with the stage of infection and with environmental influences. The yield of virus Y was not affected by the presence of virus X. The next paper by Rochow, Ross, and Siegel reports a study of electron-microscope particle counts and local lesion counts as methods of assay for potato virus X in doubly infected plants. The two methods are in quantitative agreement in demonstrating a greater yield of virus X in plants mixedly infected with X and Y viruses.

A kinetic study of Lanni and Lanni of the interaction between influenza virus and the inhibitory mucoprotein of egg white indicates that there is a progressive alteration in the properties of inhibitor molecules as a result of the action of virus enzyme rather than a sudden loss of inhibitory activity by a single act per inhibitor molecule. This results in altered inhibitor molecules with a reduced affinity for indicator virus.

The propagation of pantropic and neurotropic strains of Rift Valley fever virus in rat ascites hepatoma cells is reported by Takemori, Nakano, Hemmi, and Kitaoka. During cultivation in the hepatoma cells, there was a high rate of mutation of the neurotropic strain to a variant that was pathogenic for mice by the subcutaneous route, yet retained its neurotropic property and antigenic specificity.

A further study of the effects of proflavine treatment on phage-infected bacteria was reported by DeMars. Treatment of T2-infected *coli* bacteria with proflavine prevented development of mature phage particles but did not prevent the synthesis of specific phage constituents. Material capable of combining with phage-neutralizing antibodies, the phage tail antigen, is produced in proflavine-treated bacteria in the same yield as in untreated bacteria; but, instead of being liberated as part of the phage particle, it is in the form of elements much smaller than phage particles. Phage nucleic acid, phage head antigen, and phage tail antigen are all synthesized in normal amounts in proflavine-treated bacteria

but are not assembled into infectious phage particles.

Colicine K has the same receptor site on the bacterial cell as does coliphage T6. In a comparative study of these two agents, Latarjet and Fredericq found that their bactericidal activities had the same sensitivity to inactivation by x-rays. This suggests that the tip of the phage tail responsible for phage adsorption and for its bactericidal properties may have the same size as colicine K as well as having the same receptor specificity.

Further studies correlating chemical substances with physiological properties in bacteriophage T2 were reported by Hershey. On osmotic shock the phage particle is disrupted to form a phage "ghost" containing most of the protein, soluble phage nucleic acid, and an antigenically distinct protein fraction that does not sediment with the ghosts and amounts to about 3 percent of the total phage protein. This "nonsedimentable" protein fraction is not a basic protein, but it is injected into the host cell along with the phage nucleic acid. Its function is at present unknown.

The kinetics of release of polio virus from individual infected monkey kidney cells in culture was reported by Lwoff, Dulbecco, Vogt, and Lwoff. With type 1, Brunhilde strain, there was a latent period of 5 to 7 hr, after which most of the virus was released during the succeeding hour. Characteristic changes in cellular morphology are correlated with virus release.

With this promising start, the new journal, *Virology*, is likely to become one of the most widely read journals in the biological sciences. It satisfies a real need in the field of scientific publications.—
M. H. A.

Commercial Electric Power from Atomic Energy

General Electric Co., producer, and Niagara Mohawk Power Co., distributor, on 18 July at West Milton, N.Y., sent the first commercial electric power produced by a nuclear reactor into American homes and factories.

The source was a reactor built by the Knolls Atomic Power Laboratory, operated for the Atomic Energy Commission by General Electric Co. The reactor was built as the prototype for the one to be used in America's second atomic-powered submarine, the *Seawolf*. The reactor uses neutrons in the intermediate energy range. Heat from the reactor is transferred to a heat exchanger by liquid sodium. Steam generated in the heat exchanger is used to drive turbines connected to the submarine propeller shafts.

The *Seawolf*, built by General Dynamics Corp., was launched in Groton,