

This migration from mathematics through physics to chemistry made him an excellent holder of the John Humphrey Plummer chair of theoretical chemistry established at Cambridge in 1932. At the same time (1933) he was elected a Fellow of the Royal Society. This post at Cambridge was—and still is—the only chair of theoretical chemistry in Britain. While he was in Cambridge, Lennard-Jones (or 'L. J.' as he was known to his many friends) laid the foundations of the present vigorous school of theoretical studies in Britain. During this time he extended his earlier work on molecular orbitals, he made some useful progress in the very difficult field of chemical interactions at a metal surface, and he developed the 'cage-model' of liquids. Had it not been for the Second World War, in which he played a conspicuous part as Superintendent of Armament Research and Director-General of Research (Defence) at the Ministry of Supply, there is no doubt but that he would have done even more.

At the end of the War, Sir John returned once more to Cambridge, and although he became chairman of the Scientific Advisory Council of the Ministry of Supply, he and his younger colleagues completed an extensive study of the most fundamental problem in all chemistry—what is meant by a chemical bond? But by this time his administrative abilities were becoming widely known. He was a member of the Advisory Council for the Department of Scientific and Industrial Research, a member of the Scientific Advisory Committee of the National Gallery, and president during 1948–50 of the Faraday Society. His quiet manner and understanding approach to difficulties made him an excellent chairman on all occasions where conflicting claims had to be reconciled. It was not surprising, therefore, that in April 1953 he was invited to follow the late Lord Lindsay and become the second principal of the new University College of North Staffordshire at Keele. He threw himself whole-heartedly into this work, which he so evidently liked, and in which he had become much appreciated, not only in the College itself, but also in the neighbourhood.

Sir John received many honours. He held the D.Sc. of Manchester and the Sc.D. of Cambridge; he was made K.B.E. in 1946, was awarded the Davy Medal of the Royal Society in 1953, and an honorary D.Sc. at Oxford on the occasion of the British Association meeting there only a few weeks before his death, when he was president of Section B (Chemistry). He had recently been awarded the Longstaff Medal of the Chemical Society. All those who knew him respected the complete integrity of his life, the exceptional simplicity and clarity of his lectures and his obvious enjoyment of everything that he did. His home life was a most happy one; he is survived by his widow, a son and a daughter.

C. A. COULSON

Mr. B. H. St. J. O'Neil

THE unexpected death on October 24 of Brian Hugh St. John O'Neil at the age of forty-nine has deprived the Ancient Monuments Department in the Ministry of Works of the chief inspector who followed Mr. J. P. Bushe-Fox, whose death was so recently recorded in these pages (*Nature*, November 6, p. 860).

Educated at Merchant Taylors' School and St. John's College, Oxford, of which he was a scholar, Mr. O'Neil began a career in the City of London,

but soon deserted to Westminster and the Ancient Monuments Department in fulfilment of interests always near his heart. His most particular delight was in medieval and post-medieval fortifications and in early artillery, of which he had a profound and detailed knowledge, well employed, for example, in a recent visit to advise upon the treatment of early Portuguese fortifications in West Africa. He spoke and wrote of these matters with an authority and relish good indeed to meet. But his work extended also with distinction to other fields. He was no mean numismatist, as his classic study of Theodosian silver coin-hoards in late fourth-century Britain proves. He could take a prominent part in discussions concerning late-Roman copies of earlier coinage. No less notable was his discussion of the Silchester dykes and their relation to Britons and Saxons. Among his field-work should be specially cited his excavation of Frith Ffaldwyn Iron-Age fortress in Powys and the Caerau settlement in North Wales, and the unstinting unofficial help accorded in the excavations by his wife of Roman villas at Park Street, Whittington Court and Bourton-on-the-Water.

His appointment as chief inspector of ancient monuments brought him into close quarters with war-time and post-war problems in archaeology. The application of State aid to the examination and record of sites threatened by destruction was liberally and wisely interpreted by him, and presently extended to cover sites of national importance which private resources, impoverished by taxation and inflation, were no longer equal to tackling. This was a valiant service to knowledge of which the full effects are not yet apparent, for he was planning publication in promising fashion, talking of the matter with the writer less than a week before his death. We have lost far too soon a judicious innovator, a good (if perhaps fatally self-sufficient) administrator, a zealous public servant, a keen scholar and a staunch friend, who in all these capacities will be widely and deeply mourned.

I. A. RICHMOND

Miss Rosamund F. Shove

AFTER a long illness borne with great fortitude, Miss Rosamund F. Shove died on October 17 in Richmond Hospital, aged seventy-six. Until the last few months of her life she had hoped to renew some of her many activities in the field of science and remained keenly interested to the end. Educated at Girton (1896–99), Miss Shove was trained in research by Prof. A. C. Seward; and in 1900 "The Morphology of the Stem of *Angiopteris erecta*" appeared in the *Annals of Botany*. Miss Shove's professional career included seventeen years of science teaching in schools, followed by twenty years of university and training college work in biology and hygiene. Her last post was at the Maria Grey Training College (1921–38). She served on the council of the Linnean Society during 1943–47.

In 1937 Miss Shove became honorary secretary of the School Nature Study Union, and in 1940 undertook the editorship of its journal, *School Nature Study*, at a critical time. She sustained both the Union and the journal throughout the War and continued her labours until 1953, when the jubilee number was published. The journal had appeared regularly each quarter, thanks to her tireless devotion.

At the British Film Institute, Miss Shove was a faithful member of a volunteer panel who viewed natural history films from many sources. She con-