

Institute in Moscow, reported that putrefactive bacteria do not decompose crystalline tobacco mosaic virus and that virus may be adsorbed by various microorganisms.<sup>14</sup> Goldin also published a paper on "Some Data Concerning Crystalline Inclusions in the Mosaic Virus Disease of Tobacco," in which he called attention to the similarity between the properties of crystalline tobacco mosaic virus and those of the crystalline material described by Iwanowski in 1903.<sup>15</sup> The effect of ether on bacteriophages and tobacco mosaic virus was studied by Goldin, who found neither agent to be soluble in ether.<sup>16</sup>

In addition to the work that I have described, Russian investigators have made studies of a practical nature on several virus diseases, chiefly of virus diseases of cereal crops. Studies of importance have also been made on virus diseases of man and animals. For example, in 1937 Smorodintseff and co-workers reported the results of a study in which volunteers were inoculated experimentally with influenza virus<sup>17</sup> and in 1940 an investigation was described in which biweekly inhalations of vaporized influenza antiserum were given to a large number of persons before and during an influenza epidemic.<sup>18</sup> These two methods of approach to the influenza problem have subsequently been employed by American workers. It should perhaps be noted that the inhalation of antiserum has yielded the most favorable results yet re-

ported in connection with the prevention of influenza in man. The war does not appear to have interfered seriously with virus studies in Russia, for in a paper in last month's *Phytopathology* entitled "The Nature of Ultra-Viruses and Their Biological Activity," Rischkov<sup>19</sup> mentions a conference on plant virus diseases which was held in Moscow in 1941 and describes researches which were reported at a meeting of the Ukrainian Academy of Sciences in January, 1942. In 1942 a number of the Russian journal *Microbiology*<sup>20</sup> was issued in celebration of the fiftieth anniversary of Iwanowski's filtration experiment with tobacco mosaic virus. In the introductory article Koshtoiants<sup>21</sup> not only describes and evaluates Iwanowski's early findings but also much of the contemporary work on viruses. The author's defense of the importance of Russian science and the occasional indulgence in polemics appear unnecessary. The important researches of Engelhardt and Ljubimowa on the enzyme activity of myosin, of Rischkov on plant viruses, of Graschenkoff on encephalitis, of Petroff on tumors, of Gamali on immunity and of Smorodintseff on influenza are mentioned with justifiable pride. In the second paper Rischkov<sup>22</sup> discusses the origin of viruses and in two succeeding articles Suchov<sup>23</sup> and Vovk<sup>24</sup> describe some recent work on plant viruses.

Let us all hope that it will not be long before the rich promises of Iwanowski's early work on viruses will be even more fully realized in Soviet Russia.

## OBITUARY

### RECENT DEATHS

ARTHUR KEITH, from 1894 until his retirement in 1934 geologist of the U. S. Geological Survey, died on February 7 at the age of eighty-one years.

DR. BERNARD SACHS, formerly professor of clinical neurology at the College of Physicians and Surgeons of Columbia University and director of the division of child neurology at the Neurological Institute, died on February 8 at the age of eighty-six years.

DR. ARTHUR RENWICK MIDDLETON, since 1939 emeritus professor of inorganic chemistry at Purdue University, a member of the faculty for forty years, died on February 6 in his seventy-fifth year.

DR. DAVID ELDRIDGE WORRALL, professor of organic chemistry and director of the chemical laboratory at Tufts College, died on February 7. He was fifty-seven years old.

## SCIENTIFIC EVENTS

### THE POLISH FACULTY OF MEDICINE AT EDINBURGH UNIVERSITY

A CORRESPONDENT of the *Journal* of the American Medical Association writes: "The only existing scien-

tific institution with university standing which a great European nation has maintained is the Polish School of Medicine in the University of Edinburgh. It is unique in the fact that never before has any state set

<sup>13</sup> V. L. Rischkov and K. S. Soukhov, *Compt. rend. acad. sci. U.R.S.S.*, 21: 265, 1938.

<sup>14</sup> M. I. Goldin, *Compt. rend. acad. sci. U.R.S.S.*, 20: 735, 1938.

<sup>15</sup> *Idem*, *Microbiology U.S.S.R.*, 7: 353, 1938.

<sup>16</sup> *Idem*, *Bull. Acad. Sci. U.R.S.S.*, 173, 1938.

<sup>17</sup> A. A. Smorodintseff, M. D. Tushinsky, A. L. Drobyshevskaya, A. A. Korovin and A. I. Osetroff, *Am. Jour. Med. Sci.*, 194: 159, 1937.

<sup>18</sup> A. A. Smorodintseff, A. G. Gulamow and O. M. Tschalkina, *Zeitschr. klin. Med.*, 138: 756, 1940.

<sup>19</sup> V. L. Rischkov, *Phytopathology*, 33: 950, 1943.

