

Memorial to James Graham, 1929–2001

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Jim Graham, a former research scientist with the Commonwealth Scientific and Industrial Organization (CSIRO) in Perth, Australia, died on May 9, 2001, following a lengthy battle with lymphoma. He was born on October 13, 1929 in Cottesloe, Western Australia, obtained his B.Sc. and M.Sc. degrees in physics at the University of Western Australia and his Ph.D. at Birmingham University in England. His Ph.D. subject was devoted to the structure of alloys.

Although a physicist by training, Jim gradually evolved into a mineralogist. After graduation in 1956, he joined the CSIRO Division of Industrial Chemistry in Melbourne, working in the Cements and Ceramics Section. Following the establishment of a laboratory of the Division of Applied Mineralogy in Perth, Western Australia, in 1969, he transferred to this laboratory, and entered the world of real minerals, to which he applied his skills as a physicist.

Jim was instrumental in setting up the laboratory, including the installation of an electron microprobe analyzer—the first in Western Australia—and X-ray diffraction equipment, which he proceeded to automate. He became interested in a wide range of mineralogical problems, including the magnetic properties of pyrrhotite, the crystal chemistry of complex niobium and titanium oxides, the role of oxygen in pyrrhotite, and the metallurgy of refractory gold, making substantial contributions in these fields.

Jim was a quintessential team worker, participating in many projects involving mineralogy, crystallography, and solid-state physics. Moreover, he was always willing to interrupt his own research work to assist others. His unassuming manner, impeccable integrity, and rigorous scientific approach were an inspiration to many.

Jim retired from active research in CSIRO in 1994, and accepted an honorary fellowship at the University of Western Australia where he continued to work with minerals to within a few months of his death. He is survived by his wife, Valerie, his three daughters Carolyn Armstrong, Dorothy O'Hara, and Margaret Uloth, and grandson Patrick O'Hara.



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