from the "Ecole de Chemie et Physique" of Paris, the school made illustrious by some of the greatest French physicists, among them Pierre Curie and Paul Langevin. In 1912 he became assistant to Madame Curie, and since that time all his activity was connected with the Curie Laboratory, which he helped to organize.

Holweck's thesis for the degree of science doctor was the well-known study on soft x-rays, which bridged the gap in our knowledge between the far ultraviolet region and x-rays. This study is a classic which still supplies most of the available information on the x-ray spectra of the elements of low atomic number. In the course of this research, Holweck's interest had been directed to the problem of high vacuum production: the result was the design of the Holweck molecular pump, the most powerful vacuum-producing device prior to the invention of the vapor diffusion pumps. Other of his important achievements in the field of applied physics are: the Holweck gravimetric pendulum, a tool that proved of the utmost utility in the oil survey technique; a high power radio tube which could be disassembled, and the first x-ray tube with successive stages of acceleration. Moreover, during research on television, he was among the first to develop the use of the focusing of electrons and to pioneer the developments of electron optics.

Through his lifelong friendship with Dr. A. Lacassagne, now head of the Pasteur Laboratory of the Institute of Radium, Holweck became interested in radiobiology. In 1929 he rediscovered, independently of previous work by Crowther, the quantic interpretation of the biological action of radiation on microorganisms. In the following years he made fundamental contributions in this field with studies on bacteria, fungi and viruses.

During the first World War, Dr. Holweck had substantially contributed to the application of science to defense, by studying with Langevin and Chilowsky the detection of submarines by means of ultrasonic waves. From the onset of the second World War until the defeat of France, he was actively engaged in defense work, and obtained some of the finest results achieved by French scientists in this field.

Less known than his personal achievements are Holweck's contributions to most of the research that was performed in the Curie Laboratory since its foundation. His tremendous skill as an experimenter (he was a man for whom technical difficulties just "did not exist") and his sympathetic disposition made him the willing adviser of all the scientific workers in his entourage. Many an important research was made possible by his uncanny ability to discover the way out of some technical bottleneck. Moreover, it is not an exaggeration to state that he contributed more than anybody else to the systematization of the radioactive technique, which was created in the Curie Laboratory and spread thence throughout the world.

With the exception of painting, for which he had a particular gift, Holweck's hobbies were mainly scientific. An amateur astronomer, he had built in his Paris home a complete observatory equipped with a 10-inch telescope, a source of admiration and envy of many professional astronomers. He was about to publish a study on certain peculiarities of Jupiter's satellites.

The privilege of collaborating with Holweck enabled the writers to appreciate not only his inspiring personality and deep humanity, but also the inflexible independence of his character. This independence was perhaps responsible for the fact that his ability was not always duly recognized. It is easy to imagine that such a man would refuse not only collaboration, but even obedience to the iniquitous Nazi rule in France. He has paid with his life for his love for freedom and for his country. His example will inspire all scientists of the world in their fight for the cause of liberty and democracy.

S. ROSENBLUM
S. E. LURIA

RECENT DEATHS

DR. ROSS A. GORTNER, chief of the division of biochemistry of the University of Minnesota, died on September 30. He was fifty-seven years old.

DR. WILLIAM COLEMAN STURGIS, from 1905 to 1914 dean of the School of Forestry of Colorado College, previously, from 1891 to 1901, connected with the Connecticut Agricultural Station, and for ten years educational secretary of the Board of Missions of the Episcopal Church of New York, died on September 29 in his eightieth year.

SCIENTIFIC EVENTS

EMERGENCY BASE HOSPITALS

SELECTED hospitals and medical schools in the coastal states have been invited by the Surgeon General of the U. S. Public Health Service to organize affiliated staff units which will be ready to serve when needed to supplement the medical staffs of Emergency Base Hospitals, now being designated by the Medical Division of the Office of Civilian Defense. These units resemble the affiliated hospital units of the Army except that they are smaller in size. They are being organ-