

University of London granted him the degree of D.Sc.

The next years were devoted to the larger task of examining the soils of the historic Broadbalk wheat field, including plots manured and unmanured for fifty years. The results of this work were recorded in 1901 in the *Philosophical Transactions of the Royal Society* in a paper entitled "A Chemical Study of the Phosphoric Acid and Potash Contents of the Wheat Soils of Broadbalk Field, Rothamsted". The paper was published shortly after the death of Sir John Lawes, to whom the inspiration of this particular investigation had been due. Shortly before this, in 1900, Dyer delivered the triennial course of Rothamsted American Lectures at Newhaven, U.S.A., afterwards published by the United States Department of Agriculture under the title of "Results of Investigations of the Rothamsted Soils". In 1893 he published a little book, "Fertilizers and Feeding Stuffs"; and in 1924 a book on "The Manuring of Market Garden Crops", this latter being a record of the results obtained from more than twenty years of field experimental work in Kent.

Turning to his other great activity, Bernard Dyer became an original member of the Society of Public Analysts in 1875, and to the affairs of this Society he gave much of his time, first as a member of council in 1880, and then as joint honorary secretary during 1883-96, when he was elected president in succession to Sir Thomas Stevenson. He contributed many papers to its journal, *The Analyst*, and, in collaboration with Dr. C. Ainsworth Mitchell, prepared its history, "Fifty Years of the Society of Public Analysts". He was elected an associate of the

Institute of Chemistry during the year of its formation (1878) and became a fellow in 1880. He was an original member of the Society of Chemical Industry, and acted as chairman of its London Section during 1923-24. He held official appointments as agricultural analyst, as public analyst, and as official analyst to the London Corn Trade Association.

Dyer married twice, first Alice Collett, and secondly in 1890 Edith Steel, who survives with two of their three daughters.

Dr. Bernard Dyer will be remembered by all his friends for his great personal kindness and charm. As a member of many societies, he was greatly esteemed by his colleagues and held in the greatest affection by his juniors, who remember his kindly help in their struggling years. As an analyst he was austere in the conception of his duty in seeking the truth.

G. TAYLOR

WE regret to announce the following deaths :

Mr. Griffith Brewer, president during 1940-42 of the Royal Aeronautical Society, and a pioneer of aeronautics in Great Britain, on March 1, aged eighty.

Prof. R. T. Chamberlin, emeritus professor of geology in the University of Chicago, aged sixty-six.

Dr. A. L. Du Toit, F.R.S., lately consulting geologist to the De Beers Consolidated Mines, on February 25, aged sixty-nine.

Mr. G. S. W. Marlow, secretary of the Faraday Society, on March 5.

Sir Charles Grant Robertson, C.V.O., principal and vice-chancellor of the University of Birmingham, on February 28, aged seventy-eight.

NEWS and VIEWS

Radio Research in Great Britain :

Dr. R. L. Smith-Rose

IN 1920 the Department of Scientific and Industrial Research, guided by a newly formed Radio Research Board, started research in radio, which had grown in importance during the First World War. Most of the work was done at a field station at Slough under R. A. (now Sir Robert) Watson-Watt, and at the start attention was mainly devoted to investigations on atmospheric, direction-finding and the propagation of waves over the ground. When, in 1924, Appleton and Barnett demonstrated the reflexion of radio waves from the ionosphere, they asked the co-operation of Slough in fundamental experiments which laid the foundations of our present knowledge of the subject. Later, much of this experimental work was transferred to Slough, still under Appleton's guidance, while he continued his own work at Cambridge. In this way there grew up at Slough a team skilled in the use of pulses for the determination of distance by radio methods, which was able to turn its energies to the development of radar when the time came. In 1933 Slough and other radio research stations under the Department of Scientific and Industrial Research had been formed into a Radio Division of the National Physical Laboratory, with Watson-Watt as superintendent. In 1935 he took away a small team of experts to start a secret radar establishment, and Dr. R. L. Smith-Rose succeeded him. Just before, and during, the War, the ionospheric investigations at Slough developed so as to provide a world-wide organisation

for the forecasting of propagational conditions on different wave-lengths, and there has, in addition, been considerable work on direction-finding, the propagation of ultra-short waves through the troposphere, the development of *radio sonde*, and the measurement of the electrical properties of soil and water at radio frequencies.

A new arrangement has recently been announced by which it is intended to combine the work at the National Physical Laboratory and Slough and to transfer it to a new establishment under Dr. Smith-Rose as director of radio research. The new establishment will, by this arrangement, have a director who has been personally active in several lines of research. In the early days at Slough he was engaged, with Barfield, in investigations of the propagation of waves over the surface of the earth and in problems of direction-finding. The study of propagation led him to work on the electrical properties of soil and water, and to investigate the forward tilt of waves travelling over the ground; the work on direction-finding led to a clear understanding of the part which the wave deviated by the ionosphere can play in producing errors in a loop direction-finder, and to an explanation of the errors produced by conducting bodies near the loop, the so-called site-errors. He has published papers on the propagation of waves through the troposphere and on improved methods of direction-finding, particularly on very high frequencies. He has been chairman of the Radio Section of the Institution of Electrical Engineers, and was decorated with the United States Medal of Freedom with Silver Palm for his work in radio during the

War. Under Sir Edward Appleton's able guidance, Britain has established a lead in the scientific applications of radio, which the country will look to the new Radio Research Establishment to improve. With the present team under Dr. Smith-Rose, and with Sir Edward at the head of the Department, they are not likely to be disappointed.

