

Sir James Woodham Menter

Sir James Menter came to live permanently in Scotland on retirement twenty years ago after a full and highly successful working life in scholarship, scientific research, industry and university management. He could have been simply an academic, albeit one of great distinction, but he was one of those all too rare individuals who combine intellectual integrity, professionalism and a sound sense of judgement which made him successful also in the wider world of industry and business.

Jim Menter started out in life from a modest family background of working parents with ambitions for their children's future. With their support he gained a scholarship to Dover County School for Boys, the local grammar school, where he had the good fortune to be taught by a physics master who inspired him to embark on what was subsequently a lifelong interest in science. From there he won an Open Scholarship in Natural Sciences at Peterhouse, Cambridge.

His undergraduate studies were disrupted by the Second World War when he was recruited to work at the Admiralty Research Station at Fairlie in Ayrshire on Under Water Sound Detection systems, which played an important part in the war at sea. Jim spent much of his time there, virtually as a sailor, assisting in sea trials on destroyers; no doubt a first experience of the real world! He returned to Cambridge in 1945 to complete his degree and then embarked on a PhD. Also at this time he married Jean, whose support played such an important part in the whole of his subsequent career.

Working in the Laboratory for the Physics and Chemistry of Rubbing Solids, as it was known then, under the direction of Philip Bowden, Menter developed a novel use of the newly arrived electron microscope to examine the micro-topography of surfaces by glancing incidence of the electron beam. Electron microscopy was still in its infancy in those days and the technique employed required a close collaboration with the manufacturers, Metropolitan Vickers, which gave him a valuable insight into industrial research.

The post-war years saw an unprecedented emergence of industrial science laboratories, as the importance of introducing new scientific ideas into modern industry was increasingly recognised. Among these was the Tube Investments Research Laboratory being set up in the 1950's by the TI Group of metal manufacturers at Hinxton Hall near Cambridge. Jim Menter was attracted to work there with the prospect of an open remit to undertake good science, and a generous budget. He was thus able to procure the most powerful electron microscope then available, the newly developed Siemens Elmiscop 1. He demonstrated for the first time the possibility of using the electron microscope as a tool for the direct study of the atomic structure of crystalline solids. His paper on the resolution of the atomic lattice of platinum phthalocyanine, published in 1956 in the Proceedings of the Royal Society, was a major breakthrough in this newly emerging field. Fifty years later, in the year of his death, the importance of this paper has now been recognised by reproduction in full in the Philosophical Magazine as a landmark publication. Under his leadership the group of young scientists attracted to work with him at Hinxton quickly established an international reputation for research, not only of great fundamental importance in the theory of solid structures but also highly relevant to the metallurgical industry. Having by then assumed the Directorship of the Hinxton Hall Laboratory, Menter set about building up a wider framework of research in other areas of electron optical instrument development, most notably X-ray microanalysis. This was later to be developed into a major tool for the study of complex alloys and other materials of industrial importance. His own major scientific contribution was recognised when he was elected to Fellowship of the Royal Society of London in 1961.

Menter's technical ability and organisational skills were further recognised by Tube Investments when, in 1965, he was appointed to the Company's Board as Director of Research and Development and a member of their Executive Committee. Here he was much involved in all the major issues, political as well as technical, facing many British companies at that time, such as the nationalisation of the steel industry, the downturn of manufacturing and subsequent amalgamations and closures. His ability as a scientist to weigh up the facts and to analyse a problem critically before reaching a solution stood him in good stead. Just as his scientific colleagues at Hinxton had found him to be a good listener and wise counsellor, his advice was much valued by fellow directors. At this time his services were also widely sought by Research Councils and other government agencies concerned with research and technology. He became Honorary Treasurer of the Royal Society and President of the Institute of Physics. He was knighted in 1973.

Jim Menter's move to become Principal of Queen Mary College in 1976 was in many ways a natural return to the academic world. He took with him all the experience and wisdom gained in his earlier career. This was of immediate importance at a time when universities were in a period of turbulence and change. Over the ten years of his principalship the college not only weathered the storm but also gained in stature. The merger of the London Hospital and St. Bartholomew's, with QMC providing the science teaching for 900 medical students required enormous patience and negotiation to bring about the necessary changes in ethos and purpose. Jim Menter was the man to do this. He could listen, he could use an air of gravitas, which came naturally to him, to good effect, and he always seemed able to bring out the best solution at the appropriate time. He had to fight hard both within the college and outside to gather support for necessary changes and to

secure the funds for bringing them about. The merger of Westfield College with Queen Mary to form what is now QMWC ensured the institutional robustness that was vital for their future viability. His legacy is what is now a successful and confident institution.

On retirement, he and his wife Jean moved to live permanently at Rannoch in highland Perthshire where they had already established a much loved holiday home. However, this was by no means a retreat into isolation. They were warmly welcomed by the community around them and they participated fully in their new life. As an Honorary Fellow of the Royal Society of Edinburgh, Jim retained contact with science, which he much valued. He was a member of Court of the University of Stirling and Chairman of the Audit Committee where his experience and wise counselling were invaluable.

Jim Menter retained many deep and lasting friendships over the years. Between them, he and his wife Jean, ever at his side, offered a hand of friendship that always made one feel welcome. Their home at Carie on the shore of Loch Rannoch and their generous hospitality was always there for frequent visitors and friends, many from past times at Hinxton and QMC. Jim Menter was a great man. He will be long remembered, not only as a distinguished scientist and industrialist, but, above all, a good friend of so many people.

He leaves behind a much loved family, Jean, their three children, nine grandchildren and five great-grandchildren.

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Sir James Woodham Menter MA, PhD, ScD(Cantab), HonDTech, FInstP, FRS. Born 22 August 1921, elected HonFRSE 2 March 1992, Died 18 July 2006.