

in physics which he served under Prof. Nernst, at the same time assisting Prof. Wehnelt as demonstrator. After six further years research in German industrial laboratories, he came to Britain because of the adverse conditions in Germany under the Nazis in 1936. Shortly after his arrival in Britain, he was appointed chief physicist and head of the Vacuum Physics Section of Cathodeon, Ltd., in Cambridge, where he served until 1947, when he took a senior appointment in the Research Laboratory of the Associated Electrical Industries, Ltd., at Aldermaston in Berkshire.

His earlier researches in Germany were concerned with high-temperature physics, infra-red spectra and electronic valves. In Great Britain, he made important contributions in the development of television cathode-ray tubes, valves and image converters. He became interested in the electron microscope while in Cambridge, and built an instrument there.

Already he had published many papers, and taken out more than forty patents. He later developed his interest in the electron microscope, and put to good use his innate mathematical ability and ingenuity. His development of the resistance-network analogue calculating method, and his use of this in calculating the properties of electron lenses, contributed largely towards the development of greatly improved electron microscopes. His scientific papers were then

appearing in many scientific journals, and were being read in European countries, in the United States and in Britain. He latterly extended his reputation in the computational field by the development of resistance-network analogue methods for the solution of the transient heat flow equations, fourth-order differential equations, and the more complicated equations occurring in thermal stress and neutron diffusion problems. He lectured by invitation in the United States in 1955, and in Brussels early in 1956, and was appointed vice-chairman of the International Analogue Computation Association. He had long been a Fellow of the Institute of Physics, and several times lectured at the Institute, and was a member of the American Institute of Radio Engineers.

Liebmann was a kindly and loyal man. He was a great lover of family, of science, and the mountain peaks. His interest in science was wide, and his advice to colleagues and assistants has contributed greatly to their success. His powers of concentration were great. He was liked and admired by all. His memory will live with his friends because of his understanding and his sincerity, with his colleagues because of his example and guidance, and with his fellow scientists because of his scientific achievements.

He leaves a widow, a son and a daughter.

M. E. HATNE

NEWS and VIEWS

Chancellorship of the Massachusetts Institute of Technology: Dr. J. A. Stratton

A NEW post, that of chancellor, has been established at the Massachusetts Institute of Technology, and Dr. Julius A. Stratton, at present vice-president and provost, has been appointed as the first holder. As chancellor, Dr. Stratton will be directly responsible for administering the academic side, including staff, of the Institute's affairs and will be deputy to the president, Dr. James R. Killian, jun., who is the Institute's chief executive officer; the chancellor will act as president in the latter's absence. The other principal officers of the Institute are Admiral Edward L. Cochrane, vice-president in charge of relations with industry and government, and Mr. Joseph J. Snyder, vice-president and treasurer. Dr. Stratton graduated from the Institute in 1923 and, after study in Grenoble and Toulouse, gained the D.Sc. of the Federal Institute of Technology, Zurich, in 1927. He became assistant professor of electrical engineering in the Massachusetts Institute in 1928 and then assistant professor of physics (1930), associate professor of physics (1935) and professor of physics (1941). He was on the staff of the Radiation Laboratory at the Institute from its inception in 1940 until the end of the Second World War. During the War he was at first engaged on communication surveys and other problems over the North Atlantic and in North Africa and Italy; later he advised on problems of ground radar, radar fire control and radar bombing, and assisted in the establishment of aids for all-weather flying. For these services he was awarded the Medal for Merit. After the War Dr. Stratton became director of the Research Laboratory of Electronics at the Institute, the peace-time successor to the Radiation Laboratory. He was made provost of the Institute in 1939, with the primary responsibility for co-ordinating

inter-school educational and research facilities, and two years later he became vice-president as well.

Mechanical Engineering at Swansea:

Prof. R. H. Macmillan

MR. R. H. MACMILLAN has been appointed to the newly created chair of mechanical engineering at the University College of Swansea. Mr. Macmillan, who has been on the staff of the Department of Engineering at Cambridge for the past ten years, was educated at Felsted School and Emmanuel College, Cambridge, where he took the Mechanical Sciences Tripos in 1941. He was then commissioned in the Technical Branch of the R.A.F., where he was concerned mainly with automatic equipment for gunsights and with rockets. Since returning to Cambridge, he has published several papers on problems of automatic control, and his textbook, "An Introduction to the Theory of Control", first appeared in 1951. He spent the academic year of 1950-51 working as a visiting assistant professor in the Mechanical Engineering Department of the Massachusetts Institute of Technology, and on a later visit to the United States contributed to the Frequency Response Symposium of the American Society of Mechanical Engineers: on this occasion he also lectured on aspects of automatic control at the Universities of Pennsylvania and Minnesota. Mr. Macmillan's particular interest is in explaining engineering developments to other scientists and to the general public, and in considering their social implications; in this connexion the B.B.C. has broadcast a number of his talks, and last autumn he gave a popular series of afternoon lectures at the Royal Institution. His book, "Automation: Friend or Foe", has just been published by the Cambridge University Press.