you can do so, the way lies open to a new paradise; if you cannot, there lies before you the risk of universal death.

"We invite this congress, and through it the scientists of the world and the general public, to subscribe to the following resolution.

"In view of the fact that in any future world war nuclear weapons will certainly be employed, and that such weapons threaten the continued existence of mankind, we urge the governments of the world to realize and to acknowledge publicly that their purpose cannot be furthered by a world war, and we urge them, consequently, to find peaceful means for the settlement of all matters of dispute between them." (Signed)

PERCY W. BRIDGMAN (Harvard University, foreign member of Royal Society, London, Nobel prize for physics)

ALBERT EINSTEIN (Institute for Advanced Study, Nobel prize for physics)

LEOPOLD INFELD (University of Warsaw, member of Polish Academy Sciences, joint author with Einstein of *The Evolution of Physics* and *The Problem of Motion*)

HERMAN J. MULLER (formerly a professor in Moscow, India, and so forth, now at Indiana University; Nobel prize in physiology and medicine)

CECIL F. POWELL (Bristol University, England; Nobel prize for physics)

JOSEPH ROTBLAT (professor of physics in the University of London, at St. Bartholomew's Hospital Medical College)

BERTRAND RUSSELL

HIDEKI YUKAWA (Kyoto University; Nobel prize for physics)

JEAN FRÉDÉRIC JOLIOT-CURIE (University of Paris, Nobel prize for chemistry)

A week later, on 15 July, at the end of the 5th annual Lindau, Germany, conference, 18 Nobel prize winners signed the following statement.

"We, the undersigned, are scientists of different countries, different races, different denominations and different political convictions.

"The only thing that binds us—on the surface—is the Nobel prize which we have the honor to possess. It was with enthusiasm that we became servants of science. We believe it a way to happy life. We are terrified to see that this science gives mankind instruments to destroy itself.

"Full use in wartime of all weapons available would contaminate this earth with radiation sufficient to destroy entire nations.

"This kind of death can hit the neutrals as well as the combating parties should a war break out between the major powers.

"Who can guarantee that such a war would not develop into such a deadly fight?

"Thus, a nation which engages in a deadly war invites disaster for itself and endangers the whole world.

"We do not deny that perhaps today fear of these lethal weapons maintains peace.

"But in spite of this, we believe that a government betrays itself by thinking that fear of these weapons will prevent wars for a long time. Fear and tension have often led to wars. We also believe it is wrong to speculate that smaller conflicts would continue to be solved by the use of conventional weapons.

"In extreme danger, no nation will refrain from using a weapon which science can help to produce.

"All nations must come to the conclusion to refrain from the use of power as an ultimate means of statesmanship. If they won't do this they will cease to exist." (Signed)

KURT ADLER, Germany
MAX BORN, England
ADOLPH BUTENANDT, Germany
ARTHUR H. COMPTON, United States
GERHARD DOMAGK, Germany
HANS VON EULER-CHELPIN, Sweden
OTTO HAHN, Germany
GEORGE DE HEVESY, Denmark and Sweden
WERNER HEISENBERG, Germany
RICHARD KUHN, Germany
FRITZ A. LIPMANN, United States
PAUL MUELLER, Switzerland
HERMANN J. MULLER, United States
LEOPOLD RUZICKA, Switzerland
FREDERICK SODDY, England
HERMANN STAUDINGER, Germany
WENDELL M. STANLEY, United States
HIDEKI YUKAWA, Japan

Traveling Science Libraries for Small High Schools

To assist high-school students to learn more about science, and to interest some of them in becoming scientists, the AAAS will start in the fall a program of sending traveling science libraries to a selected list of small high schools. Plans were developed cooperatively with the U.S. Office of Education and the National Science Foundation, which has made a grant to the Association to cover the costs. (This program is in addition to the Science Teaching Improvement Program [*Science*, **122**, 151 (22 July 1955)].)

The lack of appropriate reading material in small high schools deprives a large segment of the student population of the opportunity to learn what science is like and what scientists do. As a result, many young people with potential interest in careers in science fail to capitalize on their talents. Furthermore, many lack motivation to continue their education. It is also important that those not contemplating science careers be informed citizens in science as well as in other cultural areas.

It is the hope of the sponsors that the traveling science libraries will serve the following purposes: (i) develop greater interest on the part of high-school students in reading books on science and about scientists; (ii) make available to students a larger fund of factual information from the great scientific storehouse; (iii) develop a sounder basis for the choice of a career in science; (iv) afford science teachers an opportunity to extend their scientific reading; (v) stimulate an interest on the part of schools in purchasing similar collections of books for their libraries.

Selection of participating schools. Ten reasonably limited geographic areas, with varying cultural and educational characteristics, will be selected. In each area six senior high schools in the smaller communities will be chosen. The schools will be asked whether they wish to avail themselves of the traveling libraries; only those offering full cooperation will be given the privilege of participating.

Selection of books. The collection is to consist of 120 books covering the major fields, such as agriculture, anthropology, astronomy, botanical sciences, biology, chemistry, engineering, geology and geography, history and philosophy of science, mathematics, meteorology, medical sciences, physics, psychology, and zoological sciences. The selection will be based on the suggestions and recommendations of individuals, committees, and organizations representing the various scientific disciplines. The books to be included must contain authoritative scientific information written in a style that will interest high-school students. Textbooks or research monographs will not be included. In general the books will be chosen because they may be read and understood by persons with a limited background in science. A few, however, will be at a level to challenge the better students.

Plan of operation. The 120 books will be divided into 6 units of 20 each. Each unit will be fitted into an attractive case that can be used both for shipping and display. Each participating school will be permitted to retain each of the 6 units of 20 books for 4 class weeks. The first unit will arrive at each school about 1 Oct. 1955. All units will leave the schools approximately 1 May 1956.

Since the project is experimental and is supported by very limited funds, the libraries can be sent only to the selected schools. Voluntary applications for participation cannot be honored.

A brochure describing the collection and its use and containing a brief résumé of each book, will be sent to the school librarian and to the science teachers at

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 bimonthly 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,