

CARRICKFERGUS AND DISTRICT HISTORICAL SOCIETY



WILLIAM HENRY BEATTIE CAMERON

William Henry Beattie Cameron was born in 1901 in Albert Road, Carrickfergus and died in 1937. Educated initially at the Carrickfergus Model School he won a scholarship to the Royal Belfast Academical Institution where he excelled in scientific subjects. He won another scholarship to Queen's University and graduated with honours in Experimental and Mathematical Physics in 1923. After a Master's degree awarded in 1924 he continued research there in his chosen discipline, spectroscopy (the study of light emitted when substances are subjected to intense heat or other excitation). By breaking the light into its constituent wavelengths something like a bar-code of differently spaced `bands' is produced that is unique to that substance.

In 1925 he identified a set of hitherto unrecognised ultra-violet `bands' of the gas carbon monoxide (CO). From the paper he wrote on his work published in the Philosophical Magazine in 1926 the `bands' became know as the "Cameron `Bands'. Now, in these days of space research, there is a need to understand better the behavior of gases in the upper atmosphere under the combined effects of solar radiation and man-made pollution. As a result the Cameron Bands have become a widely used research tool. One of the USA's leading space scientists, Dr Hal Weaver of University of Maryland explains, "the Cameron Bands of CO.... remain of vital interest to planetary scientist and astronomers.... for probing the carbon dioxide abundance in comets. Emissions in the Cameron system dominate the ultra emissions from Mars whose atmosphere is composed primarily of carbon dioxide gas".

[This piece has been adapted from the article by his nephew Robin Cameron in the **Big Lamp** January 2007 edition published by the Carrickfergus and District Historical Society.]