

## OBITUARY NOTICE.

EDMUND BRYDGES RUDHALL PRIDEAUX.

1878—1946.

EDMUND BRYDGES RUDHALL PRIDEAUX was born in Barbados and educated at the Auckland Grammar School and Canterbury College, New Zealand University. His education, following the tradition of his family, was mainly classical; although he devoted himself to science he never lost his love of the classics and throughout his life would turn to them for solace and inspiration.

In 1901 he came to London but moved, in 1906, to the Heriot Watt College, Edinburgh, and thence, in 1909, to Liverpool University. Professor Donnan writes: "I had the great pleasure of welcoming Dr. E. B. R. Prideaux when he came to work in the Muspratt Laboratory of Physical and Electro-chemistry after having spent a year or two of research in the laboratory of Sir William Ramsay at University College, London. As a senior research worker of ability and experience he was a great source of strength to us in Liverpool and he made very valuable contributions to the research output of the laboratory. His lectures to the senior students on physico-chemical calculations were highly appreciated. I think I may claim the honour of having directed his attention to the special study of ionic equilibria in solutions and the various types of electrical potential differences associated therewith.

"Dr. Prideaux was a quiet, thoughtful, and scholarly man of science, and I have the happiest recollections of my association with him during those Liverpool years. He was one of a number of excellent men from New Zealand, including Denham, Stubbs, and Farrow, who contributed greatly to the success of the Muspratt Laboratory and the advance of physical chemistry."

In 1913 Prideaux moved to the Battersea Polytechnic and, in the following year, to the University College of Nottingham. His output of research was increasing rapidly but it received a check due to the outbreak of war. Much of his time was spent in assisting the National Shell-filling Factory at Chilwell and in preparative organic chemistry in connection with the production of  $\beta$ -eucaine. With the end of the war came the great influx of ex-service students, and in their interests he spent himself unstintingly.

Professor Kipping writes: "Dr. Prideaux was deeply imbued with the true scientific spirit which alone enabled him to accomplish the work for which he was distinguished in spite of his conscientious and painstaking preoccupation with his academic duties and, often also, with very inadequate apparatus.

"Although quiet and reserved in unfamiliar surroundings, with some of the attributes of a recluse, he was a kind and genial man and an interesting companion with broad and well informed views and decided opinions on many subjects. Some of the less desirable qualities which so often determine worldly success were, however, entirely foreign to his character; he was too altruistic, lacking in self-assertion and prone to neglect opportunities for his own advancement. It was, doubtless, for this reason that he failed to attain the higher rank in his profession to which he was entitled.

"He was not only, during many years, an accomplished member of my staff but also a highly valued friend."

As a research worker Prideaux was remarkable for his versatility; scarcely a single branch of chemistry escaped his attention, and he published some 90 papers in scientific journals apart from articles on scientific and educational topics. After obtaining the M.A. degree of New Zealand University he completed a research on Kauri resin and was awarded the B.Sc. degree. He continued to work on resins at the Imperial Institute in London in 1902, but then, under Ramsay, turned his attention to fluorine. He discovered the compounds  $\text{BrF}_3$ ,  $\text{TeF}_6$ , and  $\text{SeF}_6$ . This work gained him the D.Sc. degree of London University. Fluorine continued to interest him throughout his life, and some 12 of his papers are devoted to this element and its compounds with selenium, tellurium, zirconium, and rubidium.

Phosphorus and its compounds also interested Prideaux, and his electronic formulation of phosphorus pentachloride received wide publicity. He published many papers on phosphoric and boric acids and was a pioneer in the use of modern indicators, and of the hydrogen and quinhydrone electrodes, and, in general, in the practical applications of the electrolytic dissociation theory. With A. T. Ward he devised the first "universal" buffer solution.

The dissociation constants of phenols and of alkaloids, the separation and estimation of pyridine and ammonia, the analysis of nitrotoluenes, benzoates, and salicylates, the spectro-

photometric examination of dyes and indicators, photo-synthetic phenomena in sea water, diffusion and membrane potentials, the corrosion of cement; these and other topics are evidence of the catholicity of Prideaux's tastes in research. In collaboration with F. O. Howitt he contributed valuable papers on the electrophoresis and isoelectric points of proteins and the kataphoresis of insulin. His theoretical papers helped the development of views on molecular structure.

Prideaux wrote several books: "The Theory and use of Indicators," "Problems in Physical Chemistry," and "A Survey of English Elementary Education." He was the author of the volume "Phosphorus" in Newton Friend's Text Book of Inorganic Chemistry, and joint author, with Herbert Lambourne, of the volume "Nitrogen," and with F. C. Laxton of "A Laboratory Course in Elementary Chemistry." He was, moreover, one of the pioneers in popular broadcast talks on scientific topics.

In 1908 Prideaux married the elder daughter of Rowland Bramwell, Esq., of Auckland, New Zealand. In 1946 he resigned his post as Reader in Physical and Inorganic Chemistry in the University College of Nottingham and, in recognition of his services, was awarded the title of *Lector Emeritus*. He then settled, with his wife and daughter, in his home at Canford Cliffs, Bournemouth, hoping to carry on his researches unhampered by the academic duties to which so much of his life had been devoted. The repose he had so richly earned by a life of labour was, however, denied him; he died on the 8th of May, 1946. His memory lives in the hearts of the students and friends who knew and valued him.

B. D. SHAW.

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