

In memoriam Martin Aitken - a pioneer in Archaeological Prospection

Archaeological prospection has lost one of its very first pioneers: Martin Aitken has died at the age of 95. The British physicist coined the word *Archaeometry* for the application of mathematics and physics to archaeological problems and pioneered the magnetometer detection of buried archaeological remains. In October 2011 Martin Aitken presented an honorary paper at the LBI ArchPro's "Pioneering Archaeological Prospection" conference in Austria. There he joined a group of highly respected luminaries in the field such as Irwin Scollar, Mike Tite, Albert Hesse and John C. Belshé who offered a memorable look back at the early beginnings of archaeological prospection.

Martin Aitken was born 1922. His education in physics at Oxford University was interrupted by war service as a Technical Radar Officer in Ceylon (Sri Lanka) and Burma (Myanmar). After completion of his Oxford doctorate he undertook research in nuclear physics using a small electron synchrotron. In 1957 he joined the University's newly formed Research Laboratory for Archaeology as Deputy Director. He became a Fellow of Linacre College in 1965 and Professor of Archaeometry in 1985. He retired in 1989.



He has written several books, including *Physics & Archaeology*, *Thermoluminescence and Dating*, *Science-based Dating in Archaeology*, *Optical Dating*. Besides Magnetic Prospection, his major research projects were in dating using Thermoremanent Magnetism (TRM), Thermoluminescence (TL) and Optically-stimulated Luminescence (OSL). Magnetic Prospection began in 1958 with a survey at Water Newton (near Peterborough, England). This was at the invitation of archaeologist Graham Webster and followed the prediction made by John Belshé, that buried pottery kilns, and some other archaeological features, would cause a slight disturbance in the intensity of the earth's magnetic field at ground level. The instrument used for detection was a proton free precession magnetometer and was a portable transistorized version of the electronic valve version that had been tried by the British military for the detection of plastic mines; this version needed a small truck for transportation but apart from that drawback it had been abandoned on account of 'soil noise'. Following the success of the first survey the basic proton magnetometer was used on many archaeological sites in Britain and in other parts of the world both by Martin Aitken and by others.

With our deepest respect we remember this truly outstanding scientist. Our sincere condolences go to his family.