

RÜCKER, SIR Arthur William (1848-1915), physicist, was born 23 October 1848 in Clapham Park, London, the eldest in the family of three

sons and three daughters of Daniel Henry Rücker, merchant of colonial produce, of London, and his wife Mary Antoinette, eldest daughter of John D. Williams, a merchant of Coolock, county Dublin. Educated at Clapham Grammar School, Rücker went to Brasenose College, Oxford (1867), with an open mathematical scholarship, taking first-class honours in mathematical moderations and the junior university mathematical scholarship (1869), and first-class honours in mathematics (1870) and natural science (1871).

Awarded an open mathematical fellowship at Brasenose (1871-6), he was appointed mathematical lecturer at Brasenose and demonstrator at the Clarendon laboratory, but, when the Yorkshire College of Science was founded in Leeds in 1874, he moved to become their professor of mathematics and physics. In 1886 he was appointed professor of physics at the Royal College of Science, London. He subsequently assisted the incorporation of the Greater London colleges within London University and, as a result, became the first principal in 1901, holding the position until retirement in 1908.

His research topics included thermal expansion of liquids (1876-84); properties of thin liquid films (1877-93), jointly with A. W. Reinold; and electromagnetism (1855-1901). His major contribution was undoubtedly to undertake, jointly with (Sir) Thomas Thorpe [q.v.], a series of magnetic surveys of the British Isles (1883-92) which significantly advanced contemporary interpretation methods; and to obtain the first measurements of the magnetic susceptibility of rocks (1890-8).

He was a good-humoured, patient man of great personal charm, an energetic and skilled administrator and excellent public speaker. His hobbies included rambling, ornithology, sketching, photography, horticulture, and astronomy; and he acquired a remarkable knowledge of the Welsh language. He stood unsuccessfully as a Liberal Unionist candidate for Parliament in the 1885 and 1886 elections in north Leeds and the Pudsey division of Yorkshire.

In recognition of his work on thin films and terrestrial magnetism he was awarded the Royal medal of the Royal Society in 1891 and became president of the permanent committee on terrestrial magnetism and atmospheric electricity of the International Meteorological Conference in 1896. He was awarded the honorary degrees of D.Sc. (Oxford, Cambridge, Victoria (Manchester), Leeds, and Belfast) and LLD (Glasgow and Edinburgh) and was knighted in 1902. Elected a fellow of the Royal Society in 1884, he was on the council (1887-9, 1894, 1898-9) and secretary (1896-1901). He was also treasurer of the British Association (1891-8) and its president (1901), and president of the Physical Society (1893-5).

In 1876 he married Marian, daughter of John Deakin Heaton, physician, of Claremont, Leeds, but she died following the birth of their daughter in 1878. Rücker was subsequently married in 1892 to Thereza Charlotte (died 1941), third daughter of Mervyn Herbert Nevil Story-Maskeleyne [q.v.] of Wroughton, Wiltshire, keeper of minerals at the British Museum. A son, Arthur Nevil, was born in 1895. Rücker died 1 November 1915 in Everington, near Newbury, Berkshire.

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RICHARD J. HOWARTH