Deputy Scientific Adviser to Army Council: Prof. F. J. M. Stratton, O.B.E., F.R.S.

THE appointment of Prof. F. J. M. Stratton to the post of deputy scientific adviser to the Army Council has been announced. Prof. Stratton's retirement from the chair of astrophysics at Cambridge last October was announced in *Nature* (159, 463; 1947), and the record of his scientific work was noted. His was a retirement dictated by the rules of superannuation, and not by any loss of activity; so that his choice for and acceptance of this further post will be no more a surprise to his friends than his own preference for further service to merited retirement. The War Office is fortunate in securing the services of so able a man of science, particularly one who has given proof, through ten years service in the Army in two wars and a long association with the Cambridge O.T.C. and the Territorial Army, of his aptitude and interest in military affairs. While his appointment will be a temporary one for a limited period, the acquisition to the Scientific Civil Service, even for a short time, of such men as Prof. Stratton will be a source of strength to the Service, and the experience and leadership he can give to some of the younger men of science employed by the Army, in operational research and other tasks, will obviously be of the greatest value to them.

Willard Gibbs Medal: Prof. Carl F. Cori

PROF. CARL F. CORI, professor of biochemistry in the Washington University School of Medicine, has been awarded the 1948 Willard Gibbs Medal of the Chicago Section of the American Chemical Society. This medal, one of America's highest scientific honours, goes to Dr. Cori for his achievements in research on the processes by which the body converts sugar into energy. He has been a leading worker in the difficult field of biological carbohydrate transformations for many years. His contributions have been of widespread importance involving adrenal, cortical, pituitary, and pancreatic roles in carbohydrate utilization as well as carbohydrate metabolism in tumours. A recent outstanding contribution is at least a partial solution of the problem of how insulin functions. He and his wife, Dr. Gerty T. Cori, who is also a professor of biochemistry in Washington University, received the Nobel Prize for Medicine for 1947 (see *Nature*, 160, 599; 1947) for determining the process by which the body stores sugar in the liver as glycogen, or animal starch, and then reconverts the glycogen to sugar as it is needed.

Library of the Royal Society: Mr. H. W. Robinson

ON March 31 Mr. H. W. Robinson retires from the office of librarian of the Royal Society. He joined the staff of the Society in 1902, when as a boy of fourteen he assisted both the chief clerk and the librarian. His work soon became exclusively associated with the Society's Library; in 1930 he was raised from assistant to the post of assistant librarian and five years later to the position which

he now holds. This forty-six years service to the Society has been twice broken by war. In the First World War Mr. Robinson served in the army with distinction; in the Second World War there was a period of service on the Central Register, which came between the strenuous work which he performed in seeing the Society's manuscripts and early printed books safely to Wales and his recall to the Society's service in 1943. Since then he has had the exacting but pleasant task of seeing the Library's books brought back from Oxford, where they had been stored by the Bodleian Library, and arranged in their places with a minimum of inconvenience and disturbance.

Mr. Robinson has a unique knowledge of the Society's Library and in particular of its extensive and priceless archives, a knowledge which he has always been delighted to put at the disposal of the scholars, from many countries, to whom his learning is well known. His intimate acquaintance with the Society's traditions and records has found expression in his services to the history of science. He is, for example, an authority on Robert Hooke, having edited, in conjunction with Mr. Walter Adams, the Diary in the possession of the Guildhall Library and having identified as another Diary of Robert Hooke the manuscript in the British Museum previously attributed to James Petiver. With Prof. Harcourt Brown and Dr. D. McKie he founded the *Annals of Science*, and he was actively associated with the foundation of the British Society for the History of Science, of which he is honorary treasurer. He has an intimate knowledge of many aspects of the bibliography of Isaac Newton, in particular of his manuscripts, and it has been arranged that after his retirement his services shall still be available to the Society, to assist Prof. H. W. Turnbull in editing the Newton letters. It is to be hoped that for many years to come Mr. Robinson's familiar figure will be seen about the Royal Society Library, working among the manuscripts that he loves so well.

Reports on German War-time Industry and Science

REPORTS of war-time scientific and industrial activities in Germany have been available to interested parties for some time. These reports were prepared by B.I.O.S. (British Intelligence Objectives Sub-Committee), its American counterpart, F.I.A.T. (Field Information Agency, Technical), and the combined Anglo-American Agency, C.I.O.S. (Combined Intelligence Objectives Sub-Committee) which preceded them. Actual investigations in Germany ceased at the end of June 1947. To date, 2,720 reports have been issued. It is stated that more than one million copies have been sold or distributed to the universities, learned societies, trade and research associations and principal public libraries of Britain. The Board of Trade has now arranged for experts in each of the major fields to prepare critical summaries suitable for publication. These reports will be known as "B.I.O.S. Overall Reports" and there will be fifty of them, all of which are expected to be printed by the end of June. The first, on the petroleum and synthetic oil industry of Germany, has been published; the next six reports will be on shipbuilding and marine engineering, the German timber industry, the glass industry, the German road system, agriculture, and the rubber industry. All inquiries about these reports should be addressed directly to the Board of Trade, T.I.D.U., Research Section, 40 Cadogan Square, London, S.W.1.