<sup>20</sup> The writer is especially indebted to Dr. S. A. Waksman of Rutgers University for providing this number of *Microbiology* (Vol. 11, No. 4, 1942) and to Dr. M. Kunitz of the Rockefeller Institute for assistance in reading two of the articles.

<sup>21</sup> C. S. Koshtoiants, *Microbiology U.S.S.R.*, 11: 139, 1942.

<sup>22</sup> V. L. Rischkov, *Microbiology U.S.S.R.*, 11: 149, 1942.

<sup>23</sup> K. S. Suchov, *Microbiology U.S.S.R.*, 11: 168, 1942.

<sup>24</sup> A. M. Vovk, *Microbiology U.S.S.R.*, 11: 177, 1942.

up its own university with its own professors lecturing to its own students in their native tongue on foreign soil as part of a foreign university. After the collapse of France in June, 1940, many Polish medical officers escaped and collected in one of the Polish army camps in Scotland. Among them were several professors, lecturers and specialists of high standing whose knowledge and experience could not be used in the early stages of the reorganization of the Polish army on British soil. Lieutenant Colonel F. A. E. Crew, commanding the Scottish Military Hospital, was one of the first to realize the needs of Poland, and in October, 1940, initiated the scheme which led to the creation of the Polish Faculty of Medicine within the University of Edinburgh.

"Profesor Antoni Jurasz, dean of the Polish Medical School, has stated in a press interview that the Poles in Britain were eager to welcome any scheme which would ensure close collaboration of the universities and scientific worlds of the two countries after the war. There has been an increasing response from the Poles in Great Britain to the establishment of the medical school. The total for the current year was 200 students, and the total number of doctors graduated from the Polish Medical School is fifty-three. The training of undergraduates and newly qualified doctors is carried on in the Paderewski Hospital, which is devoted entirely to the care of Poles in Britain. This hospital was established mainly through the foresight of an American, Mrs. Charlotte Hoffman Kellogg, president of the Paderewski Testimonial Fund, which has provided equipment and individual help to needy students from the Middle East. The physicians at the hospital are all Polish, the heads of the departments being professors or lecturers at the university. There are at present 116 beds, of which two thirds are for medical and the remainder for surgical cases."

#### THE REFRIGERATION RESEARCH FOUNDATION

THE Refrigeration Research Foundation, a non-profit-making corporation, was organized under Illinois laws on October 14, 1943. It is composed of two groups—public members who have achieved civic distinction, and sustaining members, representatives of companies who have contributed funds to the program of the foundation. It will begin its work with an initial fund of \$250,000, which will be expended in grants for research to be carried on in the laboratories of already established colleges, universities and technological institutions. The funds will be provided by subscriptions from corporations, firms or individuals engaged in the preservation of food or other commodities by refrigeration. Research will be carried on in

Canada and Mexico as well as in the United States. Its objects are:

To improve the methods of refrigeration for the better preservation of food and other commodities essential to the health and welfare of the American people.

To develop and support research in the science and art of refrigeration of food and other commodities through a nationwide program of financial grants to established institutions and agencies of research.

To establish fellowships in institutions and agencies of research and thereby to aid in the training of competent personnel to give activation and leadership to the refrigeration of commodities essential to the national economy.

To establish in the interest of the American people a repository of scientific information relating to the refrigeration of food and other materials.

To cooperate with and aid agencies of Federal and State governments, institutions of research and others in connection with their scientific and educational work involving the refrigeration of food and other products.

The foundation will not engage in any business or activity customarily performed for profit nor will it engage in any political activity or carry on propaganda or attempt to influence legislation.

The president of the foundation is Roy M. Hagen, of Los Angeles; the director of the scientific program is H. C. Diehl, principal chemist and chief of the commodity processing division of the Western Regional Research Laboratory of the U. S. Department of Agriculture. Dr. Samuel C. Prescott, who until 1942 was dean of science at the Massachusetts Institute of Technology, now emeritus professor of biology, was elected chairman of the Board of Governors to serve until the first annual meeting. At that meeting he was appointed director of the institute. His headquarters will be at Berkeley, Calif.

#### THE INSTITUTE OF AVIATION PSYCHOLOGY

A RESEARCH institute on "aviation psychology" is being established at the University of Tennessee through the cooperation of both state and national organizations. The Civil Aeronautics Administration and the Tennessee State Bureau of Aeronautics are providing funds for the institute. A committee of the National Research Council in cooperation with the special project committee of the University of Tennessee will direct research. Colonel Herbert Fox, of the Tennessee Bureau of Aeronautics, has been active in establishing the institute.

Special attention will be given to problems of training and to developing methods of instruction and training aids which can help to reduce failures among student pilots and to decrease the incidence of accidents following the completion of training. Research work has already been carried out by the Government