

**LETTERS TO PROGRESS IN PHYSICS****Arthur Marshall Stoneham**

(1940–2011)

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The memory of the prominent British physicist, Prof. Arthur Marshall Stoneham (1940–2011), will live in our hearts and souls.



Arthur Marshall Stoneham (1940–2011)

Marshall Stoneham was born in 1940 in Barrow-in-Furness, Cumbria. He was educated at Barrow Grammar School for Boys before reading physics at Bristol University. In 1964 he completed his doctorate at Bristol under Prof. Maurice Pryce. After completing his thesis, Marshall started working for the Atomic Energy Authority in the Theoretical Physics Division at Harwell. At that time, Harwell faced challenges posed by the nuclear programme, involving the construction of reactors and the safe disposal of radioactive waste. Marshall's main work was the Theory of Defects in Solids. His book on the subject left its mark on a generation, aided by Marshall's habit of referring people to the precise place in the book where their answer was. It has never been out of print since it was first published. Marshall's group at Harwell became a leading light for both the nuclear industry and beyond. He became a division head, AEA chief scientist and retained his interest in nuclear power (both fission and fusion) to the end.

At University College London (where he moved in 1995 as Massey Professor of Physics) he and his colleague John

Finney built up the London Centre of Nanotechnology. He was an Honorary Fellow of Wolfson College, Oxford University, from 1985, was elected a Fellow of the Royal Society in 1989 and in 2010 had started his term as President of the Institute of Physics. His colleagues will remember him for his support (even when that support took the form of asking a killer question at the end of your presentation after apparently having slept through it), for the way he promoted their work — even if it was by remarking, “Oh they could sort that out in a few days”. It never took less than three months. Above all, in a life that was filled to overflowing he found time for people; to listen, to encourage, to advise. Marshall was a prolific writer. In addition to several books, he was author or co-author of over 500 publications.

Marshall had a great love of music and played the French horn, inspired by a recording of Dennis Brain playing the Mozart horn concertos which his father bought for him (and regretted!) at the age of 18. His love of wind music led him to form his own music group in 1971, the Dorchester Wind Players. Throughout the '80s and '90s he dedicated himself to the massive task of compiling a directory of every piece of wind music in the world ever written for two or more instruments, into a *Wind Ensemble Sourcebook*. Marshall's professional life took him all over the world and he used these travel opportunities to rummage in obscure music libraries and even monasteries in his quest. The project took years, but eventually he and his co-authors published *Wind Ensemble Sourcebook* in 1997. It runs to 450 pages, containing records of 12,000 works by 2,200 composers, and it has two companion volumes. The whole enterprise was truly a world first and will probably never be equalled.

In 1962 Marshall married Doreen, another physicist, and also from Barrow-in-Furness. They have two physicist daughters and he would often joke that he had “done his bit” for women in science. Marshall was a director in his and his wife's specialist laboratory, Oxford Authentication, which authenticates pottery and porcelain antiquities using thermoluminescence dating.

Marshall died on 18 February from complications arising from pancreatic cancer.

Commencing in 2002 Prof. Stoneham helped us by scientific way. He had given scientific directions which then

became the basis of our research studies. Due to his scientific support, we published many important papers in the science connected with understanding structures of light and solid. We never forget Arthur Marshall Stoneham who was a very noble man. His memory will live always in our souls.

We are very grateful to Doreen Stoneham who helped us by information connected with the early private life of Prof. Stoneham.

We also thank the Editor of Chief of Progress in Physics, Dr. Dmitri Rabounski, who assisted us with this letter, and always helped us by scientific way.

Submitted on April 04, 2011 / Accepted on April 09, 2011

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