

Obituary

Prof. K. C. Browning

KENDALL COLIN BROWNING was one of three sons of the late Captain Browning, R.N., and was educated at Dulwich College, where he studied chemistry under H. Brereton Baker, and gained a leaving scholarship to St. John's College, Cambridge. Here he was senior foundation scholar, afterwards obtaining a first in both parts of the Natural Science Tripos. He was also Hughes Prizeman in 1890. He rowed for his college, was awarded a half-blue for cycling, and was a captain in the University Volunteers.

At Cambridge Browning studied under Ruhemann, and in 1898, jointly with Ruhemann, published the results of his first research—on the formation of ethyl-dihydroxy-nicotinate from ethyl-cyano-acetate. This was published in the *Journal of the Chemical Society*, as were several subsequent papers. From 1898 until 1900 he was Hutchinson research student, and from 1897 until 1903 demonstrator and lecturer at St. John's College. From 1899 until 1903 he supervised the instruction of medical students in chemistry and physics. During this period he published papers on a variety of subjects, one jointly with R. H. Adie on the interaction of sulphuric acid with potassium ferrocyanide, and others on hydro-ferrocyanic acid, phosphorus suboxide, and quadrivalent oxygen.

In 1904 Browning was appointed Government analyst and professor of chemistry at the University College of Colombo, Ceylon. His work there was of a very varied nature, including routine and research work connected with Customs and Excise, also criminological investigations for the police, for which the country afforded unusual opportunities. The results of some of his work during this period are published in the *Journals* of the Chemical Society and Society of Chemical Industry, on alcohol estimation in the tropics, on a convenient thermostat for specific gravity determinations, and a gas regulator, on the detection of mercury for toxicological purposes, on coco-nut toddy, jointly with C. T. Symons, and on ghee, jointly with M. Parasarthi.

In 1916 Browning was commissioned in the Royal Engineers, for which he carried out work on the purification of water supplies for the Army in Mesopotamia. Owing to ill-health, he later returned to England, and was transferred to the Ministry of Munitions. Here he worked with Prof. T. M. Lowry, technical director of gun ammunition filling, on problems connected with the high explosive fillings of shell. At the conclusion of the War, he was joint author, with Prof. T. M. Lowry and J. W. Farmery, of a paper on the decomposition of nitric esters by lime. This work had its origin in experiments carried out by the late Prof. Hodgkinson (at the Ordnance College), and continued by the Waste Explosives Committee under the direction of Prof. T. M. Lowry, with the view of devising methods of usefully

disposing of the immense quantities of cordite and other explosives which remained surplus at the end of the War.

On demobilisation, Browning worked for a short time with his old teacher, Prof. H. B. Baker, at Kensington, and in 1921 he was appointed professor of chemistry and metallurgy at the Artillery College, formerly Ordnance College, and now Military College of Science, Woolwich. In the following years he made a special study of the chemistry of fuels and lubricants, with reference to their properties and uses in the internal combustion engine. He was an enthusiastic teacher, and a chemist in the broadest and truest sense, possessing an encyclopædic knowledge which was always at the disposal of those who were privileged to work with him. He continued to work in the face of great physical difficulties until within a few months of his death, which occurred suddenly at Dawlish, on January 26, in his sixty-first year.

R. C. G.

WE regret to announce the death at the age of forty-two years of the eminent Brazilian biologist, Dr. Lemos Monteiro, of the Butantan Institute of the medical faculty at São Paulo. He was best known for his work on yellow fever and *Rickettsia* diseases; but he was also the author of works on cattle plague, the Twort-d'Hérelle phenomenon, antitetanic immunisation, diphtheria and vaccine virus. His death was due to accidental inoculation in the laboratory with *Rickettsia neotropica*, the virus of São Paulo typhus.

WE regret to announce the following deaths:

Prof. A. Hanák, professor of physiology in the University of Prague, aged forty-six years.

Mr. Francis A. Mason, for thirteen years secretary, and lately president, of the Yorkshire Naturalists' Union, aged fifty-eight years.

Prof. Stefan Minovici, professor of organic chemistry in the University of Bucharest, and president of the Rumanian Society of Chemistry.

Prof. C. Lloyd Morgan, F.R.S., emeritus professor of psychology in the University of Bristol, on March 6, aged eighty-four years.

Dr. G. T. Prior, F.R.S., formerly keeper of minerals in the British Museum (Natural History), on March 8, aged seventy-three years.

Mr. James H. Scarr, principal meteorologist of the United States Weather Bureau in New York since 1926, on February 14, aged sixty-nine years.

Prof. Stephen Soudek, professor of applied zoology in the Agricultural College, Brno, known for his work on pests of agriculture and forestry, on February 20, aged forty-six years.