

JOHN WALKER SHARPE

MA(Glas), FInstP

John Sharpe, formerly Reader in Physics and Applied Physics at Strathclyde University, died on 14th August, 1997, after a long illness. He was born in Stenhousemuir on 21st October, 1916. He attended Falkirk High School and having won a bursary to Glasgow University, graduated in 1939, after a distinguished undergraduate career, with First Class Honours in Mathematics and Natural Philosophy. As a result of this he was awarded a Ferguson Scholarship to pursue postgraduate studies at St John's College, Cambridge but the outbreak of war prevented him from taking this up and he was appointed, on a temporary basis, to an Assistant Lectureship at the Royal Technical College, Glasgow. In 1940 he was directed to the Admiralty as a Scientific Officer. After two years in mine design he became an original member of the team working on procedures for demagnetising ships to prevent them detonating ever-new types of magnetic mines. For the Admiralty he wrote some nineteen reports of a classified nature. He was for two years after his release from war-work a Lecturer in Natural Philosophy in the University of Aberdeen under R V Jones. He moved into industry in 1947, taking a post as physicist with Imperial Chemical Industries Ltd in the Research Department of the General Chemical Division at Runcorn. There he was engaged in pioneering work on electron microscopy. He spoke on the use of the instrument for the examination of airborne dusts at an International Conference in Delft, and was the first to photograph the parasite *Trypanosoma Congolense*, which allowed the company to develop a vaccine for sleeping sickness in African cattle. During this period he published his first papers in the open literature.

John joined (or, in a sense, re-joined) the Natural Philosophy Department at the Royal Technical College, Glasgow (as the University of Strathclyde still was) in 1950. Electron microscopy became his lifelong research study and, for a number of years, he continued to publish work in this field. In 1955 he delivered the Keith Lecture to the Royal Scottish Society of Arts on 'The Electron Microscope and its Applications' and in 1969 he contributed the article on High Resolution Electron Microscopy in the Encyclopaedic Dictionary of Physics. After the Department had bought a much more powerful instrument than it had originally possessed, he was able, much to his delight, to appear as expert witness in a Court of Session action concerning thin plastic coatings on razor blades.

In the College, on promotion to Senior Lecturer in 1953, he became responsible for organising the service courses in Natural Philosophy for students in other disciplines. When the College eventually established an Honours Course in Applied Physics for the College's Associateship (ARTC), John provided tireless support in its creation and in making it the success it became. The use of 'Applied Physics' in the title at that time emphasised the practical content as well as reflecting the intense concern for "useful learning" of John Anderson, the College's Founder. In all his dealings with staff and students John combined great charm and good humour with his unobtrusive management skills.

He became an Associate of the Institute of Physics in 1942 and was elected Fellow in 1950. John was Chairman of the Scottish Branch of the Institute of Physics and The Physical Society from 1965 to 1967 and a member of Council, serving on the Meetings Committee from 1965 to 1967 and the Finance and General Purposes Committee from 1967 to 1970. In 1966 he chaired a conference, organised by the Institute, on applications of electron microscopy and in the same year he was appointed to his Readership by the University.

He was elected Fellow of the Royal Society of Edinburgh in 1970 and was a familiar figure at Lecture Meetings, particularly after his retirement in 1981.

John was a very good sportsman. In 1935 he captained The Scottish Schoolboys XI at soccer (the pundits spoke at the time of a possible career in professional football!) and was an enthusiastic cyclist in his schooldays, his notebooks recording many trips, often of over 100 miles a day, covering much of the West of Scotland. All his life he had a passion for golf, scoring a hole-in-one twice among other distinctions. He loved music, especially opera and chamber music. It was through playing the violin in a string quartet at the home of one of us (DCP) that he met his second wife, Betty, when another viola was required for quintets by Mozart. John's first wife, Sheena, died in 1976.

In his younger days he was a keen Scoutmaster. A deeply committed Christian, John served as an elder in Killermont Church, Bearsden, from 1957 till his death; he responded to the many and varied calls of office with quiet efficiency and was particularly attentive to the elderly, sick and bereaved people in his 'district'.

John had a natural ability to make friends and to keep them. He was self-effacing, a wise and generous man. He is survived by Betty, his children David and Alison and their families.

TOM BOAG/DONALD PACK