continued his work on boron compounds. He succeeded in preparing borohydrates and in establishing the existence of hitherto unknown oxides of boron. For his work on this complicated system he was awarded the D.Sc. of the University of London. He also obtained the fellowship of the Royal Institute of Chemistry.

Returning to Patna, he was responsible for creating a school of research which produced a steady output of papers on inorganic chemistry. The majority of these dealt with boron compounds and formed a valuable contribution to the chemistry of that

In 1940 he was appointed head of the element. Department of Chemistry, and in all he worked for thirty-five years at the College. His outside interests were extensive, even after retirement; he was chemical adviser to the Government of Bihar, chairman of the examination board of Bihar University, founder-rector of the Ram Mohun Roy Institute and president of the Manorma Vidyapith. In 1944 he was elected president of the Chemistry Section of the Indian Science Congress.

He died on December 3 and leaves a widow, four sons and three daughters.

## NEWS and VIEWS

Electrical Engineering at Cambridge:

Prof. E. B. Moullin

PROF. E. B. MOULLIN retires from the chair of electrical engineering at Cambridge on September 30. Thus will end his official connexion with the Engineering Laboratory, which he first entered in 1913. In that year he began to read for the Mechanical Sciences Tripos, having previously taken Part I of the Mathematical Tripos. After a short period in industry. Moullin returned to a lectureship in engineering at Cambridge which he held until 1929. It was during this period that he developed the valve voltmeter associated with his name, and carried out numerous researches in collaboration with L. B. Turner. In 1930 he migrated to Oxford where he held the Donald Pollock readership in engineering science until 1945. Here, his scientific approach to electrical engineering problems attracted numerous research students, several of whom have since achieved world-wide recognition. Moullin was elected to a fellowship at Magdalen in 1932. During the Second World War he worked first at the Admiralty Signals Establishment and later in the research laboratories of Metropolitan-Vickers. In 1945 he returned to Cambridge as the first occupant of the newly created chair of electrical engineering and was elected to a fellowship at King's College. For many years Moullin has taken an active part in the affairs of the Institution of Electrical Engineers. He was chairman of the Radio Section in 1939 and president of the Institution in 1949. He is the author of a number of successful text-books which are distinguished by a freshness and individuality of outlook. His scientific writings cover a wide range of subjects but are largely concerned with problems in electromagnetic theory. The honorary degree of LL.D. was conferred on him by the University of Glasgow in 1958.

## Prof. C. W. Oatley

C. W. OATLEY, who succeeds Prof. Moullin in the chair of Electrical Engineering at Cambridge on October 1, was educated at Bedford Modern School and St. John's College, Cambridge. He read both parts of the Natural Sciences Tripos, specializing in physics, and graduated in 1925. After a short spell in the radio-valve industry he was appointed to a demonstratorship in the Physics Department of King's College, London, where he worked under Sir Edward Appleton and later under Sir Charles Ellis, until the outbreak of war. During this period his interests were centred on various problems of electron physics, particularly those concerned with the

measurement and interpretation of the contact potential difference between metals. In 1939, Oatley joined the Air Defence Experimental Establishment of the Ministry of Supply, then situated at Christchurch. There he took charge of a group working on radar receivers and became especially interested in ultra-high frequency and microwave measurements. In 1942, when the Establishment moved to Malvern and became the Radar Research and Development Establishment, Oatley was responsible for all basic research work. A year later he became deputy to the Chief Superintendent and, during 1944-45, was in charge of all technical work in the Establishment. In 1945 he returned to Cambridge with a lectureship in the Department of Engineering and a fellowship at Trinity College. During the past fifteen years he has been active in building up research work in electronics and has become interested in problems of electron microscopy. He was appointed to a readership in 1954. Since the War he has had close connexion with the work of the Institution of Electrical Engineers. He served on the Radio Section Committee for a number of years and was chairman of the Section in 1954.

## Chemistry at Aberystwyth: Prof. C. W. Davies

PROF. C. W. DAVIES, who is retiring from the chair of chemistry in the University College of Wales, Aberystwyth, is well known for his many contributions to electrochemistry extending over an active research career of more than thirty years. Davies early became interested in the conductivity of electrolytes, and at the appearance of the Debye-Hückel theory he was among the first to suggest the combination of the law of mass action with the ionic interaction theory to account for the conductivity of strong electrolytes. He showed that the dependence on concentration of the conductivity of many electrolytes could be accounted for if they were incompletely dissociated in solution. This conclusion was not at first readily accepted, because to many chemists the Debye-Hückel theory implied complete dissociation of all electrolytes. The idea that salts are completely dissociated in solution, and that variations in conductivity are due to variations in mobility, was too simple and attractive to be readily abandoned. This difficulty of acceptance was increased by the fact that the physical interpretation of incomplete dissociation was rather obscure. However, Prof. Davies and his collaborators showed that measurements of conductivity and of solubility led to results for dissociation constants of salts in good agreement with one another. Kinetic studies, too, have given