

1912 he laid down the basic principles of his conceptions in text-book form in "Grundriss der Biochemie", a more modern presentation of which he gave in his last work "Einführung in die allgemeine Biochemie" (Leyden, 1936). More ambitious was the "Handbuch der Biochemie" (1909). The second edition and its supplement, written by Oppenheimer in collaboration with many distinguished specialists, forms a comprehensive standard work of biochemistry. In order to enable biologists to refer to exact figures, Oppenheimer created in 1925, in collaboration with L. Pincussen, the "Tabulæ Biologicæ". He also gave biochemistry its abstracting journal, *Biochemisches Centralblatt*, founded in 1910.

Oppenheimer is, however, better known to English men of science for his work on enzymology. His main work on enzymes is "Die Fermente und ihre Wirkungen". It passed through five editions (1905-1926) and in it he gave to enzymology its form and structure. In this work he not only recorded facts and classified them, but also drew new conclusions and made suggestions for further research. In each new edition he could proudly register to what extent his suggestions had led to successful discoveries. Knowing intimately every detail of practical and theoretical development, he was able to unify contradictory ideas and to suggest possible solutions. To keep abreast of the rapid growth of enzymology, Oppenheimer wrote a "Supplement" to the chapters on special enzymology. This work, written during 1935-1939, grew eventually to be a larger volume than the last edition of the main work. Oppenheimer frequently remarked to me during the course of our collaboration on this supplement that this form of publication was too slow for the rapid development of research in this field. Accordingly, in 1936 he founded a special international journal, *Enzymologia*, which could accomplish this purpose.

Great as were his achievements, Oppenheimer considered his work as by no means finished. He was full of plans and ideas to extend his different activities. The invasion of Holland in 1940, which brought his work to a standstill, he regarded certainly as only a temporary interruption, little knowing that he would not live to see its continuation. His death is a great loss not only to his family and his many personal friends but also to science as a whole.

W. ROMAN.

Prof. R. A. Gortner

WE regret to record the death on September 30 of Prof. Ross Aiken Gortner, chief of the Division of Biochemistry at the University of Minnesota, at the age of fifty-seven. Dr. Gortner was born at O'Neill, Nebraska, on March 20, 1885. After graduation from Nebraska Wesleyan University in 1907 he obtained his M.S. degree from the University of Toronto in 1908 and his Ph.D. degree from Columbia University in 1909. He went to the University of Minnesota in 1914 as associate professor in the Division of Soils from the Station for Experimental Evolution at Cold Spring Harbor, N.Y. He transferred to the Division of Biochemistry of the University of Minnesota in 1916 as associate professor and was made full professor and chief of that division in 1917, which position he held at his death.

Dr. Gortner's scientific interests were very broad. His contributions to scientific journals number more than three hundred. The chief fields covered in these papers are the black animal pigments, the melanins ;

proteins, especially the cereal proteins and their relation to the properties of flour and dough ; colloids, especially their physico-chemical properties and the role of water in living processes. One of his major contributions to scientific thought was his book "Outlines of Biochemistry", the second edition of which appeared in 1938. Another volume, "Selected Topics in Colloid Chemistry", contained the lectures which he gave at Cornell University in 1935-36 in connexion with the George Fisher Baker lectureship which he held, and a third volume prepared by him and colleagues in 1936, entitled "J. Arthur Harris, Botanist and Biometrician", was in honour of his close friend.

Prof. Gortner felt that his chief contribution to science was through his students. In recent years he delivered to many audiences his lecture on "Scientific Geneology". His intense enthusiasm for science and especially for the field of biochemistry, his exceptional fund of scientific knowledge in many fields, and his easy, familiar delivery made him an inspiring teacher. An increasing number of students were attracted to his classes and to his department for graduate work. He gave freely and liberally of his time and thought to the research problems of his own graduate students as well as to those of his colleagues both in the Division of Biochemistry and in other divisions of the University, and in the early days of the development of graduate work in the Division of Biochemistry spent many hours in the laboratory working with his students. During the twenty-five years of his service as chief of the Division, eighty-seven students were personally directed by Dr. Gortner in their graduate research, and during the academic years 1940-42 between sixty and seventy graduate students were in residence in the division. On the National Research Council he was serving at his death on committees on the chemistry of colloids, chemistry of proteins, organic chemical nomenclature for the American Society of Biological Chemists and the American Chemical Society. Last May he was awarded the Osborne Medal by the American Association of Cereal Chemists, given by that society for distinguished service in conducting research and training students in the field of cereal chemistry.

PROF. OSKAR KRAUS, formerly lecturer in philosophy at the German university of Prague, died in Oxford on September 26 at the age of seventy. He was an authority on Czech philosophy and had also written a number of works on the history of philosophy and science, emphasizing their significance in any scheme for promoting a lasting peace.

WE regret to announce the following deaths :

Prof. Ernest C. Bryant, emeritus professor of physics at Middlebury College, Vt., on September 7, aged seventy-five.

Lieut.-Colonel J. E. E. Craster, O.B.E., sometime lecturer in geography in the University of Cambridge, on November 8.

Dr. M. S. Farr, emeritus associate professor of geology and palæontology of Princeton University, with which he had been associated since 1900, on August 27, aged seventy-two.

Sir Norman Walker, direct representative for Scotland, General Medical Council, during 1906-41, honorary fellow of the Royal Society of Medicine, on November 7, aged eighty.